CU | School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

DENTAL. INTEGRATED FOR HEALTH.

CLINIC POLICY AND PROCEDURES MANUAL

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

TABLE OF CONTENTS

I. Clinical Operations

1.1   Mission, Purpose and Philosophy

SDM Mission Statement

The University of Colorado School of Dental Medicine (CUSDM), a collaborative partner on the Anschutz Medical Campus, is a diverse teaching, clinical care and research community. The CUSDM is committed to integrated health that innovates, treats and discovers for the well-being of, and in service to, local and global communities.

Purpose

The University of Colorado School of Dental Medicine's purpose is to provide exceptional and innovative educational experiences for the next generation of dental professionals, provide access to high quality, low-cost dental care to the citizens of Colorado and the region, and to perform visionary research.

This manual serves as a resource for our faculty, staff, students and residents to enhance his/her clinical experience and as a practical guide for clinical practice in the School's clinics. In addition to School and University policies, as health care providers, you must also adhere to State and Federal regulations that are incorporated into the policies and procedures outlined in the CU School of Dental Medicine's Clinic Manual.

Philosophy

The Comprehensive Patient Care Philosophy

The overall goal of the Dental Clinical Education Program at the University of Colorado School of Dental Medicine is to emphasize CUSDM's commitment to providing a clinical learning environment that is patient-centered and evidence-based, rather than procedure-oriented, yet still provides students a sufficient number and breadth of clinical experiences to attain and demonstrate competence to be a general dentist.

The most important responsibility of dental students in the Dental Clinical Education Program is to deliver quality comprehensive dental treatment appropriate to each patient, in a timely manner. Every patient's oral health needs, personal preferences, and social, ethnic, economic, and emotional circumstances must be sensitively considered.

Every patient must receive treatment that meets the standard of care in the profession, that is evidence-based, integrating the best research evidence with patient needs and values and the knowledge and experience of the dental profession and our faculty

1.2   Student/Resident, Faculty and Staff Expectations

This clinic manual serves as a resource as students transition from classroom and pre-clinical laboratory courses into the clinical setting; for residents to understand the clinical policies and procedures of the University of Colorado School of Dental Medicine, which may differ from their pre-doctoral school; and for faculty and staff to understand and follow, setting a positive example for students and residents.

It is expected that all students, resident, faculty and staff will read this manual, gain a thorough understanding of its contents, and reference this manual as often as necessary to assist in his/her clinical training. All faculty, staff, students, and residents must adhere to the policies and procedures contained herein. If a given circumstance or situation is not addressed in this manual, seek clarification before acting.

It is also expected that each student/resident will read and understand the following:

- CU SDM Academic Honor Code, Student Professional Code of Conduct, and Discipline Policies for Suspected Academic Honor Code and/or Student Professional Code of Conduct Violations (September 25, 2017)
- CU SDM Student Handbook
- Patient Rights and Responsibilities Brochure
- Infection Control Protocols (Please refer to Section 9.6)

It is expected that each faculty and staff member will read and understand the following:

- CU SDM Academic Honor Code, Student Professional Code of Conduct, and Discipline Policies for Suspected Academic Honor Code and/or Student Professional Code of Conduct Violations (September 25, 2017)
- Patient Rights and Responsibilities Brochure
- Infection Control Protocols (Please refer to Section 9.6)

On a daily basis, students and residents will interact with faculty and staff. Students and residents are expected to treat faculty and staff with professionalism, courtesy and respect at all times; and the student/resident should expect the same in return.

1.3   Student/Resident, Faculty and Staff Requirements

Students/Residents

All students/residents involved in the direct delivery and/or supervision of patient care must:
- Hold a current Basic Life Support certificate
- Complete annual training of SDM Bloodborne Pathogens
- Complete annual training of SDM Chemical and Hazardous Waste
- Complete annual HIPAA training
- Complete Discrimination and Harassment training
- Review Infection Control Policies
- Receive an annual influenza vaccination or complete a declination form
- Read the CU SDM Academic Honor Code, Student Professional Code of Conduct, and Discipline Policies for Suspected Academic Honor Code and/or Student Professional Code of Conduct Violations (September 25, 2017)
- Comply with the School of Dental Medicine (SDM) Risk Management protocols
- Wear their University issued ID badges in a visible location, at all times while on campus

Faculty

All faculty involved in the direct delivery and/or supervision of patient care must:
- Hold an active Colorado Dental License (or an active Colorado Academic License for Foreign Trained Dentists) or active Dental Hygiene license
- Basic Life Support certificate
- Hold a current DEA license if eligible
- Acquire a Medicaid number associated with the CU School of Dental Medicine
- Complete initial and recurring credentialing process
- Complete annual training of SDM Bloodborne Pathogens
- Complete annual training of SDM Chemical and Hazardous Waste
- Complete annual HIPAA training
- Complete Discrimination and Harassment training
- Complete FERPA training
- Review Infection Control Policies
- Receive an annual influenza vaccination or complete a declination form
- Read the Academic Honor Code and Professional Code of Conduct and Ethics
- Complete all other required training per University and School policies
- Comply with the School of Dental Medicine (SDM) Risk Management protocols
- Keep axiUm swipe card in his/her possession at all times; never allowing students to use faculty swipe cards
- Wear their University issued ID badges in a visible location, at all times while on campus

Staff

All support staff involved in clinical operations must:
- Hold a current Basic Life Support certificate
- Hold a current First Aid certificate
- Complete annual training of SDM Bloodborne Pathogens
- Complete annual training of SDM Chemical and Hazardous Waste
- Complete annual HIPAA training
- Complete Discrimination and Harassment training
- Review Infection Control Policies
- Receive an annual influenza vaccination or complete a declination form
- Read the Academic Honor Code and Professional Code of Conduct and Ethics
- Comply with the School of Dental Medicine (SDM) Risk Management protocols
- Wear their University issued ID badges in a visible location, at all times while on campus

1.4   Professional Code of Conduct

FACULTY, STAFF, STUDENT, AND RESIDENT PROFESSIONAL CODE OF CONDUCT
CU School of Dental Medicine
Effective October 2014

Expected Faculty, Staff, Student, and Resident Conduct (Students see also: *CU SDM Academic Honor Code, Student Professional Code of Conduct, and Discipline Policies for Suspected Academic Honor Code and/or Student Professional Code of Conduct Violations (September 25, 2017))*

The faculty, students, residents, and staff of the University of Colorado School of Dental Medicine (SDM) are members of the professions of dentistry and dental education that demand a high level of skill, knowledge, judgment, compassion and civil behavior.

As an integral part of the University of Colorado Anschutz Medical Campus, our mission is to provide programs of excellence in teaching, research, patient care, as well as community and professional service. Fulfillment of this mission creates a varied set of professional roles and responsibilities for all faculty, students, residents and staff within the SDM.

As clinicians, educators and learners, we have an intersection of professional responsibilities that are best defined by the professions we serve. As members of a clinical profession, our clinical responsibilities are defined by the American Dental Association (ADA) as a set of guiding principles; and as educators and learners, we embrace the values established by the American Dental Education Association (ADEA).

The ADA guiding principles of: Patient Autonomy, Nonmaleficence, Beneficence, Justice, and Veracity define who we are as both the clinicians and researchers of today and tomorrow.

The ADEA Values of: Competence, Fairness, Integrity, Responsibility, Respect, and Service-mindedness remind us of what we should value as teachers and learners.

The School of Dental Medicine therefore places the highest priority on these professional principles and values and the daily demonstration of their importance to us during patient care, teaching, our interactions with each other, and learning.

At all times faculty, students, residents and staff will demonstrate respect for, and sensitivity to all aspects of diversity including: age, culture, ability, ethnicity, race, gender, language, political beliefs, religious and spiritual beliefs, veteran status, gender identity, sexual orientation and socioeconomic status.

In all interactions with patients and their care givers, faculty, students, residents and staff are expected to adhere to the ideals of the profession of dentistry. These include but are not limited to those guiding principles of the American Dental Association of: Patient Autonomy, Nonmaleficence, Beneficence, Justice, and Veracity.

Teaching, mentoring, learning and working in a health care environment are all special privileges. It is implicit that being a good teacher, mentor, and employee includes modeling professional

conduct for all learners, staff, colleagues and patients and their families. As learning is occurring in a patient care setting, the learners are also expected to demonstrate developing professional values. Together the professional expectations of teachers, mentors, learners and employees are best reflected by those professional values of dental education set for by ADEA of: Competence, Fairness, Integrity, Responsibility, Respect, and Service-mindedness. This unique learning environment demands an active engagement in the teaching, mentoring and learning process that includes humility, effective listening and respectful and timely feedback.

All members of our academic community are expected to exhibit the characteristics of good academic and institutional citizenship.   This includes developing and maintaining a high level of scientific and clinical competence and a demonstrated dedication to life-long learning. It is essential that all adhere to the highest standards of academic honesty and integrity. Truthfulness and accuracy in all scientific writing, documentation in the dental record, and reporting conflicts of interest are essential characteristics of good citizenship.

Consistent with the principles outlined above, all SDM faculty, students, residents, and staff members are expected to:

Professional Responsibilities and Accountability

Demonstrate behaviors that convey compassion, respect, empathy, caring and tolerance in all interactions with learners, patients and families, professional colleagues, teachers and staff. Uphold the primacy of patient welfare, always placing the patient's best interests first.

Demonstrate accountability to patients, families, learners, faculty, professional colleagues and society by maintaining scientific, clinical and educational competence appropriate to one's role as a faculty member.

Provide, accept and respond appropriately to constructive feedback and evaluations, in order to provide high quality clinical care and educational excellence. An appropriate response to constructive feedback should result in a positive outcome for all concerned individuals and the SDM that resolves the concern through understanding and/or modification of behavior.

Recognize and respond appropriately to behavior by others that is disrespectful, disruptive or unprofessional.

Demonstrate sensitivity and respect for learners, faculty, staff, co-workers' and patients' ethnic, racial and cultural differences.

Demonstrate professionalism through appropriate dress, grooming, language and behavior. Maintain appropriate confidentiality.

Additional Professional Responsibilities for Faculty

Appropriately prepare for, and actively engage in, all assigned teaching and mentoring responsibilities.

Treat all learners with understanding, dignity, respect and tolerance.

Evaluate learners equitably and fairly, using only criteria that reflect the learner's performance, as measured by standards applied uniformly to all learners in the course or other learning activity, except where differentiation is required or permitted in the case of students with disabilities.

Additional Professional Responsibilities as a Member of the Academic Community

Evaluate the performance of others equitably and fairly, and without prejudice, harassment or intimidation, ensuring that such evaluations are based solely on criteria that reflect professional competence.
Uphold the principles of academic honesty, including truthfulness and accuracy in medical and scientific research and writing.

Uphold the principles of academic honesty in the learning environment including no tolerance for cheating, plagiarism and the inappropriate use of electronic devices in the learning and testing environment.

Understand and comply with University, School of Dental Medicine, and other policies governing conflicts-of-interest, performance reviews, credentialing and other matters.

Recognize and manage conflicts-of-interest.

Additional Professional Responsibilities as a Member of a Health Care Community

Serve humanity without bias.

Make the health and well-being of patients the first consideration.

Ensure that the dignity of all will not be subordinated to monetary, scientific or political ends.

Recognize that the responsibility to the community, to promote its welfare and to speak out against injustice.

Promote the integrity of the profession of Dentistry with honest and respectful relations with other health professionals.

Unacceptable Conduct

Unprofessional behaviors have no place in any educational, learning, research, administrative or patient care environment and will not be tolerated. Within the healthcare environment, unprofessional and disruptive behaviors interfere not only with learning, but also with communication and trust among health care team members and the overall workplace and educational environment; thus, such behaviors threaten healthcare quality and patient safety.

Unprofessional behaviors include:
- Disruptive behaviors;
    Examples of disruptive behaviors are but not limited to:
    - Verbal attacks or outbursts;
    - profane language;
    - bullying;
    - throwing or breaking things;

- boundary violations;
- behaviors that negatively affect the workplace;
- and comments that are personal, rude, disrespectful, threatening or belittling. Insulting or insensitive comments, jokes or behaviors directed toward learners', colleagues' or co-workers' age, culture, disabilities, ethnicity, race gender, language, political beliefs, physical appearance, religious or spiritual beliefs, sexual orientation or socioeconomic status also will not be tolerated.
- actions, words or behaviors that a learner, colleague, co-worker or patient would reasonably consider to be humiliating or demeaning;
- passive disrespect (including dismissive treatment of others);
- academic dishonesty (including falsification or fabrication of data or the misappropriation of the writings, research or findings of others);
- and discrimination against any learner, patient, co-worker or other individual on political grounds or for reasons of race, ethnicity, religion, gender, sexual orientation or any other illegal or arbitrary reasons.

Finally, faculty members may not assign a lower grade, write a poor evaluation, threaten, harass or otherwise retaliate against any learner because he or she has reported, in good faith, a violation of this faculty professionalism code.

Violations of this Professionalism Code

Violations or this Professionalism Code will be reported to, investigated by and acted upon by the Grievance

Committee for faculty, Human Resources for staff and the Student Performance Committee as an Honor Code violation for students and residents.

Confidential reporting of violations of the principles and values described in this Professional Code of Conduct can be made through the use of EthicsPoint.

References
Principles of Ethics and Code of American Dental Association Professional Conduct: With official advisory opinions revised to April 2012.
ADEA Dental Faculty Code of Conduct
ASDA: White Paper on Ethics and Professionalism in Dental Education, 2009
Professionalism Code of Conduct "Professionalism Mission Statement" University of Colorado School of Medicine: Revised January 6th 2014
The University of Colorado School of Dental Medicine (SODM): Mission, Vision, and Strategic Goals

The School of Dental Medicine has a specific Professional Code of Conduct for students. CU SDM Academic Honor Code, Student Professional Code of Conduct, and Discipline Policies for Suspected Academic Honor Code and/or Student Professional Code of Conduct Violations (September 25, 2017)

1.5   Office of Clinical Operations

The Senior Associate Dean of Clinics and Professional Practice oversees all aspect of the School's clinical operations to include: physical facility, equipment, supplies, staff, clinical schedules, patients, quality and risk assessment, and information management. This is accomplished through a collaborative and supportive relationship between students, staff, residents, faculty and patients.

Under the supervision of the Senior Associate Dean for Clinics and Professional Practice, the staff of the Office of Clinical Operations ("OCO") manage the day-to-day activities and areas, including but not limited to:

- Dispensary
- Sterilization
- Risk Management
- Quality and Patient Safety
- Reception
- Screening
- Patient Advocacy
- Clinical Education
- Clinical Orientation
- Clinical Policies and Procedures
- Clinical Information Management

In addition, the Senior Associate Dean of Clinics and Professional Practice is responsible for coordinating the clinical educational programs of the School, and assisting with the monitoring of each student and resident's progression to becoming a general dentist or specialist through our graduate programs.

Clinical Operations Administration

Senior Associate Dean of Clinics and Professional Practice   Lonnie Johnson, DDS, PhD

Director of Clinical Operations and Patient Advocacy   Emily Reddick, MPA

Director of Quality and Patient Safety   Jamye Smith, MBA, MSHA, SBB

Clinical Affairs Coordinator   Kristen Young

CU School of Dental Medicine
UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

Clinical Operations Business Hours

Administrative Office	8:00 am – 5:00 pm
Front Desk Staff	8:00 am - 5:00 pm
Payment Window	8:00 am - 5:15 pm
Dispensary Window (clean instruments)	8:00 am - 5:00 pm
Dispensary Window (dirty instruments)	8:00 am – 5:30 pm
Supply Counter	7:30 am - 5:00 pm
Equipment and Operations Maintenance	8:00 am - 5:00 pm

1.6   Student/Resident Impairment Policy

Title: **Student/Resident Impairment Policy**

Source: School of Dental Medicine

Approved by: Denise Kassebaum, DDS, MS
                  Dean

Effective Date: December 3, 2015

Replaces: October 1, 2015 (New)

Applies: All students and residents enrolled in School of Dental Medicine programs

---

A. Introduction
The School of Dental Medicine is committed to safety first in all of its academic and clinical programs. As an academic unit of the University of Colorado Anschutz Medical Campus (CU Anschutz), the School of Dental Medicine (SDM) requires that all students enrolled in its academic programs be free of impairment caused by drugs or alcohol upon admission and throughout their program. This policy provides the processes to ensure that students meet this requirement.

B. Definitions
Illegal drugs. For purposes of this policy, "illegal drugs" means illegal use of controlled or illegal (i.e. prohibited) substances. It does not mean prescription drugs that are lawfully being taken by a student prescribed by a licensed health care professional; the student must be under the direct medical care of the licensed health care professional. Although marijuana is legal in the State of Colorado, marijuana is a Schedule 1 substance under federal law and continues to be an illegal substance for purposes of this policy. In addition to other illegal drugs as described above, the overuse and/or abuse of alcohol and prescription medications in the learning environment is also prohibited under this policy.

Learning Environment. For purposes of this policy, "learning environment" means University-sponsored activities taking place in all educational and clinical practice settings, such as a classroom, lab, School-based clinic, or clinical rotation site.

C. Policy
C.1. Policy Statement
a. All SDM academic programs require that their students and residents meet technical and/or professionalism standards. One of these standards is being drug and alcohol free in order to exhibit ethical and professional behavior, and for safety in the Learning Environment. Please refer to the School of Dental Medicine Professional Code of Conduct for more information.

Failure to meet technical or professionalism standards may be cause for referral to an outside agency (Peer Assistance Services) for the assessment of the nature of the impairment and drug/alcohol testing.

C.2 Rationale

The University recognizes that drug and alcohol abuse is a public health problem; assessing students suspected of impairment is important to establish accountability as professionals in training and to ensure individuals across varied learning environments are drug and alcohol free.

The education of SDM students may include learning within a clinical or practicum setting, or on clinical rotations at any of the CU Anschutz's health care hospital/clinical partner locations. All health care providers are entrusted with the health, safety and welfare of patients; providers have access to controlled substances and confidential information, and operate in settings that require the exercise of good, unimpaired judgment and ethical behavior.

C.3. Testing Upon Participation in Clinical Training

All SDM students enrolled in an academic program with off-site clinical training expectations may be required to submit to and pass a drug and/or alcohol test prior to participation in the rotation based on the contractual agreements with those clinical sites.

C.4 Testing for Cause with "Reasonable Suspicion"

> C.4.a. Reasonable Suspicion Testing
> If an academic Program Official (i.e., Dean or Delegate) has reasonable suspicion (defined below) that a student is using illegal drugs or is improperly under the influence of drugs or alcohol while engaged in academic activities (e.g., University Sponsored activities taking place in a Learning Environment), the Program Official may immediately require the student to report for testing at the SDM's designated vendor (PEER Assistance Services, 2170 S. Parker Rd. Suite 229, Denver Co 80231, Phone: 303-369-0039). The academic program is responsible for identifying and arranging for safe travel to and from the designated vendor for the testing. If a student refuses to submit to a reasonable suspicion drug or alcohol test, the student's refusal may be considered a failure of the test.

> C.4.b. Within the School of Dental Medicine, Reasonable Suspicion will be defined as below.
> To determine reasonable suspicion, the following factors may be considered, but are not an exclusive list of factors justifying a drug or alcohol test:
>
> - Physical symptoms or manifestations of drugs or alcohol use and impairment, such as altered or slurred speech or repeated incoherent statements, dilated or constricted pupils, flushed skin, excessive sweating, excessive drowsiness or loss of consciousness;
>
> - Unexplained abrupt or radical changes in behavior, such as violent outbursts, hyperactivity, extreme suspiciousness, frequent and/or extreme mood swings without explanation;
>
> - Inability to walk steadily or in a straight line, or to perform normal manual functions without reasonable explanation;
>
> - Accidents or "near misses" in clinical, classroom or lab environments that appear related to unexplained sensory or motor skill malfunctions;

- Smell of alcoholic beverages or illegal drugs;

- Direct observation of drug or alcohol use; or

- A report of reasonable suspicion provided by a reliable and credible source.

The Program Official should make a written record of the observable indices of drug or alcohol use that created reasonable suspicion.

C.5 Testing Process and Reports

C.5.a The designated vendor for testing and assistance for students enrolled in SDM academic programs is: PEER Assistance, 2170 S. Parker Rd. Suite 229, Denver Co 80231, Phone: 303-369-0039.   Immediate compliance for testing is mandatory. Testing results will be reported to a designated individual within the academic program. Students will be responsible for the cost of any drug or alcohol testing, counseling or treatment and any related transportation costs

C.5.b Review of drug or alcohol test results will be conducted by the medical director of the designated vendor to determine a passing or failing level. The drug or alcohol test results will be conveyed electronically and confidentially to the designated individual within the academic program. In each academic program, a designated individual or committee will review students who failed a drug or alcohol test (including refusals and Negative Dilute results). The designated individual or committee will determine the consequences for violating this policy. These consequences will be communicated to the student in writing.

C.6 Failure to Pass Drug and Alcohol Testing and Sanctions

A student who has failed the drug and alcohol test may review the information reported by the designated vendor for accuracy and completeness and request that the designated vendor verify that the drug and alcohol test results are correct. The academic program will notify the student that the designated vendor is a neutral third party with no influence over the decisions made by the academic program. Students who fail the drug and/or alcohol test will be referred for evaluation and treatment to a substance abuse program, Peer Assistance Services (PAS) and may be subject to other immediate consequences including suspension. Any costs incurred or required as part of a treatment program or ongoing monitoring are the responsibility of the student. Depending on the information gathered including any recommendations from PAS, students could face disciplinary action by their academic program, including revocation of their admission, administrative withdrawal from courses, placement on a leave of absence, or dismissal from the program.

1.7   Clinical Programs/Laboratories and Hours of Operations

The School of Dental Medicine's educational program includes both pre-doctoral and GPR programs based on a comprehensive care model, as well as two specialty residencies programs. Each program is responsible for managing a clinical enterprise housed within the School where patients are provided with the highest quality care and treated with professionalism and respect by the students and residents.

School of Dental Medicine
Building: Open to Public	7:00 am - 6:00 pm
Building: Access for Students/Residents	6:00 am – 12:00 am

*Students/residents must leave the building by 12:00 am

Clinics: Access for Students/Residents	7:30 am – 6:00 pm

General Practice Residency Program
Patient Clinic Hours	8:30 am – 5:00 pm
Days of the Week	Monday - Friday

*Lunch break noon – 1:00 pm

Graduate Periodontics Program
Patient Clinic Hours	8:30 am – 5:00 pm
Days of the Week	Monday – Friday

*Lunch break noon – 1:00 pm
**Times and days may vary depending on educational program

Orthodontics Residency Program
Patient Clinic Hours	8:30 am – 5:00 pm
Days of the Week	Monday – Friday

*Lunch break noon – 1:00 pm
**Times and days may vary depending on educational program

CUDT Clinics (including Oral Surgery and Emergency/Urgent Care)
Patient Clinic Hours: morning session	9:00 am – 12:00 pm
Patient Clinic Hours: afternoon session	2:00 pm – 5:00 pm
Days of the Week	Monday – Friday

*All patient treatment must be completed by 11:30 and 4:30
**Times and days may vary depending on educational program

Screening Clinic
Patient Clinic Hours: morning session	9:00 am – 12:00 pm
Patient Clinic Hours: afternoon session	2:00 pm – 5:00 pm
Days of the Week	Monday – Thursday

*All patient treatment must be completed by 11:30 and 4:30
**Times and days may vary depending on educational program

Adolescent Dental Care Clinic
Patient Clinic Hours: morning session   9:00 am – 12:00 pm
Patient Clinic Hours: afternoon session   2:00 pm – 5:00 pm
Days of the Week   Varies per Semester
*All patient treatment must be completed by 11:30 and 4:30
**Times and days may vary depending on educational program

Heroes Clinic
Patient Clinic Hours: morning session   9:00 am – 12:00 pm
Patient Clinic Hours: afternoon session   2:00 pm – 5:00 pm
Days of the Week   Varies per Semester
*All patient treatment must be completed by 11:30 and 4:30
**Times and days may vary depending on educational program

Dental Faculty Practice
Patient Clinic Hours   8:00 am – 5:00 pm
Days of the Week   Monday through Friday

Oral and Maxillofacial Surgery (DFP)
Patient Clinic Hours   8:00 am – 5:00 pm
Days of the Week   Monday through Friday

Student Technique Support Lab

Sunday-Saturday   6:00 am - 12:00 am

Simulation Clinic

Sunday-Saturday   6:00 am - 12:00 am

1.8   Graduate Programs Clinical Operations

ORTHODONTICS RESIDENCY PROGRAM

Location: L26 (3rd Floor)
Phone: 303-724-7002
Fax: 303-724-7064
Hours of Operation: Monday-Friday- 8:30 am - 12:00 pm and 1:30 pm – 5:00 pm

Clinic Schedule:

Monday:	1:30 - 5:00 pm
Tuesday:	8:30 am - 12:00 pm and 1:30 - 5:00 pm
Wednesday:	8:30 am - 12:00 pm and 1:30 - 5:00 pm
Thursday:	1:30 - 5:00 pm
Friday:	(Two Fridays a month) 9:00 am -12:00 pm and 2:00 - 5:00 pm

ORTHODONTIC TREATMENT:
Patients can call 303-724-7002 to schedule a new-patient screening. After screening, diagnostic records are taken to thoroughly assess orthodontic needs. The next appointment is usually for treatment and financial consultations. Often the first step in starting treatment can take place at the same appointment as the consultations. Active treatment can last from 12-15 months for a typical early treatment plan to 18-30 months for a comprehensive treatment plan.

ADDITIONAL INFORMATION:
There are 15 Residents per class for 30 months. The program starts in late August and ends in February 28. The winter break is the last two weeks of December, Spring Break is in March, and Summer Break is two weeks in August. The clinic has 7 full-time Faculty, 3 part-time faculty, and 7 volunteer faculty.

PERSONNEL:

Tsigereda Feseha	Program Assistant
Kathi Frymier	Business Services Manager
Amy Corey	Administrative Assistant
Katherine Salstrand	Treatment Coordinator
Nery Coronado	Patient Outreach Specialist
LeRoy Montano	Accounting Tech/ Cashier
Gina Diaz	Administrative Assistant/ Front Desk
Bertha Gonzalez	Administrative Assistant/ Front Desk
Claudia Soriano Diaz	Administrative Assistant/ Front Desk
Renee Murphy	Dental Care- Supervisor
Marisha Jones	Radiology Technician
Nardos Gebeyehu	Radiology Technician
Sarah Medina	Dental Care – Dispensary
Theresa Hood	Dental Care- Dispensary
Selamawit Wude	Dental Care
Rashmi Pyakural	Dental Care
Monica Ortiz Monge	Dental Care
Jazmin Ortiz	Dental Care
Ganna Kalina	Dental Care
Anita Deruso	Lab Technician

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

GENERAL PRACTICE RESIDENCY PROGRAM

Location: Specialty Clinic (1ˢᵗ Floor)
Phone: 303-724-6941
Fax: 303-724-6938
Hours of Operation: Monday-Friday - 8:30 am - 12:00 pm and 1:00 - 5:00 pm

PERSONNEL:
>   Program Director: Sheila Stille, DDS
>   Clinical Business Manager: Mac McAllister, MBA
>   University of Colorado Hospital OR Scheduler: Delores Cano

GPR GOALS & OBJECTIVES:

Program Goals
- Prepare residents for careers in primary care dentistry
- Implement a didactic and clinical educational program of excellence for residents
- Prepare residents to provide advanced levels of patient care
- Prepare residents to perform community service in areas of need
- Prepare residents to provide oral health care in a hospital setting

Overall Objectives
- Train the resident to be skilled in patient evaluation, laboratory diagnosis, medical history and suitable physical assessment. Provide a wide variety of patients with challenging histories to gain practical experience in the above skills.
- Enhance the resident's oral diagnostic and treatment-planning skills to meet the comprehensive dental needs of the patient.
- Provide didactic and clinical experiences that train the resident to provide quality comprehensive dental care utilizing current and innovative technology and theory, regardless of the patient's medical, mental, emotional, or physical compromise.
- Instill a sense of how hospital dentists can serve the community, especially the underserved/low-socioeconomic status patient populations.
- Educate the resident to competently select and apply appropriate means of pain and anxiety control, including inhalation, oral, transmucosal, and intravenous techniques.
- Teach hospital and operating room protocol so that the resident may easily admit a patient, perform a history and physical examination, order and assess laboratory tests, consult with other medical specialists, administer pre- and post-operative care, and perform treatment in an operating room setting.
- Provide intensive education in the recognition and management of medical emergencies in the dental setting.
- Ensure that residents learn to diagnose and treat common dental emergencies, recognizing when to refer more complex problems to the appropriate medical or dental specialists.
- Develop the resident's knowledge, skill, and confidence to participate in a multidisciplinary treatment team.
- Enhance the resident's understanding of practice administration and supervision of auxiliary personnel.

- Develop the resident's ability to retrieve, critically review and assess pertinent scientific literature.
- Develop the residents' ability to self-assess their abilities and limitations, while motivating them to be inquisitive, continuous students who strive for quality education and self-improvement.

Clinic/Area/Program Description:
General Dentistry (Sands) Clinic Rotation

Objectives:
1. Interact with various medical departments of University Hospital by providing consultative and treatment services for hospitalized patients, including dental care for kidney, heart, lung and bone marrow transplant patients. Request referrals, based on the medical and dental complexity of the patient's needs.
2. Provide general dental treatment at a level beyond that achieved in dental school, including advanced restorative, prosthetic, periodontal, endodontic, osseous implants and oral surgical procedures.
3. Act as primary care provider by formulating and executing a comprehensive treatment plan for a wide range of medically complex ambulatory patients.
4. Incorporate a preventive program into each treatment plan and into the total care of each patient.
5. Diagnose and treat dental emergencies and provide immediate, palliative treatment for pain and infection.
6. Follow recognized infection control guidelines while providing treatment for patients with chronic infectious diseases.
7. Understand various aspects of practice management such as: appointment scheduling, efficient utilization of auxiliaries, patient and staff rapport, effective time management, impact of financial considerations on treatment planning, and risk management. Understand fundamentals of associateship contracts.
8. Complete dental laboratory prescriptions, interact with commercial dental labs and evaluate the quality of the work provided by such labs.
9. Participate in the oral health needs of the local and/or state communities.

Content:
Residents are based at Sands House Clinic for approximately 7.5-8 months. The majority of time is spent in hands-on patient treatment. During this time, residents gain a wide variety of experience by providing more complex dental treatment on the medically complex ambulatory patient. The concept of **comprehensive care** is stressed, with an emphasis on the "whole" patient (medical, financial and social status, patient motivation and desires). Patient needs are assessed and taken into consideration when formulating the treatment plan and performing treatment.
Techniques of efficient time management are stressed to prepare residents for the transition from dental school to private practice and the efficient use of a hygienist is also taught. Residents are encouraged to utilize a wide variety of materials and techniques, with focus on those not commonly taught in dental school. Although direct faculty supervision is always present, residents are encouraged to use their own judgment in making patient care decisions. Morning huddles, which meet daily at 7:30am and are mandatory, act as a conduit to evaluate the patient's medical history and treatment plan and to clarify ongoing care. Residents are given performance feedback:

- Daily by attending faculty
- Weekly from faculty and other residents during Tuesday resident conferences
- Monthly during the resident's production figures review with the Program Director.

Residents are also formally evaluated by the Program Director one month into the residency program and then at six month and eleven-month intervals.

Other Information (i.e. "What patients and or students need to know about clinic/area/program," etc.):

CU School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

PROPER HYGIENE PROTOCOL FOR PATIENT EXAMINATIONS FOR GPR PATIENTS

Title:	Establishment of Proper Hygiene Protocol for Patient Examinations (Periodic and Comprehensive), Radiographs, and Fluoride Recommendations.
Source:	CU SDM GPR Program
Prepared By:	Mac McAllister
Effective Date:	November 3, 2014

OVERVIEW

In an effort to ensure that all routine preventative dental care patients are receiving optimal dental care through the GPR program the following polices shall be followed related to examinations, x-ray frequency, and fluoride recommendations.

Examination Frequency Recommendations

Patients receiving preventative care through the CU SDM GPR Program shall receive a periodic oral evaluation by a GPR resident every 6 months. The periodic oral evaluation is performed on a patient of record to determine any changes in the patient's dental and medical health status since a previous comprehensive or periodic oral examination. This includes an oral cancer evaluation and periodontal screening where indicated, and may require interpretation of information acquired though additional diagnostic procedures. Additional diagnostic procedures will be reported separately. The CDT code D0120 shall not be used for a patient that has not received a comprehensive oral evaluation D0150/D0180 here at the CU SDM.

Patients receiving preventative care through the CU SDM GPR Program shall receive a new comprehensive oral evaluation (D0150/D0180) once every three years. Patients who have had a significant change in health conditions or other unusual circumstance or who have been absent from active treatment for three or more years shall receive a new comprehensive oral evaluation. The comprehensive oral evaluation (D0150) shall consist of a thorough evaluation and recording of the extraoral and intraoral hard and soft tissue. It may require interpretation of information acquired through additional diagnostic procedures. Additional diagnostic procedures should be reported separately. This includes an evaluation for oral cancer where indicated, the evaluation and recording or a patient's dental and medical history and general health assessment. It may include the evaluation and recording of dental carries, missing or unerupted teeth, restorations, exiting prostheses, occlusal relationships, periodontal conditions (including periodontal screening and/or charting), hard and soft tissue anomalies, etc.

In the event that periodontal disease is present a comprehensive periodontal evaluation D0180 shall be performed in compliance with the mandated timeframe. The comprehensive periodontal evaluation is indicated for patients showing signs or symptoms of periodontal disease and for patients with risk factors such as diabetes and smoking. It includes evaluation of periodontal conditions, probing and charting, evaluation and recording of a patient's dental and medical history and general health assessment. It may include the evaluation and recording of dental caries, missing or unerupted teeth, restorations, occlusal relationships and oral cancer evaluation.

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

X-Ray Frequency Recommendations

The recommendations for x-ray frequency are subject to clinical judgment and may not apply to every patient. They are to be used by the dentists only after reviewing the patient's health history and completing a clinical examination. The following table will help determine the appropriate frequency regarding radiography:

Recommended Frequency of Professionally Applied Topical Fluoride

Patients should be evaluated on the "Caries Risk Criteria" when determining the necessity of

Type of Encounter	Patient Age and Dental Development Stage		
	Adolescent with Permanent Dentition	Adult, Dentate, or Partially Edentulous	Adult, Edentulous
New Patient	Individual radiographic exam consisting of posterior bitewings with panoramic exam or posterior bitewings and selected periapical images. A full mouth intraoral radiographic exam is preferred when the patient has clinical evidence of generalized oral disease or a history of extensive dental treatment.		Individualized radiographic exam, based on clinical signs and symptoms.
Recall Patient with clinical caries or at increased risk caries	Posterior bitewing exam at 6-12 month intervals if proximal surfaces cannot be examined visually or with a probe	Posterior bitewing exam at 6-18 month intervals if proximal surfaces cannot be examined visually or with a probe	Not applicable
Recall Patient with no clinical caries or at increased risk caries	Posterior bitewing exam at 18-36 month intervals	Posterior bitewing exam at 24-36 month intervals	Not applicable
Recall Patient with periodontal disease	Clinical judgment as to the need for and type of radiographic images for the evaluation of periodontal disease. Imaging may consist of, but is not limited to, selected bitewing and/or periapical images of areas where periodontal disease can be demonstrated clinically.		Not applicable
Patient (new and recall) for monitoring of dentofacial growth and development, and/or assessment of dental/skeletal relationships	Clinical judgment as to need for and type of radiographic images for evaluation and/or monitoring of dentofacial growth and development, or assessment of dental and skeletal relationship. Panoramic or periapical exam to assess developing third molars.	Usually not indicated for monitoring of growth and development. Clinical judgment as to the need for and type of radiographic image for evaluation of dental and skeletal relationships.	

fluoride treatment recommendations and the intervals should be based upon the severity of their risk level. Professional fluoride treatment recommendations should be adhered to by GPR residents and hygienist alike, please reference the "Caries Risk Criteria" and recommended intervals to determine the appropriate fluoride treatment regimen.

![CU School of Dental Medicine — University of Colorado Anschutz Medical Campus]

Caries Risk Criteria

Low Caries Risk:
- No incipient or cavitated primary or secondary carious lesions during the last three years and no factors that may increase risk*

Moderate Caries Risk:

- One or two incipient or cavitated primary or secondary carious lesions in the last years.
- No incipient or cavitated primary or secondary carious lesions in the last three years but presence of at least one factor that may increase caries risk*

High Caries Risk:
- Three or more incipient or cavitated primary or secondary carious lesions in the last years.
- Presence of multiple factors that may increase caries risk*
- Suboptimal fluoride exposure
- Xerostomia (medication-, radiation- or disease-induced)

* Factors that increase the risk of decay include poor oral hygiene, a high level of infection with decay causing bacteria, prolonged nursing (bottle or breast), poor family dental health, defects in dental enamel, many multisurface restorations (crowns and fillings), xerostomia (dry mouth) caused by disease, medication or radiation treatment, eating disorders, drug or alcohol abuse, irregular dental care, a diet high in acid or sugar, braces, gum loss or exposed tooth roots, and a physical or mental inability to brush and floss correctly. Prolonged exposure to poverty conditions increases the risk of tooth decay (on the basis of findings from population studies, groups with low socioeconomic status have been found to have an increased risk of developing caries and should be considered as a caries risk factor).

Recommended intervals for professionally applied topical fluoride should be based upon the following risk level assessment:

- Low-risk – patients whose caries risk is lower, as defined the in the caries risk criteria, may not receive additional benefit from professional topical fluoride application (Fluoride water and fluoride toothpastes may provide adequate caries prevention in the risk category. Whether or not to apply topical fluoride in such cases is a decision that should balance this consideration with the practitioner's professional judgment and the individual patient's preferences.

- Moderate-risk – patients should receive fluoride varnish or gel application at six-month intervals.

- Higher-risk – patients should receive fluoride varnish or gel applications at three- to six-month intervals.

School of Dental Medicine
UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

GRADUATE PERIODONTICS RESIDENCY PROGRAM

Location: Specialty Clinics (1st Floor)
Phone: 303-724-6941
Fax: 303-724-7066
Hours of Operations: 8.30 a.m. - 5:00 p.m.

PERSONNEL:

Residency Coordinator: Pamela Colosacco
Front Desk: Dana Peterson and Mariella Murcia

Dental Assistants: Veronica Mendoza Araujo
                       Joseph Canul
                       Margaret Chang
                       John Gavel
                       Iziah Harris
                       Amy Schmidt

Dental Hygienists: Meghan Crow
                       Amy DeStaffany
                       Allison Kessler

OVERVIEW:
The overall goal of the Postgraduate Periodontics Program is to train periodontal residents to be proficient in the diagnosis and treatment of periodontal diseases, and competent to provide state-of-the-art dental implant therapy and periodontal plastic surgery procedures. The program is designed to enable the postgraduate periodontal student to become familiar in all aspects of the theoretical and practical knowledge and skills pertinent to the specialty of Periodontics, and to contribute to the available knowledge in the field of dentistry by conducting research.

PATIENTS:
Patients are referred from the undergraduate clinics and from outside providers for consultation. Upon review of the referral, patients may not be accepted if their treatment needs do not fit with the goals of the teaching program, or their treatment needs are outside the scope of Periodontics. Upon referral to Graduate Periodontics, patients will undergo an examination to develop and finalize a treatment plan. There is a fee for this examination.

STUDENTS:
Referral from all sources is via the SDM Referral Form in axiUm. Undergraduate students have the option of assisting the assigned resident in delivery of care to their patient. Students also have the opportunity to assist in the Graduate Periodontics Clinic as part of their undergraduate Periodontics curriculum.

1.9 CU Dental Team Care Clinical Operations

CU DENTAL TEAM CARE CLINICAL OPERATIONS

Location: 2nd floor East & West Clinics;
3rd Floor Futures Clinic (Adolescent Dental Clinic; Heroes Clinic; Screening Clinic)
4th Floor Clinic

Phone: 303-724-CARE (2273)
Email: CUDT@ucdenver.edu
Hours of Operations: Front Desk/Reception- 8:00 am - 5:00 pm
Clinic Hours of Operation: 9:00 am – 11:30 am and 2:00 pm – 4:30 pm

PERSONNEL:

Director of Clinical Operations and Patient Advocacy
Emily Reddick

Front Desk
Carmen Santiago (supervisor)
Dylan Jones
Gabby Leilo
Johannes Thomason Larsen
Alix Navarette

Clinic Coordinators
Kasey Stutler (manager)   (303) 724-5848
Courtney Bowman   (303) 724-6913
Nancy Groswold   (303) 724-6917
Patricia Martinez   (303) 724-6926
Lyn Masche   (303) 724-6921
Julieta Melais   (303) 724-6915
Alicia Troxel   (303) 724-6919
Perla Vamos   (303) 724-7768

Screening Coordinator
Pam Moore   (303) 724-8452

Academic and Clinical Systems Coordinator
Sze Pui Shum   (303) 724-5571

Patient Advocate
Colette Kuhfuss   (303) 724 7040

Referral Coordinator
Karissa Gramly

OVERVIEW:

Dental and international students treat patients on the second, third, and fourth floor clinics of the SDM with the exception of emergency and oral surgery clinics (these are located on the first floor). The second floor clinic has 74 operatories, (operatory numbers 1-43 are located in the west clinic and operatory numbers 44-74 are located in the east clinic). The third floor clinic has 24 operatories, and the fourth floor clinic has 42 operatories. All patients are screened to and if deemed a candidate for care in the student clinics, the patient is assigned to a student for treatment (see

Section 2.5 "Patient Screening Procedures and Status"). The faculty oversees the students during all dental treatment of patients.

PATIENT CHECK-IN:

Patients check in for their appointments using Patient Check-In Kiosks or with one of the front desk personnel. The staff will monitor and assist patients in the reception area who have not been met by their student. Students will be responsible to communicate to patients when they will be unable to seat them at the appointed time. All appointments will be checked in through the Clinical Information System, axiUm. All new patients of the SDM will be asked to sign a General Consent to Treatment and the HIPAA Privacy Notice by the Front Desk Staff at their screening appointment. The front desk is responsible to verify and update patient information including phone numbers, address, and email. Students are asked to remain at their chair until axiUm indicates their patient has arrived (the patient's name turns red in the schedule). After 15 minutes past the clinic start time, the student may then go to the Front Desk to inquire about their patient's status if there is still no indication the patient has arrived.

The front desk personnel will monitor the patient waiting areas to ensure the students have attended to their patients. The front desk will check in with patients who are waiting every 15 minutes after clinic start time until every patient has been attended to.

CLINICAL ATTENDANCE:

Students are required to attend all scheduled clinical sessions, with exceptions as noted below. Clinic attendance is dictated by the Comprehensive Care Syllabus. Students should treat their own patients or co-assigned patients when a scheduled in the main clinic as an operator.

1. <u>Attendance Monitoring</u> - Clinic attendance is monitored through axiUm. Every patient encounter must be documented by the generation of an entry in axiUm, regardless of whether there is a fee associated with the patient visit. For those clinic experiences that do not involve direct patient care (e.g., clinical assisting), the student is responsible to sign in with their coordinator in order to get credit for the clinic session.

    If a patient cancels, fails an appointment, or a student does not have a patient scheduled, the student must check-in with the Clinic Coordinator and sign-in. This must be done for both clinic sessions.

2. <u>Alternative Clinical Activities</u> - In the event that the student is unable to schedule their patient, has an unanticipated open appointment, or if the scheduled patient cancels their appointment at

the last minute or fails the appointment, the student will be required to sign in with their coordinator for assignments as indicated, with priority as determined by group coordinators and/or faculty:

1. Treat patients scheduled by coordinators or front desk staff for an "On-Call" appointment (patients of record in need of "emergency" care).
2. Emergency Clinic
3. Oral Surgery Clinic
4. Special Care Clinic
5. Adolescent Dental Care Clinic
6. Periodontal Surgery Assist
7. Screening
8. Heroes Clinic
9. General Practice Residency
10. Dental Faculty Practice
11. Dental Assisting
12. Record Audit and Quality Case Review
13. Simulation Clinic Exercise

Students will be given clinical attendance credit only for the above listed areas. In the event that all of the above areas do not require student participation, the student may be directed to pursue other activities (i.e. lab work, chart or practice organization, study, etc.). However, students are expected to remain available via page throughout the session, unless otherwise directed by practice faculty or coordinator.

3. Excused Absences - In order to allow for personal leave, students will be allowed up to sixteen sessions (8 days) of excused absences per academic year which may be either pre-arranged or approved as noted above on the same day.

Per the Student Handbook
"**Personal leave -** Approved personal leave is defined as time allotted for externships, observance of religious holidays, interviewing for residency programs, and continuing education at approved professional meetings in conjunction with the educational objectives of the program (such as the RMDC, Specialty meetings, etc.). Approval is based on merit relative to the student's professional development. Each student/resident is allowed 8 working days per year of approved personal leave. Approved personal leave must be scheduled in advance, should be considered in the context of conflicting with patient care responsibilities, and cannot accrue from one year to the next. Personal leave time cannot interfere with scheduled rotation assignments or scheduled examinations.

Vacation leave – Students and residents will have the following vacation days
• Labor Day
• Thanksgiving Day and Friday after
• Christmas Eve
• Christmas Day
• New Year's Day
• Martin Luther King Day
• President's Day
• Memorial Day

• Independence Day
• Clinic Closure Days – Specifically designated by Appropriate Clinic Administrator or Program Director.

Note: On-call responsibilities will be assigned to specific residents and students to cover the patient care needs of the School of Dental Medicine's patients of records and urgent care patients

Attendance Requirements for Clinic
100% attendance to all assigned clinical sessions is expected. If no patient is scheduled or a patient fails an appointment you must check with patient care coordinators and be available to see emergency patients, walk-in patients, assist, or staff emergency clinic or oral surgery clinic.

4. <u>Unexcused Absences</u> - Failure to attend clinic will result in an "unexcused absence." Unexcused absences will negatively affect the student's patient care clinic grade, and may be grounds for loss of clinic privileges.

5. <u>Coordination and Enforcement</u> - The Office of Clinic Operations will coordinate and enforce this policy, with assistance of group coordinators and faculty.

CHAIR ASSIGNMENTS:

All appointments and chair assignments are requested and scheduled through axiUm. If a student has a same day request for an appointment, they must see their coordinator. The student can view their chair assignments through their personal planner in axiUm. If a student's patient cancels or fails their appointment, the student is required to let their coordinator know so the appropriate action can be taken. Since the student is scheduled to be in clinic at that time, they are required to stay on the floor or let their coordinator know where they can be found, if needed.

TELEPHONE PROCEDURES:

All patients need to be contacted by telephone within 48 hours of being assigned to the student. It is advised that the student confirm all appointments not confirmed through EasyMarkit and give their patients their coordinator's contact number and the school's main number (303-724-6900).

CONTACTING STUDENTS:

Students will be contacted either by email or cell phone regarding patient issues. The first attempt will be to locate the student. If the student is not located in the school, then email or cell phone will be used. Students should instruct patients to call them outside of the Dental School clinics for routine matters (i.e., making appointments). It is highly recommended that students have a home answering machine and/or cell phone for routine messages from patients during the day. Students should minimize personal phone calls at the Dental School.

CLINIC CARE COORDINATORS:

There are eight Clinic Care Coordinators and one Screening Coordinator to assist the students with scheduling and managing their patient pools. Each student is assigned to a group and each group is assigned to a Clinic Care Coordinator. The duties of the Clinic Care Coordinator include, but not limited to, assigning patients to students, patient management, sending correspondence to patients for missed appointments, unable to contact, etc. (see Section 3.16 "Written Correspondence"),

schedule emergency patients when the primary student is not available, give input to Group Leaders regarding student performance in patient management. Offices on the 2nd and 4th Floors.

DENTAL FACULTY PRACTICE

Location: School of Dental Medicine First Floor
Phone: 303-724-5505
Fax: 303-724-5456
Hours of Operation: Monday – Friday, 8:00 am – 5:00 pm
Email: dfp@ucdenver.edu

OVERVIEW:

Dental Faculty Practice (DFP) is a multi-specialty practice for the public and CU employees. Full-time faculty of the School of Dental Medicine may choose to be a provider of the practice ranging from ½ day to 1.5 days a week. All providers of the DFP are participating with Delta Dental as Premier and PPO providers. DFP providers are not Medicaid Providers and accept mostly every PPO insurance as long as the patient's insurance has out of network benefits for those who do not have Delta Dental.

PERSONNEL:

Dr. Songjiang Luo	Director
Nubia Young	Business Director
Cristina Tovar	DFP Front Desk Supervisor
Roberta "Bobbie" Kobos	Front Desk Staff
Taryn Troxel	Front Desk Staff
Ana Stawarz	Dental Assistant
Roberta Sebby	Dental Assistant
Brittney Mangravito	Dental Assistant
Jeannie Cofer	Dental Assistant
Robert Pope	Dental Assistant
Elizabeth Soto	Dental Assistant
Phyllis Rodasti	Dental Hygienist
Linda Ballard	Dental Hygienist
Lisa Barber	Dental Hygienist
Lori Cackovic	Dental Hygienist
JoAnn Leclaire	Dental Hygienist

1.11 Faculty, Staff, and Student Required Training

Title   School of Dental Medicine Required Employment Training
Source: Clinical Operations and University Compliance
Effective Date: January 1, 2015
Revision Date: February 1, 2018
Action Required: Complete all trainings and confirm results are recorded in SkillSoft

Background: As a health care facility within the University of Colorado, our faculty, students, residents, and staff are required to complete numerous training sessions to remain in compliance with State, Federal, and University laws and policies.

Policy: The University of Colorado and the University of Colorado School of Dental Medicine require all faculty, staff, residents, and students to complete specific on-line and in-person training sessions as a condition of employment. These trainings, as well as the frequency of completion may change over time and are dictated by State, Federal and University law and policies.

During orientation, new employees will be directed as to which trainings are required within 30 days of hire. Orientation will be in the form of the University held program, as well as the orientation conducted by supervisors or their designees during new employee training. The SDM HR Office will schedule the time for faculty and staff members to attend the University sponsored Orientation Program.

Reminders will be sent out by the Office of Regulatory Compliance, Human Resources, and through the School of Dental Medicine's Compliance Portal regarding training that is required to be completed annually.

Specific training certifications are required to be uploaded into the School of Dental Medicine's Compliance Portal. These trainings may change periodically. Appropriate documentation is the Skill Soft Certificate which includes the name of the course, the individual's name, and date of completion.

If required training is not completed within set deadlines, employees may be removed from the clinic or other daily responsibilities until all training is completed.

If individuals have any questions or concerns regarding required training, they can contact the School of Dental Medicine's Compliance Officer, Mr. Brian Davis, Associate Dean.

1.12   Faculty Credentialing Policy

Title   School of Dental Medicine Faculty Credentialing Policy
Source: Dean's Office
Effective Date: February 1, 2010
Action Required: Complete all credentialing prior to hire; complete all re-credentialing within required timeframe; up-date all expiring documents with Office of Clinical Operations

Background: To stay consistent with best practices established by the University of Colorado Hospital for clinical faculty credentialing, the School of Dental Medicine revised the credentialing process for its faculty. The revised credentialing for all faculty members will ensure that the SODM is granting faculty appointments only to highly qualified individuals.

Policy Statement: All individuals seeking a faculty appointment at the University of Colorado School of Dental Medicine are required to be credentialed by the School's Office of Faculty Affairs and Development.

Re-credentialing of faculty will be performed every two years to ensure faculty members remain in good standing with State and Federal regulatory agencies, as well as professional liability carriers.

Required documentation for initial appointment credentialing includes:
- Completed Colorado Health Care Professional Credentials Application
- Copy of a current, active Colorado Dental/Dental Hygiene/Medical License or Colorado Academic License
- Copy of a current DEA License
- Copy of a current BLS Certification
- Copies of diplomas and certificates of training
- Updated curriculum vitae/resume

From information provided in the Colorado Health Care Professional Credentials Application, the Office of Faculty Affairs will perform the following:
- Request peer evaluations from the peer references listed
- Verify all degrees and training
- Request a claims history report from professional liability carriers
- Verify past employment
- Request information through the National Practitioner Data Bank (NPDB)
- Verify dental/dental hygiene/medical licenses in other states

Re-credentialing documentation will include:
- Completion of the most current Colorado Health Care Professional Credentials Application

- Copy of a current, active Colorado Dental/Dental Hygiene/Medical License or Colorado Academic License
- Copy of a current DEA License
- Copy of a current BLS Certification
- Copies of diplomas and certificates of additional training

Re-credentialing will also entail:
- Requesting a claims history report from professional liability carrier
- Requesting information through the National Practitioner Data Bank
- Verifying dental/dental hygiene/medical licenses in other states

If any adverse events appear on the NPDB report, licensure, or professional liability, the Credentialing Committee will review the details and determine if the individual should be forwarded to the Promotion and Tenure Committee for appointment.

Expiration dates for Colorado dental/medical licenses, DEA licenses, BLS certification, and professional liability will be kept in axiUm. The Office of Faculty Affairs will be responsible for reviewing reports on a monthly basis and for sending notifications of upcoming expiration dates to appropriate faculty members.

1.13 Faculty, Staff, and Student/Resident Clinical Privileges

Title: Faculty, Staff, and Student/Resident Clinical Privileges
Source: Office of Clinical Operation
Effective Date: January 1, 2008

OVERVIEW:

All faculty, students and staff must have current approval for clinical activities granted by the Office of Clinical Operations ("clinical privileges"). Clinical privileges shall be granted and monitored by the Office of Clinical Operations in accordance with the criteria outlined in this section.

Clinical privileges may be suspended or revoked at any time by the Office of Clinic Operations due to unprofessional conduct or to protect the health, safety or welfare of patients, faculty, students or staff. Students may appeal the suspension of privileges to the Student Performance Committee. Faculty and staff may appeal the suspension of privileges to the Dean.

FACULTY CLINICAL PRIVILEGES:

Faculty must have:
- A current faculty appointment;
- A completed and signed Colorado Health Care Professional Credentials Application;
- A current <u>active</u> Colorado Dental License, Dental Hygiene License or Colorado Academic Dental License;
- A current DEA License;
- A current BLS Certification;
- A Medicaid Number;
- Professional liability coverage through the University Trust or a private carrier;
- TB Titer;
- Hep B vaccination or antibody positive or informed waiver;
- Annual Influenza vaccination or informed waiver;
- Completed all required University and School of Dental Medicine training located in SkillSoft.

Copies of these documents will be kept within the School of Dental Medicine's Compliance Portal.

All requests for information from the National Practitioner's Data Bank will be made directly by the Office of Faculty Affairs. Review of responses will be done with the utmost confidentiality and maintained in the Office of Faculty Affairs. **Any adverse occurrences listed on the NPDB report, dental licenses, and/or professional liability will be reviewed by the School of Dental Medicine's Credentialing Committee, who will make recommendations on retention of privileges.**

STUDENT AND RESIDENT CLINICAL PRIVILEGES:

Students and residents must have the following:
- Students and residents must be currently enrolled in a program at the School of Dental Medicine;
- Students must have passed Part 1 of the National Boards;
- Hep B vaccination or antibody positive or informed waiver;
- TB Titer;
- Basic Life Support: All students and residents must have BLS certification prior to direct patient care;
- Influenza vaccination annually;
- Required annual training within SkillSoft (HIPAA, SDM Bloodborne Pathogens, SDM Chemical Waste);
- Students/residents must be in good standing with the Office of Academic Affairs.

STAFF CLINICAL PRIVILEGES:

Staff employees must have the following:
- The University must employ staff members in good standing or be participating in a working interview as approved by OCO;
- Basic Life Support - All clinical staff and clinic-related staff must have current BLS certification when participating in clinical activities;
- TB Titer;
- Hep B vaccination or antibody positive or informed waiver;
- Completed all University and School of Dental Medicine required training located in SkillSoft;
- Annual Influenza vaccination or informed waiver.

1.14   Badge Access for Non-Enrolled Students

Title: Badge Access for Students Not Enrolled in Courses
Source: Office of Academic Affairs and Office of Student Affairs
Effective Date: March 5, 2018

Purpose:
The School of Dental Medicine provides activities for future (admitted) students, students who are on a leave of absence prior to program re-entry, and for students continuing their education into the following semester as needed to complete "in progress" (IP) grades from the previous semester. Even though the students are not currently enrolled in a course during the semester of these activities, the activities require the student have access to Campus and School facilities, which requires a University ID badge. The purpose of this policy is to outline acceptable activities, the process for acquiring approval for the activity, and steps to attain a badge.

Acceptable Activities:
Activities include, but are not limited to involvement with the PONTIC Program, remedial educational projects that may or may not include work needed to complete an IP course grade, and research projects where students are not paid. Another approved activity includes the situation where a student is required to continue Patient-care coursework into the following semester as needed to complete an IP grade from the previous semester. In this situation, the students will not be "checked out" until the course work/remediation is complete. Any student who does not finish by the University academic deadlines will have to enroll in a course the following semester and pay additional tuition.

Process for Acquiring Activity Approval:
The faculty member responsible for the School of Dental Medicine activity must submit a written request for activity approval, including names of participants, to the Associate Dean for Academic Affairs and the Assistant Dean for Student Affairs. This request will be reviewed and either approved or denied by the Associate Dean for Academic Affairs and the Assistant Dean for Student Affairs. The faculty member will be informed of the decision.

Badge Access:
The list of participants for approved activities will be forwarded by the Associate Dean for Academic Affairs and the Assistant Dean for Student Affairs to the Manager of Student Engagement who will work with the Anschutz Medical Campus Badging Office to issue badges. Students are then required to contact the badging office to obtain their badge.

1.15   Student Malpractice Coverage for Community Volunteer Activities

Title: Guidelines for Ensuring Malpractice Coverage for Community Volunteer
                    Activities and Student Career Development Activities in Clinical Settings
Source: Office of the Dean
Effective Date: January 6, 2015

Background

As a public entity, the University of Colorado's defense and indemnity of its employees, students, residents and volunteers is outlined in state statute, the Colorado Government Immunity Act (CGIA). The CGIA provides that the University of Colorado will indemnify and defend its employees against claims or lawsuits arising out of any act or omission that occurs during the performance of that employee's duties and within the course and scope of the employee's employment, except where those acts are willful and wanton. The CGIA also provides that the University will indemnify and defend any health care practitioner-in-training (student, intern, resident or fellow) who is enrolled and matriculated in a University of Colorado program for acts or omissions that occur within the course and scope of the individual's responsibilities as a student or trainee. The CGIA also protects health care providers and others who provide authorized volunteer service to the University.

The University can neither defend nor indemnify employees for actions that are outside the course and scope of their approved job responsibilities, nor can it defend health care trainees for activities that are outside the scope of their academic program responsibilities as approved by the University. The University does not assume responsibility for any punitive or exemplary damages awarded against its employees or trainees.

While the language of the CGIA controls coverage provided by the University of Colorado Self-Insurance Trust ("Trust"), it does not always address the numerous situations and activities that involve students, residents, fellows and faculty. In general, it can be assumed that coverage by the University will be provided to employees whose activities are formally approved by their supervisors. Enrolled students will be covered to the extent that they are properly supervised, in activities that are approved by their academic CU program. **However, given the multiple fact situations and nuances, especially around "volunteering," all faculty members, administrators, students and residents should contact the Professional Risk Management Office (303-724-RISK [7475]) or the Office of University Counsel (303 315-6617), before assuming that CGIA and Trust insurance coverage apply.**

Faculty who are employees of Denver Health and Hospitals, the Veterans Administration Medical Center, National Jewish Health, affiliated ACT's clinical training sites or another affiliated institutions should contact their respective legal offices for advice.
Clinical Volunteer Activities by Faculty Who Are Employees of the University of Colorado
who participate in community-based clinical volunteer activities are covered by the University of Colorado Self-Insurance and Risk Management Trust ("Trust"), *if two conditions are met*:

- First, the volunteer clinical activities must fall within the course and scope of the employee's job duties; for volunteer activities to be deemed "within the course and scope of employment," there should be a written Memorandum of Understanding (MOU) or other document that is signed by the individual faculty member's department chair, setting forth that this work is within the course and scope of the faculty member's job responsibilities.
- Second, the volunteer clinical activities should be performed at a location approved by the University of Colorado School of Dental Medicine.

Notes:
- If the clinical volunteer activities are performed during the work week, the employee should not take a vacation day.
- Examples of volunteer activities that *are unlikely to be covered* by the Trust: participation in any volunteer activity outside of the state of Colorado, participating at COMOM, participating at a community health fair that is not a CU activity; acting as the dentist for a charity event; or providing dental supervision for a high school sports team.
- Faculty members must understand that "moonlighting" is not permitted. That is, if a University employee (other than a resident or nurse) also has an outside health care practice in addition to his or her work for the University of Colorado, then the employee will not be covered by the Trust for any clinical activities, whether within or outside of the faculty member's scope of employment.

Clinical Volunteer Activities by Residents and Fellows
Only clinical volunteer activities that are within the course and scope of the individual's responsibilities as a resident or fellow are covered by the Trust. The volunteer activities should be approved, in writing, by the Program Director, and the volunteer activities should count toward meeting the residency/fellowship program requirements. Residents and fellows who do not have active Colorado dental licenses and active University of Colorado faculty appointments cannot serve as the primary supervisors for a volunteer activity, or they must have individual malpractice insurance.

Clinical Volunteer Activities by Dental Students Clinical volunteer activities performed by dental and post-doctoral students enrolled at CU are covered by the Trust if they fall within the course and scope of the individual's responsibilities as a student.

In most circumstances, the volunteer activity will be a recognized activity within the approved curriculum, and course credit will be awarded to the student.

In situations where course credit is not given (for example, dental school "clubs", "tracks," "threads," interest groups, advisory college programs and various community outreach activities), contact the Professional Risk Management Office (303-724-RISK [7475]) or the Office of University Counsel (303 315-6617) for guidance. All non-course credit volunteer activities should also be approved, in writing, by the Senior Associate Dean for Academic Affairs or the Associate Dean for Student Affairs, or their designees). In determining whether a student volunteer activity will be covered by the Trust, consideration will be given to such factors as: a) whether the volunteer work is a structured part of the dental school curriculum; b) whether course credit is given; c) the level of faculty supervision provided to the student; and d) for offsite activities, whether approval has been granted by the School of Dental Medicine.

Student Career Development Activities

"Career development" includes activities designed to promote clinical skill acquisition or career exploration and are carried out under the supervision of dentists or other licensed health care professionals. Activities can be at the shadowing level (which entails only observation and no direct clinical involvement) or at the hands-on level (which entails clinical activities, such as history taking, physical examinations and procedures). To a large extent, students are responsible for engaging in career development activities during their dental school tenure.

Career development clinical activities performed by dental students enrolled at CU are covered by the Trust if they fall within the course and scope of the individual's responsibilities as a student. When the career development activity is part of an approved SODM course, where credit is awarded, no further approval is required.

In many situations, course credit is not given (for example, career exploration activities in a clinic, office or operating room, dental school "clubs", "tracks (Education, Professional Leadership Research, Rural and Urban Underserved)" "threads," advisory college and community education programs, student interest group activities, or individually-arranged clinical activities). All non-credit career development activities, whether they take place during the academic year or during academic breaks, should be approved, in writing, by the Senior Associate Dean for Academic Affairs or Associate Dean for Student Affairs or a designee.

There is no coverage by the Trust for externships or other volunteer opportunities that occur outside of the state of Colorado. For additional guidance, contact the Professional Risk Management Office (303-724-RISK [7475]) or the Office of University Counsel (303-315-6617). In determining whether a student career exploration activity will be covered by the Trust, consideration will be given to such factors as: a) whether the career development activity is a structured part of the dental school curriculum; b) whether the activity is linked to a dental school career development program; and c) the level of faculty or health professional supervision provided to the student.
Approval

These Guidelines were approved by the School of Dental Medicine. The Guidelines should be reviewed at least once every two years.

References:
1. University of Colorado School of Medicine
   Guidelines for Ensuring Malpractice Coverage for Community Volunteer Activities and
   Student Career Development Activities in Clinical Settings. January 2013

1.16   Clinic Dress Code Policy

Title: Clinic Dress Code Policy
Source: Office of Clinical Operation and Office of Quality and Patient Safety
Effective Date: October 1, 2014 (replaces policy dated 2008)

PURPOSE:

To standardize the dress of faculty, staff, students and residents in an effort to promote professional standards with regard to safety, cleanliness, comfort and image.

GENERAL POLICY:

A neat, clean professional appearance is required in all areas of the building. This requirement applies to all students, faculty, staff and residents.   All articles of clothing worn in the School should be clean and in good repair.

This policy must be read in conjunction with the School's Infection Prevention and Exposure Control Plan. If a conflict arises between this policy and the School's Infection Prevention and Exposure Control Plan, the Infection Prevention and Exposure Control Plan will prevail.

COORDINATION

The Senior Associate Dean for Clinic Operations and Professional Practice shall be responsible for coordinating the selection of clinical attire for each class prior to participation in clinical activities.

I.   **CLINIC GARMENTS AND APPEARANCE**

A. Outer Garments
The decision to determine the proper outer garments typically rests upon whether the planned patient contact involves a potential for splatter. In order to err on the side of safety and to allow for ease of monitoring, the use of outer garments will be based on whether the provider is providing treatment to the patient, regardless of the potential for splatter. Treatment procedures are defined as any time the provider has the potential to contact saliva or blood of the patient, either directly (e.g., gloves) or indirectly (e.g., through instruments). Treatment procedures do not include chair side patient interviews and instruction. When providing treatment the UCSDM guidelines for personal hygiene and appearance as stated in the schools Infection Prevention and Exposure Control Plan are intended to maintain asepsis in the clinic environment and protect clinicians from exposure to infectious agents. In addition, the correct use of protective attire will also reduce the unintended transfer of infectious agents to the home environment. The following guidelines apply as appropriate to all clinic personnel- male and female - including faculty, pre and post-doctoral students, international students, residents, staff

with patient contact, and any clinic employees who are likely to contact contaminated materials or surfaces.

1. Required Personal Protective Equipment (PPE) for Patient Treatment: Correctly worn masks, gloves, eyewear and gowns provide an important level of protection from infectious materials that may contact mucous membranes of eyes, mouth, nose and non-intact skin. The following barrier techniques will be practiced routinely in all clinics of the UCSDM including the simulation clinic (with the exception of disposable gowns), as part of standard precautions and are required for the treatment of all patients.

    a. Masks: Selected masks will have an intermediate rating of 98 % particle filtration at .1 micron and must be worn for all patient treatment. The mask must cover the nose and mouth and be correctly adjusted to stay in place. The mask collects aerosols and contaminated material during treatment. It should not be worn under the chin between uses as this allows the contaminated outer surface to touch the face, mouth, etc. Masks become saturated over time and must be changed a minimum of every 60 minutes or more frequently for high aerosol procedures such as ultrasonic instrumentation. Student clinicians will wear a fresh mask for each patient.

    b. Gloves: Nitrile or Nonlatex Gloves will be used in the UCSDM and are a single use item, with a fresh pair to be used for each patient. Wear cuff of glove over cuff of lab coat or gown. Torn or compromised gloves will be replaced immediately and hands washed prior to regloving. Contaminated gloves must be removed when leaving the treatment cubicle and/ or clinic treatment area. Upon return to treatment area, hands must be decontaminated with soap and water wash or if no visible soils, use alcohol rub, then fresh gloves may be donned upon returning to patient treatment. Surfaces should not be touched with gloved hands during treatment sessions unless barrier protected.

    c. Eyewear: Protective eyewear must be worn during patient treatment and includes goggles, prescription eyewear, or faceshields. (Faceshields do not take the place of masks.) Protective eyewear including prescription glasses must have side-shields or eyewear "wraps" that offer side protection. Patients must also wear protective eye-wear during all procedures including screening exams. All eyewear for clinicians and patients must be cleaned between patients with soap and water or if visibly soiled with splatter, cleaned and disinfected.

    d. Gowns and lab jackets: Protective clothing must be worn over scrubs or street clothes during clinic patient treatment sessions and any tasks generating potentially infectious aerosols such as instrument processing. Note: Scrubs are considered street clothes and must be covered by protective gowns or jackets in the clinical setting. Protective gowns or lab

        coats are intended to limit the transfer of soils and contamination in two directions: from street clothes to patient treatment zones; and from aerosols and debris generated in the patient treatment zone that would

otherwise be transmitted outside the facility, especially to home and family. Students will wear disposable gowns. Gowns and lab coats must be changed daily or more often if visibly soiled. Faculty and staff will wear approved clean lab coats or disposable gowns over scrubs during all clinic sessions when involved in patient care or while working in clinics where patient care is actively ongoing. Lab coats must cover street clothing where aerosols are most likely to contaminate. Neckties are a known vector of contamination and should be covered if worn.

2. Restrictions and removal of PPE: Gowns, masks, and gloves must NOT be worn outside patient treatment areas. Gowns and lab coats should be removed prior to eating. Cloth lab coats should be turned inside out when hung up in non-treatment areas. Contaminated gowns may NOT be worn inside any of the laboratories. Do not wear gloves while manipulating items at rotary grinding or polishing lathes in the labs. Appropriate containers will be provided for the collection of contaminated jackets/ laundry.

3. Recommended PPE for decontamination of dental unit treatment operatory: Gloves, masks, eyewear and gowns are required while cleaning and disinfecting environmental surfaces in treatment units. Utility gloves or double gloving are the preferred level of hand protection during dental unit cleanup and for surface cleaning and disinfecting. Disinfectant chemicals may compromise the integrity of some glove products. There is also the risk of sharps exposures during treatment area cleanup.

4. Required PPE for receiving and processing contaminated instruments in dispensary areas and Central Processing: Receiving and handling contaminated instruments, including those contained within cassettes, trays and baskets, is an exposure prone procedure. Heavy duty puncture resistant utility gloves, masks, protective eyewear and gowns must be worn when receiving and handling contaminated instruments, equipment and supplies.

5. PPE in dental laboratory areas: Protective eyewear must be worn in dental laboratories. Masks must also be worn when grinding, using rag wheels or any other procedures likely to product dust and aerosols or when shields and dust collection devices are not installed. Gloves should NOT be worn while working at rotary devices. It is preferred that gowns or lab coats used during patient treatment be removed prior to entering dental labs. Gowns must be removed if visibly soiled. Required PPE for Simulation Clinic: Correctly worn masks, gloves and eyewear must be worn during all simulation clinic activities. Required PPE for the Technique Lab: Correctly worn eyewear must be worn during all technique lab activities.

6. PPE for Oral Surgery including implant and osseous involved procedures: Sterile gloves will be worn by clinicians and assistants during all oral surgery and periodontal surgery procedures in addition to general PPE required for all patient contact.

7. Disposable lab gowns as approved and provided by the Office of Clinic Operations will be worn during all treatment procedures. The outer garment will have a high neck and protect the arms if splash and splatter are reasonably anticipated. Gowns should be changed for each clinic session or more often if visibly soiled.

B. Personal Appearance and Hygiene for Patient Treatment Procedures:

1. Secure hair away from the face and restrain from entering the treatment field.

2. Beards or mustaches will be covered by face mask or shield.

3. Jewelry on fingers, hands, arms or ears must not interfere with the effective use of gloves and masks. Jewelry on the hands and arms is discouraged during clinical sessions.

4. Nails must be clean and short. Artificial nails are known to harbor soils and microorganisms and are not permitted.

5. Intact healthy skin is a key element of infection control for health care workers.
   a. Use lotions to maintain skin health, wash frequently and at appropriate times, and inspect skin frequently for cracks and injuries that could increase risk of infectious agent transmission.

6. Shoes worn in patient treatment areas must be clean and have solid closed toes.

7. Neckties, scarves and necklaces should be covered by PPE during aerosol producing procedures.

8. Scrubs must be clean.

9. Designated CU Dental T shirts distributed through School of Dental Medicine are permissible alternative to scrub shirts on Fridays only.

C. Other Garments to be worn during Patient Treatment

In addition to approved outer garments as listed in Section II.A, students will be required to wear full surgical scrubs for all clinical patient care, whether or not there is a potential for splatter.

1. Style and Color
   The Office of Clinic Operations will be responsible for coordinating the style and color of scrubs for each class prior to their entry into the clinic.

2. Undergarments
   Undergarments, shirts or blouses must be fully covered by the student's scrubs.

3. Footwear

    a. Dress or athletic shoes are acceptable, but they must be clean and in good repair.

    b. Shoes must protect and cover the foot (i.e.: open toe or exposed dorsum of the foot is inappropriate).

    c. Heel height should not exceed 2 inches.

    d. Nylons or socks must be worn at all times.

4. Glasses and Protective Eyewear

    a. Regular prescription or safety glasses must be worn during all clinical procedures with a potential for splatter of saliva or blood. Glasses should protect the student on the side through wrap-around styling or a side-shield.

    b. Other appropriate eye protection includes a full face shield used in conjunction with a mask or a combination mask/eyeshield system.

5. Jewelry

    a. Chain type necklaces and stud-style earrings may be worn during all clinical procedures.

    b. Smooth (wedding band style) rings may be worn if the operator wears gloves. Ring styles which may puncture rubber gloves must be removed.

6. Security Badges

Each student/resident/staff/faculty member will be assigned a security badge which is to be worn as a part of all clinical attire. If you lose your badge, please report it to the Office of Academic and Student Affairs and campus security for a replacement. *Note: There will be a fee for each replacement.*

II.   DRESS CODE FOR NON-TREATMENT ON THE CLINIC FLOOR LEVELS

Students who are present in the building, and are not involved in patient care, should be appropriately dressed in either:

A. Surgical Scrubs as described in Section II; or

B. Street Clothes

1. Both men and women may wear regular slacks, jeans or cords that are clean, neat and in good repair;

2. Women may wear either skirts or dresses that are full and long enough to allow for modesty and comfortable movement;

3. Men are required to wear a dress shirt;

4. Women are permitted to wear a variety of blouse styles that are in good taste;

5. First Floor attire with an approved outer garment as described and limited in Section V.C.

6. **NOT PERMITTED** - Shorts, gym or sweat clothing, t-shirts or halter tops.

III.   PERSONAL HYGIENE

    A. <u>Hair</u>
1. Hair should be neat, clean, and out of the field of operation. Surgical caps are required during surgical procedures.
2. Shoulder length hair must be tied back at the nape of the neck so that it does not require handling during the treatment procedure.
3. Short hair around the face, such as long bangs or "feathers" must be kept off the face.
4. Facial hair must be kept neat, clean and well-trimmed.

    B. <u>Fingernails</u>
1. Hands and fingernails must be kept immaculately clean.
2. Fingernails must be kept trimmed and well-manicured.

    C. <u>Personal Cleanliness</u>
1. Body hygiene is required so that offensive body odors are avoided.
2. Preventive measures should be taken to maintain favorable oral hygiene and to prevent breath odors. Eating strong foods (garlic, onions, etc.) on clinic days should be avoided.
3. Strong perfumes, colognes or after-shave lotions should be avoided.

    D. <u>Make-up</u>
Women are expected to wear a minimal amount of make-up. Moderation should be exercised due to the close proximity of patients during treatment.

IV.   DRESS GUIDELINES FOR CLASSROOM/LAB ACTIVITIES

    A. <u>Due to the presence of visitors in the School, the street attire described above in Section III is preferred.</u>

    B. <u>A more casual attire is permissible in these areas with the following limitations:</u>
1. Shorts, cutoff, T-shirts or halter tops, gym or sweat clothes are not permitted.
2. Clean shoes and socks must be worn.
3. A clean, non-clinical lab coat should be used for laboratory work.
4. Jeans that are clean and in good repair are permitted, but not encouraged.

    C. Any student who enters the patient care area, which includes the reception areas, clinical hallways, and the treatment clinics, must wear at least a clean laboratory coat over acceptable street clothing. This provision is intended to facilitate use of the appointment system, dispensary, and consulting with faculty. It is not to be construed as a waiver of clinical attire requirements.

V.   DRESS GUIDELINES FOR SIMULATION CLINIC

Students will follow the same dress guidelines for the simulation clinic as for the regular clinic, with one exception: disposable outer gowns will not be worn in the simulation clinic. Students may wear laundered lab coats or scrubs while working in the Simulation Clinic.

VI.   ENFORCEMENT

The spirit of the dress code is intended to nurture the professional image of the dental students and the image of our school. In addition, the stated guidelines provide for both student and patient safety. It is hoped that all students will cooperate by complying with the code without enforcement being necessary. Recognizing that not all students share this point of view, enforcement shall be the responsibility of the supervising faculty who is authorized to take appropriate action in order to achieve compliance. These actions may include the following:

A. Warnings

B. Denials of access to clinics, classrooms or laboratories.

C. Reduction of grades where appropriate.

Students/residents have the right to appeal any disciplinary actions to the Senior Associate Dean of Clinics and Professional Practice.

1.17   Inclement Weather Policy

Title: Inclement Weather Policy
Source: Office of Clinical Operations
Prepared By: Mark Osvirk, Sheila Kennedy, Dr. Lonnie Johnson
Approved By: Faculty Senate; Dean; Sr. Associate Dean of Clinics and Professional Practice
Effective Date: November 29, 2012 (Revised 1/25/2013) (Revised: 12/13/2013) (Revised 4/11/2016)

Applies: Immediately; to all Clinics within the CU School of Dental Medicine

Introduction:

It is the legal an ethical responsibility of the CU School of Dental Medicine to provide safe patient care, as well as a safe educational and working environment for our students, residents, faculty, and staff. Colorado weather patterns are highly changeable causing significant storms throughout the year. University, campus, and School leadership are responsible for monitoring and making decisions based on the potential impact these conditions may cause on educational, business, and clinical operations.

This policy outlines three inclement weather scenarios: delayed openings, closure after the start of the work day, and complete closure of the campus.

Purpose:

The purpose of this policy is to define a course of action for the Cu School of Dental Medicine during an occurrence of severe inclement weather.

Policy:

To be consistent with the University of Colorado Anschutz Medical Campus' policy regarding the campus remaining open during periods of inclement weather, the CU School of Dental Medicine's educational and clinical operations will make every effort to remain open in the event of inclement weather. The decision to stay open, delay, and/or to cancel specific clinical operations or didactic classes, will be determined by the School's Executive Decision Committee (see Appendix A) and communicated to the students, faculty, staff, and patients by email distribution and website announcement.

When the School's clinical operations remain open, personnel and students are expected to be at work/school. If faculty and staff are unable to make it work, they will be required to take a vacation day. Students who are unable to attend regularly scheduled clinical assignments and/or didactic classes will need to inform their coordinators, clinic managers, rotation program directors and/or course directors prior to the start of the work/school day. It is the student/residents' responsibility to contact their scheduled patients to cancel, reschedule and/or ensure the patient received the appointment cancellation notification. (This may vary by clinic. Please check with your Clinic Director/Manager.)

Didactic classes will be held unless the course director or Interim Assistant Dean of Academic Affairs deems it necessary to cancel individual or all classes. Every effort will be made to conduct classes. Course attendance policies outlined in the syllabus will be adhered to if the class is not cancelled. However, recognizing the varying severity of local weather and driving conditions within the Greater Metro Denver area, students will be given the opportunity to make up missed course work on days of severe inclement weather.

In the event the University delays the opening of campus or closes the campus at any time, the School of Dental Medicine will follow the University's directive. In the case of a delayed opening, all clinics will be closed for the a.m. session, this includes the GPR, Graduate Periodontics, Emergency, Oral Surgery, all CUDT clinics; with the exclusion of Orthodontics, and Faculty Practice.

In the case of an early closure, all remaining clinic sessions will be canceled for all School of Dental Medicine clinics as listed above.

Executive Decision Committee

The Executive Decision Committee (Appendix A) is comprised of administrators, department chairs, and program directors, and has the responsibility to monitor potential impacts of a storm on didactic and clinical operations. This committee will also be responsible for decisions regarding business operations during inclement weather that are in-line with University and campus policies.

Essential Personnel

In an effort to ensure continuous clinical care, a core group of faculty and staff have been identified as "essential personnel" (Appendix B) to make certain that each of their areas are functional on inclement weather days. These essential personnel will be responsible for communicating with those faculty and staff essential for clinic operations to confirm that these individuals will be able to make it to campus.

Protocols:
A. Inclement weather situations with advance warning:

When possible, the School's Executive Decision Committee (see Appendix A) will meet on the day preceding the storm to determine the potential impact on our educational and clinical operations.

The following emails will be sent communicating any possibility for closure:

To Faculty and Staff from SDM Human Resources

A significant winter storm is forecasted for (Date). Given the prediction, we will be monitoring the news in the morning and providing information to you via email. We are planning on being open tomorrow so please give yourself extra time to make it to campus.

University police will also be monitoring the conditions and informing University leadership of unsafe conditions. University leadership will determine if conditions require campus closure or modified schedules. To keep up with the campus operational status please click on this link: http://www.ucdenver.edu/about/newsroom/alerts/Pages/default.aspx

In addition, notices will be sent to university-issued email accounts or individuals can call the toll-free phone line: 877-463-6070

It is best if everyone does report to work and being late is better than not reporting. If you do choose to stay home while the school operates on a normal schedule, you will be required to take a vacation day.

Residents and students will receive the following email from the Sr. Associate Dean for Clinics and Professional Practice or the Chair of Restorative Department:

To Students and Residents from Sr. Associate Dean of Clinics and Professional Practice or Designee

Dear Students and Residents,

With snow predicted (Date), we wanted to remind you to fill up your gas tank and give yourself extra time in the morning to make it to campus. During inclement weather, commute times can double, especially when it's a significant snow storm.

We expect to operate on a normal schedule on (Date) and we expect you to be here. If you are unable to get to campus, please notify your coordinator, course director, and/or program director.

Please check the School of Dental Medicine website for additional information should the amount of snowfall become significant.

University police will be monitoring the conditions and informing University leadership of unsafe conditions. University leadership will determine if conditions require campus closure or modified schedules. To keep up with the campus operational status please click on this link: http://www.ucdenver.edu/about/newsroom/alerts/Pages/default.aspx

In addition, notices will be sent to university-issued email accounts via the RAVE system, or individuals can call the toll-free phone line: 877-463-6070

Day of Storm
The morning of the storm, the Executive Decision Committee will reconvene by conference call to make an assessment of the extent of the storm's impact throughout Greater Metro Denver taking into consideration road and school closures throughout the area and their impact on our programs and operations. The committee will reference the University's Weather Alert page for updates on campus announcements.

Campus-wide Delay or Closure
In the event of a campus-wide delay, the graduate and undergraduate clinics will be closed for the morning session, and all scheduled patient-care activities for the effected time frame should be cancelled and rescheduled.

The only exception to this is the emergency clinic which will be covered by the General Practice Residents. In the case of a delay, GPR residents should be prepared to cover the morning session of Emergency Clinic. In the case of a campus-wide closure, the GPR residents on call will cover dental emergency as though it were after-hours.

Campus-wide delays will be announced on the University's Weather Alert page at: http://www.ucdenver.edu/about/newsroom/alerts/Pages/default.aspx. In addition, notices will be sent to university-issued email accounts via the RAVE system, or individuals can call the toll-free phone line: 877-463-6070.

The Manager of Communications will send EasyMarkit emails and text messages to patients, and will make an announcement on the School of Dental Medicine website and Facebook page.

Closing of SDM Clinical Operations and Didactic Classes

If the Executive Decision Committee and/or University leadership deems it necessary to delay or cancel clinical operations and didactic classes, they will make every effort to do so by 5:00 a.m. They will alert the Messaging Team (see Appendix A) who will ensure that:

1. An announcement will be made via email to all faculty, staff, and students prior to 5:30 am on the day of the storm (when possible) (Director of Facilities);
2. The main phone line, as well as each of the clinic direct lines, will be forwarded to x46901 (Director of Information Technology); and
3. The message at x46901 will inform anyone calling the School that the building is closed/delayed due to inclement weather (Sr. Director of External Relations).
4. The Director of Communications will use the EasyMarkit communication tool to send email and text messages to patients scheduled for the day.
5. The Director of Communications will place an announcement on the School's website announcing a delayed opening or closure.

Messaging for the Delay/Closure

Once the delay/closure has been announced by the Executive Decision Committee and/or University Police. The following email will be sent out by the Director of Facilities or Sr. Associate Dean for Clinics and Professional Practice (message to be revised based on the inclement weather scenario):

The Anschutz Medical Campus, including the School of Dental Medicine, is on a # hour delay/closed on (Date).   All morning/afternoon clinics are cancelled. Messages have been sent out via EasyMarkit to patients as well as updates to the School of Dental Medicine website and Facebook page. However, students/residents should call their patients to confirm that they received the notification of the cancelation of the morning/afternoon clinic session.

(Include in the case of a delayed opening) All essential personnel are required to be at the School of Dental Medicine to coordinate essential activities in support of emergency operations. If you are not sure if you are essential personnel, please contact your supervisor.

B. Inclement weather situations without advance notice:

In the event that a weather situation unfolds overnight or during normal business hours, the Executive Decision Committee (Appendix A) should convene prior to 5:00 a.m or during business hours to discuss the forecast and its potential impact on didactic and clinical schedules. Decisions should take into consideration the start of patient appointments (e.g. prior to 8:30 a.m. and 1:00 p.m. clinic starts), travel conditions for patients to get to the clinics, and the ability for patients, staff, students and faculty to safely leave the clinics.

Regardless of the timing or method for discussion, the Executive Decision Committee should determine one of three courses of action:

1. All educational and clinical activities will operate on a regular schedule;
2. All educational and/or clinical activities will be on a delayed start/early departure;
3. Only emergency care services will be provided between 8:00 am – 5:00 pm, covered by General Practice Residents, with after-hour care provided by the resident(s) on call.

Should option 2 or 3 be selected, an announcement will be made via email, on Facebook, and on the website, and announced via email and text to patients through EasyMarkit. Announcements should only be made that are agreed upon by the Executive Decision Committee, at the time determined by the Executive Decision Committee.

When the School's educational and clinical operations remain open, faculty, staff, and students are expected to be at work/school. In the case of emergent care only, the staffing requirement will be essential personnel (see Appendix B).

C. *Reporting Requirements when School is Open During Inclement Weather*

If faculty, staff, or students are unable to make it in on an inclement weather day in which the School is open, absences must be reported per the following:

1. Faculty must inform their department chairs and/or program directors, and the Scheduler (Krista Neu) at sdmscheduler@ucdenver.edu if scheduled to cover in the CUDT clinics;
2. Staff must inform their supervisors, back-up staff, and program directors/department chairs;
3. Students must inform their clinic coordinator, clinic manager, rotation program director, or course director, as appropriate per their daily schedule;
4. Department chairs must inform the Sr. Associate Dean of Clinics and Professional Practice.

D. *Canceling Didactic Classes when School is Open*

If a course director considers cancelling a didactic class when the School is open, he/she must first contact their department chair to determine if someone else is able to cover their class. If not, and the class is to be cancelled, it is the course director's responsibility to send an email to the entire class in a timely manner, keeping in mind that individuals give themselves additional time to get to campus during bad weather.

E. *Examples of Social Media, Voicemail, and EasyMarkit Messages During Inclement Weather*

Closed/Delayed Opening

Facebook:
Due to hazardous weather, the CU Dental Clinics and all academic classes are cancelled/delayed for today, (DATE). Please check with your patient coordinator or instructor to determine when clinic or classes will be rescheduled. Stay safe, and please continue to monitor ongoing weather impact at www.ucdenver.edu/sdmweather.

Website (Closed):
Due to the hazardous weather, the CU School of Dental Medicine will be closed today (DATE). If you need emergency care, please contact the University of Colorado Hospital at 720-848-0000 and ask to speak to the Dental Resident on-call. If you are having a medical emergency, please go to your nearest Emergency Room.

Website (Delayed):
Due to the hazardous weather, the CU Dental Clinics will be on a delayed start today (DATE). All morning clinical appointments are cancelled, with the exception of our Emergency Clinic which will start treating patients at 9:00 a.m. Should you have questions about weather conditions, please continue to check your email and visit www.ucdenver.edu/sdmweather.

Voice Mail:
The CU Dental Clinics are closed/delayed, today, (DATE) due to hazardous weather. A clinic staff will call to reschedule your appointment. If you are experiencing an emergent or urgent issue, please contact the University of Colorado Hospital at 720-848-0000 and ask to speak to the Dental Resident on-call. If this is a life threatening situation, please go to your nearest Emergency Room.

EasyMarkit Email Message:
Due to hazardous weather, the CU Dental Clinics are closed/delayed today, (DATE). A clinic staff member will call to reschedule your appointment. If you are experiencing an emergent or urgent issue, the contact the University of Colorado Hospital at 720-848-000 and ask to speak to the Dental Resident on-call. If this is a life threatening situation, please go to your nearest Emergency Room.

EasyMarkit Text Message:
Due to the weather, CU Dental Clinics will be closed/on a delayed opening. Clinic staff will call to reschedule your appointment. Please stay safe!

Closure During Normal Business hours:
Facebook:
Due to the hazardous weather, the CU Dental Clinics and academic classes are closed as of (Time) today, (DATE). At this point, we will reopen for normal clinic and academic schedules tomorrow, (DATE). Stay safe and check back for further messages. Should you have questions about weather conditions, please continue to check your email and visit www.ucdenver.edu/sdmweather.

Website:
Due to the hazardous weather, the CU School of Dental Medicine will be close at (Time) today (DATE). At this point, we will reopen for normal clinic and academic schedules tomorrow, (DATE). If you need emergency care, please contact the University of Colorado Hospital at 720-848-0000 and ask to speak to the Dental Resident on-call. If you are having a medical emergency, please go to your nearest Emergency Room.

Voice Mail:
The CU Dental Clinics CLOSED, today, (DATE), at (Time) due to hazardous weather. A clinic staff will call to reschedule your appointment. If you are experiencing an emergent or urgent issue, please contact the University of Colorado Hospital at 720-848-0000 and ask to speak to the Dental Resident on-call. If this is a life threatening situation, please go to your nearest Emergency Room. Should conditions prompt any schedule adjustments, information will be available on this website and on our toll-free phone line 877-463-6070.

EasyMarkit Email Message:
Due to hazardous weather, the CU Dental Clinics are closed today, (DATE) starting at (Time). A clinic staff will call to reschedule your appointment. If you are experiencing an emergent or urgent issue, please contact the University of Colorado Hospital at 720-848-0000 and ask to speak to the Dental Resident on-call. If this is a life threatening situation, please go to your nearest Emergency Room.

EasyMarkit Text Message:
Due to the weather, CU Dental Clinics will be close at (Time) today. Clinic staff will call to reschedule your appointment. Please stay safe!

II.   Health and Safety

2.1   Safety Policies Overview

Title: **Safety Policies Overview**
Source: **Clinical Affairs and Facilities Management**
Effective Date: **June 24, 2019**
Approval Date: **July 10, 2019**

INTRODUCTION:

The School of Dental Medicine (SDM) wants to provide a safe environment for all individuals including faculty, staff, residents, students, patients and visitors. SDM personnel are responsible to report or address safety issues.

PURPOSE:

The School of Dental Medicine (SDM) follows the University of Colorado Environmental Health and Safety (EHS) policies and procedures. The EHS policies and procedures are available at http://www.ucdenver.edu/research/EHS/OH/Pages/default.aspx. In addition, the school has adopted school-specific policies and procedures as summarized below. The School of Dental Medicine safety policies are divided into seven sections: General Safety, Security, Hazardous Materials, Equipment, Utilities, Life Safety (Fire Safety) and Emergency Response. In all categories, SDM coordinates safety and emergency activities with the applicable University of Colorado departments or resources.

POLICY:

General Safety

Each SDM individual whether faculty, staff, resident or student is responsible to report and address general safety issues. General safety issues may include, icy sidewalks, wet floors, emergency lighting that is non-functional, broken furniture, or rugs that are not flat. The SDM Facilities department in conjunction with the University Facilities department address such issues. Email the concern to sdmfac@ucdenver.edu.

Security

The school is an open building with badge access by authorized persons 24 hours a day, 7 days a week. The normal operating hours are 7 a.m. to 6 p.m. At times, the building may be "locked down" by campus police, for example, when the campus is closed due to inclement weather or during an active shooter scenario.

SDM recognizes that the security of our personnel, patients and visitors is a chief concern. The Campus Police department assigns a full-time campus security guard to the building. The

Security guard patrols the building and its perimeter, addresses various security-related concerns and maintains continuous communication with the campus police dispatch. The campus security guard may be reached at 720-955-3219. Campus police dispatch (our closest emergency responders) may be reached by calling 4-4444 from any SDM phone or 303-724-4444 from a cell phone. You

may call 911 from your cell phone; however, the call will be routed through the Aurora EMS system and may cause a delayed response.

The school limits access to areas defined by the school as high-risk. SDM high-risk areas include clinics outside of normal business operating hours. Other high-risk areas are the dispensaries and central sterilization, office pods, warehouse, equipment and utility rooms, server and telephone equipment rooms, fire control rooms, elevator control rooms and janitor closets. Specific badge and key access to these rooms is required. SDM Human Resources and the SDM Facilities Manager assign badge and key access based on job description and role assignment.

Campus police electronically track access to each high-risk area. SDM will quarterly perform a random audit of recent access. The audit may include a review based on job description, role assignment, location or timeframe such as after-hours access to patient care areas. This report is provided to the Dean of Finance and to the Operations Committee.

In addition to the badge access monitoring system, cameras are located throughout the building at all points of entry and exit and other high-risk areas as defined by SDM and campus police. One such area is the PIXIS machine (pharmaceutical storage of the narcotics and other drugs). SDM Facilities Management and the campus security guard or police have access to view the images.

SDM is mindful of the potential for an active harmer situation on college campuses and in patient care environments. As such, SDM has adopted the Run, Hide, Fight response plan. See the SDM Emergency Response Plan.

Hazardous Materials

The School of Dental Medicine works with many hazardous materials to include chemicals, compounds, and biohazardous fluids and tissue. The following are University Environmental Health and Safety as well as SDM requirements. EHS is responsible for chemical, biological and other waste disposal. For more information, see the Hazardous Materials Management Plan and the Infection Prevention and Exposure Control Plan in these sections: Hazardous Materials Management Plan; and SDM Infection Prevention and Exposure Control Plan.

- *Eye Protection Required:* Colorado law, University policy, and SDM require that all personnel and patients wear appropriate eyewear where hazardous conditions may exist to include bloodborne pathogen exposure. Patients are offered eyewear during clinical appointments. Students are issued eyewear as part of their initial supplies. Eyewear is available in all clinical and non-clinical lab areas for all SDM persons.

- *No Eating, drinking, applying cosmetics or handling contact lenses:* Eating, drinking, applying cosmetics and handling contact lenses is not permitted in laboratory, clinics, or clinical support spaces where hazardous materials (chemical or biological) are present. Drinks may be consumed in the Technique Lab and Simulation Clinic but they must be in a closed container and stored in a designated space. Drinks may be consumed in non-clinical areas.

- *Children in laboratories and clinical spaces:* Children under the age of 18 are prohibited from entering laboratory or clinic areas or other areas where hazardous materials or conditions may

be present unless such entry is in the context of a scheduled clinical appointment or is approved, and properly supervised by departmental personnel.

- *Flammable Liquid Storage:* Flammable liquids must be properly stored inside fire rated storage cabinets in order to comply with fire codes and to protect the School of Dental Medicine from potential fires.

  At the Anschutz Medical Campus (AMC) including the School of Dental Medicine, clinical and laboratory areas may store a maximum of 2 gallons of flammable liquids outside of a rated flammable liquid storage cabinet. As a reminder, the 2-gallon limit includes waste and non-waste flammable liquids. Each smoke compartment (clinical area or office pod) may contain a maximum aggregate of 10 gallons of alcohol based hand gel.

  Flammable liquids may not be stored inside walk-in coolers, refrigerators or freezers. Up to one pint of alcohol may be stored inside a refrigerator if the container is stored inside a sealed plastic secondary container.

- *Chemical Waste Training:* All personnel must successfully complete the School of Dental Medicine's Chemical Waste Management training online within 30 days of the date of hire. In addition, the Supervisor or Principal Investigator must provide and document on-the-job training for those employees that directly handle hazardous material and waste. Complete the EHS Employee's Hazardous Waste OJT Training Checklist. The Clinical Support Director has copies of this document. New employees must be under the direct supervision of a trained employee whenever handling chemical waste until all of the required training has been successfully completed. In addition, all employees, students, and residents are required to complete the Chemical Waste Management refresher training every year.

- *Bloodborne Pathogen Training:* Bloodborne pathogen training is required for all School of Dental Medicine personnel due to the risk for exposure to bloodborne pathogens in the clinical and clinical support environments to include lobbies and other common areas where patients may visit. All personnel must complete the School of Dental Medicine Bloodborne Pathogen online training within 30 day of the date of hire and the refresher training each year.

Equipment Management

SDM Facilities manages all dental equipment to include the dental chairs and dental units. SDM Clinical Support Services manages all dental instrumentation and related equipment such as cameras. The Clinical Support Services department includes the Central Sterilization and the Dispensaries that provide and assign instrumentation to the student and thereby to the patient. Radiology manages the radiology equipment. The Information Technology (IT) department manages all computing equipment whether clinical or non-clinical and software to include the electronic health record. The IT department coordinates with the University to manage the telecommunications system. These groups coordinate with various vendors.

Utilities

The SDM Facilities department coordinates all utilities work with University Facilities and vendors. SDM utilities include a vacuum (suction) system, compressed air, medical gases, other HVAC components and a generator. SDM Facilities keeps logs of maintenance that are the school's responsibilities. University Facilities keeps maintenance documentation that is specific to their oversight. University Facilities keeps the generator maintenance and testing documentation.

Life Safety (Fire Safety) and Emergency Preparedness.

The University maintains logs of all fire detection, fire alarm, and fire response systems to include fire extinguisher and fire door maintenance logs. SDM conducts at least one fire drill per year. For more information on Fire and Emergency responses, see SDM Emergency Response Plan.

REFERENCES:
- 29 CFR 1910.1030; Code of Federal Regulations, OSHA Bloodborne Pathogens standard
- School of Dental Medicine Emergency Response Plan
- School of Dental Medicine Hazardous Materials Management Plan
- School of Dental Medicine Infection Prevention and Exposure Control Plan
- University of Colorado Environmental Health and Safety (EHS) Policies and Procedures
- University of Colorado Office of Regulatory Compliance (ORC) and Risk and Compliance (RAC) requirements

ACCOUNTABILITY:

All faculty, staff, residents, and students are responsible for the safety of our school. All individuals are responsible for reading and following this policy.

AUTHORITY:

The Sr. Associate Dean of Clinics and Professional Practice, faculty, directors, managers, and supervisors have the authority to enforce this policy per University policy, professional practice, and community standards.

REVIEW AND APPROVAL:

The Sr. Associate Dean of Clinics and Professional Practice, the Operations Committee, Faculty Senate and SDM Executive Committee grant final approval of this policy. The policy is reviewed on a triennial basis or sooner, as needed.

2.2   Hazardous Material Management Plan

Title: Hazardous Material Management Plan
Source: Facilities, Quality & Patient Safety, and Clinical Operations
Effective Date: Revised February 2019

Introduction to Hazardous Chemical Waste Regulations

The Resource Conservation and Recovery Act (RCRA) hazardous waste regulations apply only to chemicals, which have become a waste. Laboratory and clinical use chemicals become chemical wastes if the chemicals are: spent, expired, surplus stock, or are unused chemicals, which no longer have a legitimate use. The hazardous waste regulations do not apply to chemical reagents that are actively being used and stored in the laboratory or dispensaries for legitimate laboratory or clinical purposes.

In Colorado, the Colorado Department of Public Health and Environment (CDPHE) enforces the RCRA hazardous waste regulations. The university and School of Dental Medicine must comply with these regulations and is subject to compliance inspections by CDPHE without warning. Non-compliance with hazardous chemical waste regulations may result in citations or enforcement actions being issued against the university and the School of Dental Medicine along with significant fines and/or criminal penalties.

School of Dental Medicine personnel who are involved in the use of hazardous materials are responsible for properly collecting all of the chemical wastes generated from laboratory and clinical use and disposing of them through EHS.

Overview of Chemical, Biological/Infectious, and Household Waste Disposal Procedures.
Chemical Waste

All School of Dental Medicine personnel involved in the use of hazardous materials are required to collect chemical wastes in empty chemical reagent containers and dispose of them through EHS.

To manage chemical wastes, follow the five-step procedure below:

1. Collect the chemical waste in an empty chemical reagent bottle, which is chemically compatible with the waste to be collected;
2. Seal the reagent waste container with its original lid;
3. Complete a UCD Hazardous Waste label and place it over the existing reagent label as soon as the first drop of waste is added to the waste container;
4. Keep the chemical waste container closed at all times except when adding waste to it;
1.   Inspect every chemical waste container weekly for leaks, and document your inspection results in your SAA Inspection log.

To obtain chemical waste labels, contact the hazardous materials group at 303-724-0111 and provide your name, phone number, mail stop, and the number and size of chemical waste labels required (large-5"x 4", or medium-3"x 4").

Empty chemical reagent containers that once held a hazardous chemical can be disposed of into the

regular garbage once the containers are empty.

To request that chemical waste be picked up from the School of Dental Medicine, fill out and submit the appropriate Chemical Waste Disposal Request Form.

Biological / Infectious Waste: Complete instructions for the proper segregation and disposal of biomedical or infectious wastes are found in the EHS website at http://www.ucdenver.edu/hazmat in regulated medical waste management plan.

Biomedical waste cannot contain any hazardous chemicals or radioactive materials. If you have a mixed waste stream consult with the EHS Biosafety Officer prior to generating these wastes.

School of Dental Medicine personnel should collect biomedical wastes in point-of-use receptacles at the dispensary on each clinic floor. Point-of-use containers should be lined with a red bag and labeled to indicate they are for biomedical wastes only.

Individual red bags must be tied or taped shut and placed into the appropriate red or yellow biomedical waste tubs for final disposal. Red tub wastes will be treated by autoclaving and yellow tub wastes will be treated by incineration.

Needles and sharps must be collected in appropriate sharps containers. When full, the sealed sharps containers are disposed of in the appropriate red or yellow biomedical waste tub.

Once a tub is full, the red bag must be tied or taped shut and the lid placed on the tub.
EHS personnel will pick up full tubs and mark them with the appropriate barcode label and resupply the lab with empty tubs, lids, and red bags.

Contact EHS at 303-724-0111 for assistance.

Amalgam Waste: The School of Dental Medicine (SDM) in accordance with Metro Wastewater Reclamation District, federal regulation: 40 CFR Part 441, Effluent Limitations Guidelines and Standards for the Dental Category, effective 07.14.17, and the American Dental Association (ADA) best management practices adhere to the following guidelines:

1. The School of Dental Medicine (SDM) has installed a model MRU10-30 Amalgam Separator which meets ISO 11143 specifications. SDM qualified staff change out the separator tanks once a year. The tanks are returned to the vendor for recycling.
2. Each clinical chair is equipped with a chair side trap. SDM staff, in accordance with the manufacturer's instructions, inspect and replace the chair side traps weekly or as needed. When amalgam is present, the complete trap is handled as regulated chemical waste and disposed in a proper amalgam waste container (Satellite Accumulation Area).
3. SDM does not rinse traps or items containing amalgam over sinks, drains or toilets.
4. SDM uses non-chlorine, non-oxidizing disinfectants and neutral cleaners.
5. Pre-clinical amalgam is collected in Satellite Accumulation Area (SAA) collection sites. Containers are inspected weekly and the inspection is documented on the SAA log. The containers are inspected for leakage and proper labeling.
6. University Environmental Health and Safety (EHS) collects the SAA containers and disposes or recycles them per University EHS policy. EHS maintains documents of

recycling or disposal.

7. The School of Dental Medicine is using vacuum collection in all clinical areas and pre-clinical areas.

8. The School of Dental Medicine uses pre-capsulated, single use amalgam.

9. SDM conducts daily visual inspections on the amalgam tanks to ensure proper function and that there are no leaks. All inspections are documented in a daily inspection log. In addition, a semi-annual maintenance is performed and documented.

10. Exchange of the amalgam holding tanks is done on an annual basis by SDM in accordance with set guidelines. The School of Dental Medicine maintains a log of when the canisters were changed out including the invoices of the recycled amalgam.

11. If repair is needed to the amalgam separator, the repair will be scheduled within 10 business days of when the malfunction is discovered. A repair report is maintained that includes the repair date, person making the repair or replacement (including make and model) and a description of the repair.

12. Training: All SDM personnel including students, staff and faculty whether clinically based or not take the on-line Chemical Waste training course, annually. The Chemical Waste module includes training on the proper handling and disposal of amalgam waste. The Chemical Waste training course is managed by the University training system, Skill Soft.

13. Documentation: SDM maintains a copy of the One Time Compliance Report, training records, this policy/plan, logs of inspections, repair, replacement, maintenance, recycling receipts and manifests for 3 years.

14. SDM will make all documents available for review by Metro Wastewater District.

Household Waste (Trash): Household waste (paper, cardboard, plastic, etc.) is collected in regular garbage cans or wastebaskets.

Do not discard any of the following with regular household waste:

Chemicals, radioactive materials, or biomedical waste.

Unused orange autoclave bags, red bags, or containers marked with either radioactive or biohazard warning labels.

The janitorial staff is responsible for picking up household waste.

Hazardous Materials Warning Labels: Placing a hazardous material warning label on the outside of the container or affected area should always indicate the presence of a hazardous material. All School of Dental Medicine personnel must become familiar with these warning labels so that the proper safety precautions may be taken. When a container or area is marked with a hazardous material warning label, you should always take the proper precautions to prevent contaminating yourself or your equipment. Do not use containers or bags marked with hazardous material warning labels to store non-hazardous materials. If you are unfamiliar with a container or a piece of equipment which has a hazardous material warning label, you should not use or handle it until you are properly instructed by your supervisor.

Hazardous Chemical Warning Labels: Containers or equipment that have chemicals present will be marked with hazardous chemical warning labels. Hazardous chemical containers are sometimes marked with warnings such as "Flammable," "Corrosive," "Reactive," or "Toxic" or they may be

labeled with a variety of U.S. Department of Transportation warning labels.

Biohazard or Infectious Agent Warning Labels: Materials that have the potential to cause disease are marked with a biohazard label. Infectious materials are also collected in red or orange bags, colored buckets, red plastic tubs, or cardboard boxes labeled with the BIOHAZARD or INFECTIOUS symbols.

Identification of Universal Wastes
Universal wastes are regulated wastes that you might not recognize as chemical wastes. Universal wastes must be properly collected and disposed of through EHS although there are instances where they may also be picked up by UCD Space and Asset Management.

The following universal wastes must be collected by School of Dental Medicine personnel and disposed through EHS: pharmaceuticals, and mercury containing switches and devices (thermometers, blood pressure cuffs, barometers, etc.).

Contact UCD Space and Asset Management (303-315-2249) to properly dispose of surplus computers or computer peripherals (monitors, printers, CPUs, keyboards, mice, etc.), laboratory equipment (including all equipment containing circuit boards), or furniture.

UCD Facilities Management (303-724-1777) will properly collect fluorescent bulbs from building lights but other mercury containing bulbs from equipment (fluorescent bulbs, HID lamps, etc.) should be disposed of through EHS.

DEA Controlled Substances Management and Disposal: If you are a holder of a DEA controlled substances registration, you need to register your DEA registration with our reverse distributor group by sending a copy of the registration via email to jerman.lopez@ucdenver.edu, via fax (303-724-0388), or via campus mail (F-484). In addition, when you no longer have a use for any controlled substances on your registration our reverse distributor group can assist you in disposing of the substances according to the law and also provide you with the paperwork for your records to show you've disposed of your controlled substances in accordance with all applicable laws

Empty Chemical Reagent Container Disposal Procedure: Empty chemical reagent containers that once held a hazardous chemical can be disposed of into the regular garbage once the containers are empty. In addition, empty aerosol containers may be disposed of into the regular household trash.

Satellite Accumulation Areas: A Satellite Accumulation Area (SAA) is defined as any laboratory or room where chemical waste containers are stored. As long as School of Dental Medicine properly manages their chemical waste containers according to the rules provided in this section they will be in compliance with environmental regulations.

All chemical wastes generated and stored in the SAA must be managed according to specific rules provided in this section. The University and the School of Dental Medicine is inspected by the CDPHE on a regular basis to determine whether personnel are complying with the rules for managing their chemical waste containers. Non-compliance with the following chemical waste container rules may result in significant monetary fines and penalties for the University and School of Dental Medicine.

General Guidelines for Collecting Chemical Waste: To manage your chemical wastes, follow this five-step procedure:

6. Collect the waste in an empty chemical reagent bottle, which is chemically compatible and has no cracks, dents, or rust.
7. Seal the container with its original lid. Do not use corks or rubber stoppers.
8. Complete a UCD Hazardous Waste label and place it over the existing reagent label as soon as the first drop of waste is added to the container.
9. Keep the chemical waste container within eyesight at all times, otherwise you must place the container inside a locked room or a locked storage cabinet.
10. Inspect the chemical waste container weekly and document the results in your Satellite Accumulation Area Inspection Log.

Labeling Requirements Each chemical waste container must be labeled with an EHS hazardous waste label as soon as the first drop of waste has been added to the container. To obtain chemical waste labels contact the EHS and provide your name, campus box number, and the number and size of labels required (5"x 5" or 3" x 4"). The labels will arrive within a couple of days through campus mail. You can also request them from the hazardous materials specialists when they pick up your chemical waste.

When labeling the empty chemical reagent container, ensure that the following information is complete and accurate:

4. Cross out existing information on the chemical reagent container;
5. Attach the UCD waste label securely (over existing reagent label);
6. Complete all sections of the chemical waste label:
7. Name of PI, building name, room # and phone #;
8. Spell chemical names completely **- no abbreviations or chemical formulas;**
9. Provide chemical concentrations to the best of your ability.

Quantity Storage Limits You may store only limited quantities of chemical wastes in the SAA area. Remember:

Never accumulate more than a total of 1 gallon of any chemical waste in the SAA area.

At the School of Dental Medicine, we prefer that you do not accumulate more than 1 gallon of hazardous chemical waste in the SAA area in order to remain in compliance with fire codes and to reduce the potential for large spills or exposures.

Segregation of Chemical Wastes and Reagents: Incompatible chemical wastes must be property segregated from one another to prevent hazardous chemical reactions. When incompatible chemicals are mixed together, the chances for undesired chemical reactions to occur increase significantly. Here are some important segregation rules that must be followed when storing incompatible chemical containers together:

1. Do not store oxidizers with flammable liquids
2. Do not store acids with bases
3. Do not store water-reactive chemicals next to aqueous materials or corrosives
4. Do not store cyanides or sulfides next to strong acids

Important note: Whenever you have incompatible chemical waste or reagent containers they must be stored inside separate storage cabinets, otherwise they must be placed inside plastic pails or trays to protect from co-mingling of incompatible materials should any of the containers leak.

The following guidelines should be used when collecting chemical wastes:

1. Keep halogenated solvents (solvents containing chlorine, bromine, fluorine, or iodine) separate from non-halogenated solvents.
2. Clean flammable and combustible solvents (alcohols, acetone, acetonitrile, xylene, etc.) may be collected together in the same waste container.
3. Acids must be collected separately.
4. Bases must be collected separately.
5. Oxidizing wastes must be collected separately.

Aisle Space Requirements: To facilitate the cleanup of chemical spills, always maintain at least 3 feet of aisle space to reach the chemical waste containers stored in your area

Do not store laboratory supplies, carts, or equipment in front of the cabinet where your chemical waste containers are stored since this will violate the aisle space requirement.
Do not store laboratory supplies, carts, or equipment in front of emergency showers and/or eyewash stations in order to facilitate their use in emergency situations.

Security Requirements: You are responsible for the waste you generate, even if someone else handles it. Chemical waste containers must always be under your control. The waste container must be under visual observation at all times. If no one is present, chemical waste containers must be under lock and key. This ensures that new or untrained employees do not commingle incompatible wastes into your waste container.

Weekly Inspection of Chemical Waste Containers: Chemical waste containers will develop leaks. As such, chemical waste containers must be inspected weekly for leaks. If any issues are found during the weekly inspection or at any other time the issues should be immediately resolved. Inspect every chemical waste container for the following issues:

1. Waste containers are in good condition with no leaks;
2. Waste container is closed with a proper lid;
3. Hazardous waste labels are securely attached and properly filled out;
4. No incompatible chemical wastes stored together;
5. No excessive quantities accumulating (No more than 1 quart)

Inspection results must be documented weekly on the SAA Inspection Log and be made available during inspections. Save inspection logs for 3 years.

Chemical Waste Pick Up Request: To request chemical waste be picked up from your area you must complete and submit a Chemical Waste Disposal Form to EHS. EHS personnel will pick up chemical waste containers within 2 weeks after the Chemical Waste Disposal Forms are received for the AMC campus

Sink Disposal Guidelines for Chemical Waste: The Federal Clean Water Act requires wastewater contaminated with toxic chemicals to be pretreated prior to discharge into the sanitary sewer. Do

not pour hazardous chemical wastes down sink or floor drains. All wastes which are poured into the sinks and drains at the university go directly into the main sewer lateral connection without any pretreatment. There are no special filters, holding tanks, neutralization processes, or pretreatment of any kind for wastes discharged into sinks and drains located at any of the campuses.

Emergency Response Procedures: Every person at the School of Dental Medicine must know how to respond to air quality hazards, hazardous waste spills, or uncontrolled releases of hazardous materials. School of Dental Medicine personnel cannot safely clean up many hazardous substance spills because they lack the appropriate personal protective equipment (PPE) and specialized training. In such an incident, EHS should be notified immediately at 303-724-0345 for assistance. For hazardous chemical spills that personnel cannot cleanup safely, evacuate the affected area and notifying EHS is the proper response procedure.

Planning for Spills and Emergencies Principal Investigators or Supervisors are required to provide and document on-the-job training to employees that handle or work with hazardous materials. Examples of the information that should be provided to employees include the following:

1. Laboratory personnel must know where the shutoff switches are located for laboratory equipment.
2. Know the location of the nearest eyewash, safety shower, fire pull station, and type and location of the nearest fire extinguisher.
3. Know two separate evacuation routes from the laboratory. Pre-designated "muster" locations should be established where lab personnel can congregate and be accounted for during an emergency.
4. Elevators must not be used in cases of fire or catastrophic chemical releases.
5. Laboratory personnel may cleanup incidental chemical spills only if the spill is small and they possess the knowledge and PPE required to clean up the spill safely.

Incidental Chemical Spills An incidental chemical spill is one that you can handled by School of Dental Medicine personnel (or with the help of a coworker) without negatively impacting your health. Typically, incidental chemical spills consist of small spills (1 pint or less) of common chemical reagents that are not very hazardous.

Consider the following issues below before attempting to clean up an incidental chemical spill on your own.

1. Are you familiar with chemical spilled and cleanup procedures?
2. Do you have the right spill cleanup materials and protective equipment?
3. Does the spilled chemical have low toxicity?
4. Does the spill present an inhalation hazard?
5. If the spill is a flammable liquid, is there enough (> 1 gallon spilled) that a significant fire could start?
6. Has anyone been injured or chemically exposed?
7. Does the spill have the potential to impact the environment?

Emergency Response Chemical Spills: Whenever School of Dental Medicine personnel have spills of hazardous chemicals that they are unfamiliar with, or the quantity spilled (1 gallon or more) is too large to cleanup without special protective equipment, they need to request outside assistance and the spill is considered an emergency response spill.

Here are some criteria that will trigger an emergency response spill:

1. Any chemical spills where you are not familiar with the chemical properties or physical hazards or lack appropriate cleanup supplies or equipment.
2. Spill of 1 gallon or more of a flammable liquid (flashpoint < 140 degrees F).
3. Compressed gas cylinder leaking flammable or toxic gas.
4. An employee has spilled a large amount of chemical onto him/herself.
5. The spill has the potential for environmental release (e.g., down a sink drain, evaporate up fume hood, or spilled outdoors).
6. The substance has an NFPA rating of 3 or 4 for toxicity or flammability.

Follow the procedure below during an emergency response spill:

1. Warn others and evacuate the immediate area of the spill.
2. Close the door behind you and post an employee by door to warn others of the spill.
3. For fires or large-scale toxic, flammable, or toxic gas releases pull the fire alarm and evacuate the building.
4. From a safe location call 911 for assistance or on the campus phone system call (303) 724-4444.
5. Provide your name; call back number, building name and location, name of chemical spilled and quantity released.
6. Wait for the emergency responders to show up and provide them with details of the incident.

Air Quality Concerns: For concerns about air quality and building odors, School of Dental Medicine personnel should contact the SODM Facilities Director or Facilities Dispatch at 303-724-1777. Facilities will involve EHS as needed. In a case of a severe odor situation follow the same procedures as an emergency response spill.

Personal Decontamination: In an event has occurred where a School of Dental Medicine been exposed to a chemical immediately call EHS at 303-724-0345 or in case of an afterhours incident call the University Police at 303-724-4444.

For exposures to the skin with toxic chemicals immediately flush with water for 20 minutes. Use eyewash for the eyes, or a sink for small areas of the body. Place any contaminated clothing into a sealed plastic bag for later evaluation and disposition.

Do not use chemical or mechanical methods that may damage the skin and worsen the exposure. Use only mild soap or detergent and warm water.

As a general rule, with the exception of performing the initial emergency actions necessary to stabilize or abate the spill**,** any person involved in any chemical incidents must ensure that EHS is informed immediately by telephone:

Household Trash Guidelines: There are three types of wastes (household, chemical, biomedical) generated at the School of Dental Medicine. Each one of these wastes is managed by an independent set of environmental regulations. Properly segregating these wastes is extremely important because each one of them must be sent to a separate waste disposal facility.

Municipal (sanitary) landfills accept household waste, which are considered non-hazardous and are

collected in standard wastebaskets or trashcans. Sanitary landfills are not permitted to bury wastes that are considered hazardous.

The following wastes cannot be placed into the household trash at the university:

Glass containers: Uncontaminated glassware of any kind cannot be discarded in the regular trash because of the potential for injury to the custodial staff. Collect all types of uncontaminated glassware in a sturdy cardboard box that has a lid. Seal the lid to the box securely with tape. Mark the lid of the box clearly with the words "Scrap glass". The janitors will pick up and dispose of properly prepared boxes of scrap glass by placing it directly into the trash compactor.

Empty Chemical Reagent Containers: Empty chemical reagent containers that once held a hazardous chemical can be disposed of into the regular garbage once the containers are empty. Empty aerosol containers may be disposed of into the regular household trash.

Chemical Spill Debris Collect all chemical spill debris (paper towels, rags, etc.) in a properly labeled chemical waste container and have them picked up by EHS.

Asbestos Containing Materials Old bench tops, oven liners, fume hood liners, cabinet liners, gloves, floor tiles (especially 9 inch tiles) and outdated ceiling tiles may contain asbestos containing materials which are prohibited from disposal into the trash. Dispose of all asbestos containing materials through EHS.

Liquid Wastes Regardless of Toxicity No liquid wastes of any kind (including sterile water) may be placed in the trash, even if they are in leak-proof plastic containers.

Surplus, Broken, or Outdated Laboratory Equipment Surplus or broken refrigerators, freezers, centrifuges, incubators, GCs, and all other related laboratory equipment cannot be discarded until it has been properly decontaminated from radioactive isotopes, biological materials, and hazardous chemicals by School of Dental Medicine personnel. To initiate the disposal process complete the Medical/Scientific Equipment Disposal Request form and submit it to the UCD Space and Asset Management in order to have your surplus laboratory equipment green tagged by EHS and then picked up for disposal.

Surplus Computers, Monitors, Printers, CPUs: Surplus computers and computer related equipment cannot be discarded into the household trash because they contain excessive levels of heavy metals. To initiate the disposal process complete the Computer, Peripheral and Other Office Equipment Disposal Request and submit it to the UCD Space and Asset Management in order to have your surplus computers picked up for proper recycling.

Spent Fluorescent/UV Light Tubes: Collect spent fluorescent light tubes and discard them through the EHS because they contain mercury. If a spent ultraviolet fluorescent light tube removed from a biosafety cabinet has been potentially exposed to infectious materials, make sure the tube has been wiped down with an appropriate disinfectant. All spent fluorescent tubes will be discarded through EHS.

Sharps Collect syringes, needles, razor blades, and scalpels in a plastic sharps bucket separate from those that have been contaminated with hazardous materials. Never discard sharps into a scrap glass box.

2.3   Radiation Use Policy

Title: Radiation Use Policy
Source: SDM Division of Radiology
Effective Date: September 2005; Revised 2007; Revised 2012; Revised May 2018
Action Required: Sign document and returned to Division of Radiology

PURPOSE:
The following policy has been developed in the interest of establishing a consistent standard concerning the use of ionizing radiation within the School of Dental Medicine. This radiation use policy complies with the Federal Radiation Control for Health and Safety Act of 1968, the Consumer-Patient Radiation Health and Safety Act of 1981, and the Rules and Regulations Pertaining to Radiation Control from the Colorado Department of Public Health and Environment. The primary goal of this policy is to assure the safe effective use of ionizing radiation and to minimize the potential risk from adverse biological effects to patients, students, faculty, and staff.

1. Deliberate exposure of an individual to dental radiographic procedures for training or demonstration purposes shall not be permitted unless there is a documented diagnostic need for the exposure by a member of the University of Colorado School of Dental Medicine faculty.

2. No operator (faculty, student, or dental auxiliary) shall hold an image receptor in place for the patient during the exposure. The use of receptor holding devices, bite tabs, or other positioning devices should be used to position the receptor during exposure.

3. The operator must stand at least 1.8 meters (6 feet) from the patient and behind the barrier provided for each x-ray exposure cubicle in the School of Dental Medicine. The operator shall be positioned outside the path of the useful beam and be able to directly observe the patient during each exposure.

4. The tube housing, the cone, or the position indicating device for wall mounted x-ray machines must never be hand held during the exposure. If equipment is not stable, report the problem to the radiation protection supervisor for the School of Dental Medicine, and use another unit. The use of hand held mobile x-ray machines is allowed only if the user is properly trained in its operation and State prescribed radiation exposure monitoring is followed.

5. Radiographic machines designed for use with an intraoral image receptor shall limit the source- to-skin distance to not less than 18 centimeters (7 inches).

6. Only shielded open-end position indicating devices will be used in order to minimize scatter radiation.

7. When a cylindrically collimated x-ray machine is being used, the circular beam shall be limited to no larger than 7.0 centimeters (2.75 inches) at the end of the cylinder. When rectangular collimation is used, the useful beam at the end of the collimator shall not have a diagonal measurement of greater than 7.0 centimeters (2.75 inches).

8. Only digital image receptors shall be used. Traditional intraoral film of speed rating "F" may be used in emergency situations.

9. Each dental x-ray machine shall contain filtration of 2 mm of aluminum equivalent if operated at less than 70 kilovolt peak (kVp), and 2.5 mm of aluminum equivalent if operating at 70 kVp or above.

10. Leaded aprons will be used on all x-ray patients of the School of Dental Medicine as an additional precaution to prevent unnecessary scatter radiation exposure to the body of the patient. Thyroid shields shall be used in all situations, except when diagnostic information will be lost by their use (panoramic and some extraoral radiographic procedures).

11. Periodic radiation protection surveys and inspections will be made according to State Regulations. All recommendations by the radiation safety officer concerning collimation, filtration (HVL), beam alignment, roentgen output, radiation leakage, etc., will be implemented immediately.

12. All operators will follow prescribed exposure techniques. Appropriate exposure values will be mounted on the wall of each x-ray exposure cubicle or designated by the control panel of the x-ray machine. Instructions for scanning digital receptors will be available in the Oral and Maxillofacial Radiology area.

13. As a general policy, all newly admitted patients to the School of Dental Medicine must have adequate oral and maxillofacial radiographic examinations to assist in diagnosis prior to treatment in the school's clinics. In all situations, the need for radiographs shall be determined by using high-yield selection criteria as the basis of professional judgment. The following shall be adhered to in regards to criteria for exposure:

    a. All radiographic imaging shall be prescribed in by a licensed dentist.
    b. Imaging ordered on a routine basis or for screening purposes will not be permitted.
    c. A radiographic examination shall not be ordered before the patient's medical and dental history has been reviewed and an initial extraoral and intraoral evaluation has been completed.
    d. If prior radiographs are available, they should be evaluated by a faculty member before new images are prescribed. Only those additional views needed for

complete diagnosis and treatment planning should be exposed. The faculty member will determine if sufficient time has passed, since the patient's last radiographic examination, to warrant a new examination.

e. Imaging should be completed only on patients capable of compliance or under appropriate sedation.

f. Subsequent follow-up (recall) radiographic examinations for School of Dental Medicine patients will be based on the diagnostic need of the patient as determined by the faculty dentist after a thorough health history review and oral examination of the patient.

g. Imaging obtained for administrative purposes only, including those for insurance claims or legal proceeding, should not be made.

h. Images of patients shall not be made merely for the purpose of training or demonstration.

i. The following shall apply to dental board examination patients:

1) Request for images for all board examination patients shall be ordered by a licensed dentist.

2) Images on patients should not be made for testing purposes alone. Images acquired should contribute to the proper diagnosis and treatment of the patient.

3) Images made on site for, or as part of, board examinations shall be made in compliance with the School of Dental Medicine's radiation use guidelines.

4) The type and number of images needed shall be dictated by the oral and maxillofacial disease clinically evident or suggested by the history or other tests.

5) Images should not be required at specific time intervals to document treatment progress for board certification purposes. Rather, the clinical progress as monitored by the candidate (and his or her mentor in the case of a student) should be used as a guide to the need for imaging.

j. Newly admitted adult patients will generally receive a radiographic examination to determine a base-line for the patient. This may include a panoramic image, bitewings, selected periapicals, or a series of full mouth radiographs (FMX).

k. Edentulous patients may receive a complete edentulous periapical series, a panoramic image, or a combination of occlusal and periapical images as deemed appropriate by the faculty dentist. Nevertheless, edentulous surveys will usually contain fewer image receptors than a comparable FMX of dentate patients.

l. Patients under 12 years of age may receive either a complete child periapical survey and bitewings, a panoramic image with bitewings and selected periapical views (if indicated), bitewings only, bitewings and selected periapicals and occlusals, or no images if none are indicated. The complete child periapical survey will vary

depending on the age of the child; however, all child surveys will contain fewer images than the adult periapical survey.

m. The radiation exposure of endodontic patients for pre-operative and post-operative images wilt be kept to a minimum level consistent with clinical requirements. The limits of exposure in each case will be determined by the professional judgment of the faculty dentist. Where possible, a single image at each stage of the endodontic procedure will be acquired. Multiple images from different angles may be acquired on a restricted basis and only when the information to be gained is considered to significantly enhance the diagnosis and treatment. When multi-angle projections are required, documentation of their need will be made in the treatment record by the supervising faculty.

n. Emergency patients will receive only those images needed to diagnosis and treat the immediate emergency problem.

o. The Dental Radiographic Selection Criteria Panel's recommendations shall be followed in regard to radiographic examination of pregnant patients. Quoting directly, "Accordingly, there appears to be no rationale to preclude a properly justified dental radiographic examination because of pregnancy. In some cases, radiography may be arbitrarily deferred during pregnancy for purely psychological reasons." Appropriate protective shielding of the patient will always be used.

14. Radiation monitoring of operator exposure will include the following:

a. All members of the faculty and staff who regularly use x-ray equipment will wear a dosimeter at aH times while at work.

b. Records of monthly, quarterly, yearly, and total cumulative exposures will be kept as a permanent record and will be available for inspection by the employee.

c. Radiation Safety Officer monthly and quarterly review of occupational Maximum Permissible Dose (MPD) limits and ALARA Levels

Table: Applied Annual Occupational Dose Limits for Adults* and Related ALARA Reporting Levels for Cumulative Quarterly Totals (mSv)

Part of Body	Applicable Annual Occupational MPD	Quarterly ALARA Level I Limit	Quarterly ALARA Level II Limit
Whole Body[1]	50	1.25	3.75
Skin of Whole Body[2]	500	12.50	37.50
Extremity[3]	500	12.50	37.50
Lens of Eye[4]	150	3.75	11.25

The ALARA limits are defined by

(I) one tenth of one quarter of the applicable annual MPD (ALARA Level I), and
(II) three tenths of one quarter of the applicable annual MPD (ALARA Level II).

*These limits apply to ADULTS ONLY -the limits for minors are one tenth of those shown in the table. The Maximum Permissible Dose for fe1al dose to a declared-pregnant workers (form available from the Radiation Safety Officer for the School of Dental Medicine or from Environmental Health and Safety/Radiation Safety) is 5 mSv over the full tenn of gestation. The RSO shall make efforts to avoid substantial variation above a uniform monthly exposure rate to a declared pregnant woman. Reported fetal doses in excess of 0.1 mSv in any month are generally reported to the declared-pregnant worker and investigated by the Radiation Safety Officer.

[1] e.g., deep dose reported on the whole-body dosimeter
[2] e.g., shallow dose reported on the whole-body dosimeter
[3] e.g., finger dose reported on a ring dosimeter
[4] e.g., eye dose when reported separately on an eyeglass dosimeter

15. Documentation of all images and radiation exposures will be maintained in the patient's electronic record. The patient[1]s treatment record should include the date, prescription detailing type and number of images and any remakes necessary. The number of images acquired should also be entered.

16. The School of Dental Medicine will have a Quality Assurance Program designed to produce images of consistently high quality with minimal exposure. This program will consist of the following:

   a. Projection Techniques

      1) Before students will be allowed to acquire images on a patient, they will have didactic instruction in oral and maxillofacial radiology plus

laboratory instruction in acquiring images on a mannequin. Successful completion of required courses will be necessary in order to acquire images on patients.

2) There will be direct supervision of all students during their first clinical experiences in radiology.

3) All radiographic examinations will be reviewed for errors by faculty or staff immediately after they have been scanned or acquired. When practical, the patient will not be dismissed until indicated remakes have been completed. Students who must remake 4 or more images will be directly supervised and instructed by faculty and / or appropriate staff member.

4) Receptor holders and alignment devices will be used to aid students in the correct alignment of the position indicating device, the receptor, and the area of interest.

b. The x-ray equipment in the School of Dental Medicine will be inspected by an official approved by the State at a frequency that complies with current federal and state regulations. The results of these tests and any corrective measures taken will be maintained by the School of Dental Medicine radiation safety officer. If during the routine use of any x-ray machine, an error is noted in its operation, the machine will immediately be put out of service until the appropriate corrective repairs can be made. Any suspected malfunction should be reported to the radiation safety officer so that appropriate corrective measures may be instituted.

c. All digital processing systems shall be maintained and operated in such a manner that insures optimum diagnostic quality of images. The receptors should be inspected on a regular basis and any damaged or inoperable receptors will be removed from patient care activities.

d. All lead vests within the School of Dental Medicine will be inspected on a semi-annual basis. Defective vests will be removed from service and replaced with new vests accordingly. In order to track the inspection process and maintain records for each vest, an inspection label will be placed on each apron, which includes the dates of inspection. A summary of the inspections will be kept in an electronic format (such as Microsoft Excel). While there are no government guidelines in place to evaluate whether an apron passes or fails an inspection, there are some industry norms. Many states, hospitals and research organizations use the widely cited artic1e entitled "Inspection of Lead Aprons: A Practical Rejection Model" of Ors. Pillay and Stam (Health Physics, volume 95, No. 2, August 2008). This article gives criteria to aid in determining when lead aprons should be discarded, such as:

Tearing

For a single apron with a .50 lead/lead equivalency, tears of more than 5.4 cm in length are cause for rejection. Smaller perforations or cracks in the edges can result in rejection as well, depending on the length and width of the apron as compared to the size of the defect.

Thinning

Thinning of the lead and the outer protective layer of the apron also warrants rejection. Thinning is the result of prolonged use and creates a floppy, comparatively lightweight apron that can expose the patient or health care worker to lead. Thinning is determined by measuring thickness in relation to the size of the apron.

Defective Velcro, Buckles or Ties

Irreparably broken apron closures warrant an inspection failure. Each lead apron is designed to protect different areas of the body. For example, an apron used at a dentist's office is high around the neck to ensure complete coverage of the thyroid gland. Broken Velcro or other closure mechanisms will cause the unsecured apron to slide downward, exposing the gland to harmful x-rays, and is therefore not acceptable.

Defects in relation to placement

Defects near certain organs will cause an apron to be rejected such as a 1.8 cm tear over the thyroid, etc. These values are for a single apron comprised of .5 mm lead (or lead equivalent).

In the School of Dental Medicine, the following inspection process will be completed every 6 months:

Visual (looking at the apron)
Tactile (feeling the apron for holes)
X-ray (when indicated)

Visual - lay the apron out on a clean, flat surface and visually inspect for any tears , perforations or imperfections (such as bumps) that may warrant further inspection. Take note of the apron closures (Velcro, buckles, etc.) to ensure that they are in proper working order.

Tactile - run your hands over the entire surface of the apron to find any thinning of the lead or creases. Some people prefer to lay the apron down to perform the inspection. Another method is to hang the apron on an apron rack and place one hand

on the front and one hand directly on the back of the apron. Keeping your hands directly parallel to each other, slowly run both hands up and down the surface area of the apron, noting anywhere there is a thinning or creasing of the material.

X-ray - Fluoroscopic equipment is not readily available in the School of Dental Medicine, so an x-ray method will be used as a suitable alternative. Each vest will be closely inspected for kinks and irregularities. If identified, a radiograph of suspect areas may be acquired and interpreted for any breaks in the lining (typically appearing as dark slashes). Defective vests will be removed from service.

17. Radiographic procedures will be completed following institutional infection control guidelines.

     All patients will be treated as potentially infectious and the following will be adhered to:

     1) Since potentially infectious patients may have no evidence of a problem, the patient's medical history will be evaluated for indications of infectious disease.
     2) Protective gloves, masks, and eye wear will be worn during receptor and tube placement and during digital processing to minimize risks to the operator and the patient.
     3) Operators will wash their hands as they enter the clinic and after removing their gloves at the completion of the procedure.
     4) Supplies and receptors will be kept on a covered work surface.
     5) Receptor holders will be sterilized prior to patient use and left unopened until the procedure begins. Disposable items and supplies will be used whenever practical.
     6) The control panel, tube head, exposure button, and position indicating device will be covered with disposable plastic wrap. Any other surface likely to be touched during the radiographic examination will also be covered. At the completion of the procedure, all surfaces will be wiped down with the appropriate disinfectant while using the School's prescribed protective gloves, masks, glasses and gowns.

I have read and understand the CU School of Dental Medicine' Radiation Use Policy.

_____   _____

Print Name   Date

_____

Signature

School of Dental Medicine
UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

University of Colorado Denver | Anschutz Medical Campus

ENVIRONMENTAL HEALTH AND SAFETY | RADIATION SAFETY

Declaration of Pregnancy

In accordance with CDPHE regulation 6CCR 1007-1, "Dose to an Embryo\Fetus," I am declaring that I am pregnant.

The estimated date of conception is _____

I understand that the above regulation requires licensee to "ensure that the dose to an embryo/fetus during the entire pregnancy, due to occupational exposure of a declared pregnant woman, does not exceed 0.5 rem (5 mSv)," and also requires licensee to "make efforts to avoid substantial variation above a uniform monthly exposure rate to a declared pregnant woman." A declared pregnant woman is defined in 10 CFR 20.1003 as a woman who has voluntarily informed her employer, in writing, of her pregnancy and the estimated date of conception.

Signature _____ Date _____

Printed Name _____ Employee ID _____

Submit original signed form to EHS, Mail Stop F484, or deliver to Bldg. 401, Rm. 202.

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

2.4   Immunization Policy

Title: University of Colorado School of Dental Medicine Immunization Program
                   and Policy: Student/Resident, Staff and Faculty Immunization Requirements
                   and Compliance.
Source: Adapted from Immunization policy from Office of the Provost
Effective Date: December 1, 2013
Revision Date: March 2018
Action Required: Continuous updating of vaccination information to Office of Clinical
                   Operations of Office of Student Affairs

Introduction

This policy addresses immunization requirements and describes the process for ensuring and certifying compliance with basic and expanded immunization requirements for current and newly enrolled students/residents, employees and faculty at the University Of Colorado School Of Dental Medicine. The State of Colorado has established basic immunization requirements for students at institutions of higher education. The Joint Commission (TJC), using standards established by the Centers for Disease Control (CDC), additionally mandates that all students in health care professions whose training includes clinical settings and patient contact must present evidence of immunization for or immunity to an expanded list of communicable diseases. The scope of this policy applies to all dental health care workers (DHCW) including students, staff and faculty.

Policy Statement

All dental health care workers (DHCW), which includes continuing and newly enrolled students/residents, employees and faculty at the University of Colorado School of Dental Medicine must comply with the basic immunization requirements as described in this policy. Students who do not comply with the immunization requirements described in this policy may not be allowed to enroll in succeeding terms and/or be assigned to clinical sites until the requirements are met. Employees and faculty at the University of Colorado School of Dental Medicine may not be allowed to work or continue to work until the requirements are met. Student immunization records are protected information under the Family Educational Rights and Privacy Act (FERPA). Health information contained in some immunization records also may be protected information under the Health Insurance and Portability and Accountability Act (HIPAA). These records are, therefore, be stored and maintained in a secure manner.

Immunization Requirements for Enrolled Dental Students and Dental Health Care Workers at University of Colorado School of Dental Medicine

1. School of Dental Medicine Office of Clinical Operations and Office of Student Affairs
   collaboratively are responsible for:
   a. Updating the Immunization Certification Form when new CDC guidelines are
      issued;
   b. Informing new students of the immunization requirements and distributing the
      certification form (hard copy or electronic format) in admissions materials;
   c. Setting deadlines for submitting the completed forms -- typically prior to
      matriculation but no later than the end of the student's first semester;

    d. Reviewing the submitted immunization forms and following up with non-compliant DHCW;

    e. Monitoring annual TB testing if required of continuing students.

2. All School of Dental Medicine DHCW are required to submit documented proof of the following immunization for or immunity prior to matriculation and the start of their first term for students or first day of employment for employees and faculty:

    a. MMR
- Documentation of the two vaccination series. There must be at least 28 days between the first and second vaccine. Two separate dates must be recorded.
- Documentation of a positive titer.
- **DHCW born after January 1, 1957** must provide documented proof or a self-signed statement that they have received **two** rubeola (measles), **two** rubella (German measles), and **two** mumps vaccinations **OR two combination** MMR vaccinations (measles, mumps, and rubella)
- **DHCW born before January 1, 1957** must provide documented proof or a self-signed statement that they have received **one** rubeola (measles), **one** rubella (German measles), and **one** mumps vaccination **OR one combination** MMR vaccination (measles, mumps, and rubella).

    b. Hepatitis B; one of the below:
- Documentation of the three vaccine series. There must be at least 1 month between the first and second vaccine and 4-5 months between the second and third vaccine. Three separate dates must be recorded.
- Documentation of a positive titer (HBSAB).
- Documentation that negative titer may be present after three vaccine series.

3. Tuberculin Skin Test (Mantoux Purified Protein Derivative - PPD); one of the below:
- For someone who has never been tested, or if it has been over a year since their last test, the two step testing method is required. Placement of 2 separate PPD skin tests 7 to 14 days apart. Two separate dates and results of skin test required for reporting.
- For someone who has had a PPD done within the last year, 1 PPD skin test results are required.
- Positive PPD test: Physician documentation of a negative chest x-ray then annual symptom questionnaire to be completed by student in lieu of further testing.
- International students who have received the Bacille Calmette-Guerin Vaccine (BCG), submit a physician's report of a negative chest x-ray. PPD will appear as a false positive.

4. Varicella, one of the below:
- Documentation of a positive titer.

- Documentation of a two vaccine series. Two separate dates must be recorded.
- Documentation of childhood disease.

5. Tetanus/ TD/TDAP
   - Documentation of vaccine; date must be recorded (required within last 10 years). Renewal every 10 years. List most recent date of vaccination or booster received.

6. Polio for international students; for domestic students it is not required but strongly encouraged. One of the below:
   - Documentation of the 4 vaccine childhood series (can be oral). Four separate dates required.
   - Documentation of a 3 vaccine adult catch-up IPV series. Three separate dates required.

7. Seasonal Influenza, annual requirement:
   - Vaccination date required. Due to seasonal availability this must be completed annually by December 1st. Trivalent (Inactivated) Influenza Vaccine (TIV) or Live Attenuated Influenza Vaccine (LAIV) is accepted.
   - H1N1 Influenza vaccine is currently not required, but highly encouraged.

   Exemptions:
   > Self-identified medical, religious, and personal exemptions to the requirements are allowed by law. Students who submit exemptions on the Certificate of Immunization form are subject to the prevailing state regulations governing quarantines in case of outbreaks and university policies related to forfeiture of tuition and fees. Exemptions by signed waiver may subject the student to academic restrictions regarding lab, clinical placement and the student may be unable to complete the program/degree requirements.

   - Medical Exemption. The physical condition of the student is such that immunization would endanger life or health or is medically contraindicated due to medical condition.
   - Personal Exemption. The student (person) himself/herself (or parent/legal guardian) is an adherent to a personal or religious belief opposed to immunizations.

   Note:
   - All exemptions will be reviewed by Office of Clinical Operations. Decision will be communicated in writing to the appropriate individual.
   - Annual tuberculin skin testing also is mandatory for all DHCW and who have not previously tested positive.

8. DHCW who do not meet posted deadlines for submitting certification forms and completing any other requirements (e.g., annual TB testing) in a timely fashion will not be allowed to

register in their first and/or subsequent term and/or be assigned to clinical settings and responsibilities until the required information has been submitted.

9. If the DHCW assigned to clinical settings needs other medical tests, procedures, or equipment to meet compliance requirements related to their training (e.g., annual TB tests, CPR, TB mask fit, etc.), it will be communicated to them in writing. Unless otherwise arranged, students are responsible for obtaining and paying for those medical services not covered by their insurance plans.

10. Clinical training program students in all years of their studies are responsible for complying with immunization regulations and supplying (if requested) to affiliated health care facilities any records of their physical examinations, immunization status, and other medical tests and other forms of required documentation (related to, for instance OSHA, HIPAA, and TJC requirements).

Deadlines for submitting documentation
Students pre-enrollment into clinical program- Last Friday of June
Staff and Faculty- Before first day of work.
Influenza- October 15

References:

Colorado Department of Public Health and Environment rules on student immunizations:
http://www.cdphe.state.co.us/regulations/diseasecontrol/100902infantimmunizationprogram.pdf)

Centers for Disease Control Recommendations on Health Care Personnel Immunizations:
http://www.immunize.org/catg.d/p2017.pdf

Joint Commission Accreditation and Patient Safety Standards:
http://www.jointcommission.org/

Health Center at Auraria immunization requirement website:
http://www.mscd.edu/healthcenter/immunization/

2.5   Influenza Vaccination Policy

Title: Influenza Vaccination Policy
Source: Deans' Office; Clinical Affairs; Student Affairs
Effective Date: December 1, 2013; revised October 5, 2021

INTRODUCTION:

The Centers for Disease Control and Prevention (CDC) states that, "Influenza viruses typically circulate in the United States annually, most commonly from the late fall through the early spring. Most persons who become ill with influenza virus infection recover without serious complications or sequelae. However, influenza can be associated with serious illness, hospitalizations, and deaths, particularly among older adults, very young children, pregnant women, and persons of all ages with certain chronic medical conditions." Influenza vaccination is an important way to prevent serious illness and death in the most vulnerable populations. Influenza vaccinations help protect the workforce and provide for the continuity of operations for patient care and student education.

The Colorado Department of Health and Environment (CDPHE) requires that all workers (including students or trainees) of licensed health care agencies, who have a "potential for exposure to clients of the facility or to infectious materials, including body substances, contaminated medical supplies or equipment, contaminated environmental surfaces, or contaminated air" be subject to receiving an influenza vaccination.

PURPOSE and SCOPE:

The School of Dental Medicine (SDM) has a vital interest in maintaining a safe, healthy and professional environment for its employees and the public. To protect staff, patients, visitors and families from acquiring and spreading seasonal influenza disease, all SDM individuals (faculty, staff, students, residents and volunteers) will be required to receive an annual influenza vaccination unless they can provide evidence of a valid medical or religious exemption. See requirements below.

Patients are assessed for signs and symptoms of influenza by obtaining a thorough medical history and clinical assessment.

POLICY:

Definition of Exposure

Influenza is transmitted via aerosolized or droplet transmission from the respiratory tract of an infected individual. Those who are non-immunized and who have had an exposure to an individual with known or suspected influenza, room air sharing and or contact within 6 feet of a person with influenza will be considered exposed, particularly if the individual is exposed to the infected person's respiratory exhalations or coughing, saliva, respiratory secretions, or aerosolized particles. Contaminated objects or surfaces may transmit the influenza virus.

Time Frame

The influenza season usually lasts from October to May. SDM requires an influenza vaccination on or by Oct. 31 of the current year or by the date recommended by the Centers for Disease Control and Prevention (CDC). Preventive measures, to include wearing masks and physical distancing of 6 feet or more for unvaccinated individuals, is required generally through Mar. 31 of the following year or on a date determined by the CDC. New individuals (faculty, staff, students, residents, volunteers) will be required to obtain the vaccine as part of their pre-enrollment or pre-employment, or show proof of having received the vaccine for that influenza year. Medical exemptions will be accepted on or by Oct. 31 for current SDM individuals or at the time of pre-enrollment or pre-employment for new SDM individuals. See Medical Exemption below.

Influenza Vaccination Program

- Annual influenza vaccination is available to all School of Dental Medicine individuals at local pharmacies, primary care practices, and oftentimes via a campus influenza vaccination clinic such as the School of Nursing flu clinic.
    o Individuals who are receiving the influenza vaccination for the first time may be advised to wait 15 minutes before leaving the area to be observed for a possible reaction.
    o See Medical Exemption below for contraindications to receiving the influenza vaccination.
- Faculty, staff, and GPR residents must provide proof of current vaccination, religious exemption or medical exemption to the School of Dental Medicine. Exemption requests will be reviewed on a case-by-case basis in line with campus processes and requirements. The vaccination document, religious exemption or medical exemption must be uploaded to the Compliance portal by the beginning of the influenza season. For example, if the CDC recommends that people obtain an influenza vaccination by the end of October the proof of vaccination must be uploaded to the Compliance portal by the close of business on October 31 of the current year.
- Students, volunteers, Graduate Orthodontic residents and Graduate Periodontics residents must provide proof of current vaccination or medical exemption to the School of Dental Medicine. The vaccination document or medical exemption must be uploaded to the Compliance portal by the beginning of the influenza season. This group does not qualify for religious exemption. For example, if the CDC recommends that people obtain an influenza vaccination by the end of October the proof of vaccination must be uploaded to the Compliance portal by the close of business on October 31 of the current year.
- Proof of vaccination should include the original receipt or record from the vaccination administration entity or influenza clinic. The vaccination record should include:
    o Date that the influenza vaccination was administered
    o Name of the administering entity or influenza clinic
    o Injection site (left shoulder or right shoulder or other)
    o Vaccine manufacturer (brand name)
    o Lot number of the influenza vaccination
    o Expiration date of the influenza vaccination

- Medical exemption to vaccination will only be granted for medical contraindications and must be re-submitted annually. See Medical Exemption below.
- Religious exemption to vaccination will reviewed on a case-by-case basis and ONLY applies to those personnel covered by Title VII of federal labor law (faculty, staff, and GPR residents) and must be re-submitted annually. Students, Graduate Orthodontic residents, Graduate Periodontics residents and volunteers are not allowed to apply for a religious exemption.
- In the event of an influenza vaccine shortage, the Dean will evaluate the situation for the entire organization.

Medical Exemption

- SDM individuals requesting medical exemption to receiving the influenza vaccination must provide proof of the medical contraindication(s) and attestation by their primary care provider using the SDM Influenza Vaccination Medical Exemption and Release form located at the end of this policy.
- According to the State of Colorado Department of Health and Environment (CDPHE), the primary care provider must be a physician, physician's assistant, advanced practice nurse, or certified nurse midwife licensed in the State of Colorado. A medical exemption signed by a chiropractor is not acceptable.
- Only individuals providing proper written documentation supporting the medical contraindication(s) listed below will receive a medical exemption from this policy. Other medical conditions may preclude influenza vaccination per the person's primary care provider.
- The Director of Quality and Patient Safety (Infection Control Officer) will review all requests for medical exemption in conjunction with Sr. Associate Dean for Clinical Affairs and Professional Practice. An individual who receives a signed medical exemption form must upload it to the Compliance portal by the due date that is generally October 31. Tracking of medical exemption will be done in the Compliance portal.

- Approved medical contraindications for which a medical exemption is allowed are:

  o Persons with documented severe allergies to eggs or egg products unless an egg free vaccine is available;
  o Persons with documented severe allergies to other components of the influenza vaccine;
  o Persons with a history of Guillan-Barre Syndrome (GBS) within six weeks of receiving the influenza vaccination. If the answer is "yes", the individual should consult their primary care provider before receiving an influenza vaccination.
  o Individuals with a serious illness, fever, a bleeding disorder, a serious reaction to a previous influenza vaccination, taking anticoagulants, a latex allergy, or immunocompromised disorder should consult with their primary care provider before receiving an influenza vaccination;
  o Individuals who have received a bone marrow transplant within the past six months should consult with their primary care provider before receiving an influenza vaccination.

- Approvals of medical exemptions will be communicated to the requester in writing via the SDM Influenza Vaccination Medical Exemption and Release form. Individuals who are granted a medical exemption will be required to wear a mask and practice 6 feet of physical distancing for the entire influenza season that is generally through March 31 of the following year or a date determined by the CDC. These individuals should review the CDC list of Flu Symptoms at this link: https://www.cdc.gov/flu/symptoms/symptoms.htm

- The Senior Associate Dean for Clinics and Professional Practice and/or the Human Resources department will communicate denials of medical exemption to the requester in writing using the SDM Influenza Vaccination Medical Exemption and Release form. This communication should also include information that noncompliance with this policy could lead to discipline up to and including termination.

- Personnel who have an approved exemption are subject to the prevailing university, county, state or CDC regulations governing quarantine in case of outbreaks and university policies related to forfeiture of tuition and fees and usage of sick leave.

- If an individual with a contraindication to the vaccine still desires to receive the influenza vaccine, the individual should discuss the situation with their primary healthcare provider. If the primary healthcare provider administers the influenza vaccine, the person must upload the influenza vaccination document to the Compliance portal by the due date that is generally the last day of October.

Religious Exemption

- SDM individuals requesting religious exemption to receiving the influenza vaccination must provide proof from the religious entity and attestation by their religious leader/group to include contact information, address, name of religious organization and statement as to the religious reason for the request. This will be reviewed on a case-by-case basis.

Procedure for Failure to Comply with Vaccination Requirement

All personnel must receive the annual influenza vaccine or receive an approved medical exemption by the date determined annually in accordance with the CDC guidelines. Failure to comply with vaccine protocol by this date will result in corrective action up to suspension/termination until compliance is met.

Source Control and Prevention

All personnel experiencing flu-like symptoms should remain at home in isolation. Since many influenza symptoms are also symptoms of COVID-19 infection, the person is required to self-report to the university COVID-19 contact tracing team unless otherwise communicated by the university. This is the link to the university self-report form file a self-report here

Symptoms of influenza infection	Symptoms of COVID-19 infection
Fever	Fever or chills
Cough	Cough
Sore throat	Sore throat
Runny or stuffy nose	Congestion or runny nose

Muscle or body aches	Muscle or body aches
Headache	Headache
Fatigue (tiredness)	Fatigue (tiredness)
Vomiting or diarrhea (common in children)	Nausea, vomiting, diarrhea
	New loss of taste or smell
	Shortness of breath or difficulty breathing

- If granted an exemption from this policy, the individual may be reassigned to a non-clinical job (if possible), have their FTE reduced or be terminated from employment if an undue hardship to the school is surmised. If allowed to continue to work at the SDM, personnel will be required to wear a surgical mask at all times while in the School of Dental Medicine building, any labs associated with the School of Dental Medicine, and any classroom settings associated with the School of Dental Medicine. Such masks shall be in addition to other standard personal protective equipment. The individual will be required to practice 6 feet of physical distancing.
- Use of Standard Precautions, Respiratory Etiquette and Droplet precautions will apply.

Exposure Management

- Refer to the SDM Exposure Control Plan, policy 9.6 located at Clinic Policy and Procedure Manual 2021 8-24-21.pdf

- Influenza illness will not be covered as workers' compensation unless the individual develops the disease and has a documented *unprotected exposure while performing their job duties or student activities.*

Work Restrictions

- Work Related Exposure
  - Exposed employee with no signs/symptoms of influenza
    - No work restrictions
  - Exposed employee with signs/symptoms of influenza
    - Excluded from duty in accordance with current CDC recommendations and university requirements.
  - Work related exposures must follow up with the university occupational health clinic as directed and/or their personal primary care provider. They must provide a return to work note to their supervisor or Human Resources department per current protocol.

- Non-Work Related Exposure
  - Exposed employee with no signs/symptoms of influenza
    - No work restrictions
  - Exposed employee with signs/symptoms of influenza
    - Excluded from duty in accordance with current CDC recommendations and university requirements.

o   Non-work related exposures must follow up with their personal primary care provider and provide a return to work note to their supervisor or Human Resources department per current protocol.

Treatment

Prophylactic antiviral agents may be used for prophylaxis after exposure and for treatment as ordered by the individual's primary care provider.

ACCOUNTABILITY:

All faculty, staff, residents, and students are responsible for the safety of our patients, visitors, and each other by obtaining an annual influenza vaccination. All individuals are responsible for reading and following this policy.

AUTHORITY:

The Senior Associate Dean for Clinics and Professional Practice, faculty, directors, managers, and supervisors have the authority to enforce this policy, in particular the requirement to wear a mask if a person has not received the influenza vaccination in the current influenza season, per SDM requirements, professional practice, and community standards.

REVIEW AND APPROVAL:

Members of the SDM Institutional Quality Committee and the Senior Associate Dean for Clinics and Professional Practice vet the Influenza Vaccination policy. The SDM Operations Committee, Faculty Senate, and SDM Executive Committee grant final approval of the policy. The policy is reviewed on a triennial basis or sooner, as needed.

References

- Centers for Disease Control and Prevention (CDC). Prevention and Control of Seasonal Influenza with Vaccines. Recommendations of the Advisory Committee on Immunization Practices (ACIP) – United States, 2020-21 Influenza Season, August 21, 2020 / 69(8); 1-24.
  https://www.cdc.gov
- Centers for Disease Control and Prevention (CDC) Frequently Asked Influenza (Flu) Questions: 2021-2022 Season. https://www.cdc.gov/flu/season/faq-flu-season-2021-2022.htm
- Centers for Disease Control and Prevention (CDC) Flu Symptoms & Complications: https://www.cdc.gov/flu/symptoms/symptoms.htm
- Colorado Department of Public Health and Environment (CDPHE), Standards for Hospitals and Health Facilities, Chapter II-General Licensure Standards 6CCR 1011-1, Chap 02, Part 10-Influenza Immunization of Hospital Healthcare Workers.
- Association of Professionals in Infection Control (APIC) Position Paper:

Influenza Immunization of Healthcare Personnel.
- OSAP influenza toolkit
- University of Colorado Health Policy
- Medical Declination and Release Form

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Influenza Vaccination Medical Exemption and Release Form

All employees who cannot receive an influenza vaccination due to a medical reason(s) must complete the following documentation.

All Medical Exemption forms will be reviewed by the Director of Quality and Patient Safety (Infection Control Officer) or designee and must be completed by the person's primary care provider (see policy).

My employer or affiliated health facility, University of Colorado, is requiring that I receive an influenza vaccination in order to protect myself, the patients that I serve, my coworkers, and the public.

I understand that if I am not vaccinated against the influenza virus, I may place others at risk (patients and co-workers) if I work while infected with the influenza virus.

I understand that since I have a contraindication to influenza vaccination, I will be required to wear a mask during the influenza season (dates determined and communicated by Department of Quality and Patient Safety) and practice physical distancing of 6 feet or more.

_____

Student/Employee Name (print)   Student/Employee ID number

_____

Signature   Date Signed   Department

To be filled out by employee's Primary Healthcare Provider (see policy for requirements):

I have evaluated the above individual and can verify that this person has a medical contraindication to influenza vaccination.

This employee has one or more of the following contraindications as checked:
- Documented severe allergy to eggs or egg products; does not include an egg-free vaccine.
- Documented severe allergic reaction to other components of the influenza vaccine.
- Documented severe reaction to a previous influenza vaccination.
- Personal history of Guillan-Barre Syndrome (GBS) within 6 weeks of receiving influenza vaccine.
- Other (please explain as most medical conditions are not a reason to be exempt from an influenza vaccination); examples include, fever, bleeding disorder, taking anticoagulants, latex allergy, immunocompromised disorder
  _____
- Individuals who have received a bone marrow transplant within the past six months

_____

Healthcare Provider Name (print):   Healthcare Provider Credentials

_____

Healthcare Provider Contact information (phone): _____

Signature of Healthcare Provider: _____   Date: _____

School of Dental Medicine Verification: (printed name, signature, date of SDM approval/denial)

_____   _____   _____   _____

Print Name   Signature   Date   SDM approval/denial

School of Dental Medicine
UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

Influenza Vaccination Religious Exemption and Release Form

All employees requesting a religious exemption must complete the following documentation.

The School of Dental Medicine Human Resources department or designee will review all Religious Exemption forms in accordance with university requirements. The person's Religious Leader must complete the section below and sign this document.

My employer or affiliated health facility, University of Colorado, is requiring that I receive an influenza vaccination in order to protect myself, the patients that I serve, my coworkers or fellow students, and the public.

_____ (Initials) I understand that if I am not vaccinated against the influenza virus, I may place others at risk if I work while infected with the influenza virus.

_____(Initials) I am requesting a religious exemption to receiving the influenza vaccination.

_____(Initials) I agree to enter into the interactive process in an attempt to eliminate this potential work-religion conflict. I understand that during this interactive process, I may be asked questions about my religious beliefs regarding the influenza vaccination and other vaccinations.

_____(Initials) I understand that this religious exemption may be granted should it be determined that my request is not unreasonably burdensome to my employer, e.g., is not disruptive to the workplace and/or does not decrease productivity.

_____(Initials) I understand this religious exemption, if granted, is only effective for this current influenza season.

_____

Individual's Name (print)   Individual's ID number

_____

Signature   Date Signed

_____

Religious Leader's Name (print)   Religious Leader's Credentials

Name of Religious Organization _____

Address of Religious Organization _____

Statement of Religious reason for the Religious Exemption request

_____

_____

Religious Leader's Contact Information (phone) _____

_____

Religious Leader's Signature   Date Signed

CU School of Dental Medicine
UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

Individual's Manager   Manager's Phone Number

_____ (Initials) I understand that I am granted a religious exemption to receiving the mandatory influenza vaccine. As a part of this exemption, I agree to wear a mask during the entire influenza season and to practice 6 feet of physical distancing

_____(Initials) I understand my supervisor will be made aware of my requirement to wear a mask and to practice physical distancing.

_____(Initials) I understand that my failure to wear a mask or to practice physical distancing as required may result in disciplinary action up to and including termination.

_____   _____

Signature: Date:

School of Dental Medicine Verification: (printed name, signature, date of SDM approval/denial)

_____   _____   _____   _____

Print Name   Signature   Date   SDM approval/denial

2.6   Emergency Response Plan (Fire, Tornado, Active Shooter, Bomb Threats, etc.)

Title: Emergency Response Plan
Source: Infection Control and Life Safety Committee
Effective Date: November 16, 2016; July 26, 2021

INTRODUCTION:

The University of Colorado School of Dental Medicine (SDM) has a consistent and effective Emergency Response system that outlines actions to take in response to various environmental emergencies. All SDM staff, faculty, students and residents (SDM individuals) are to follow these actions to the best of their ability given the type and scope of an environmental emergency.

PURPOSE:

The primary purpose of this plan is to provide SDM personnel including students and residents with information that may be critical to ensure your safety or the safety of others in the event of an emergency.

POLICY:

Accidents and emergency situations can happen to anyone, at any moment. Take the time to learn the emergency procedures and contacts listed in this document. Take responsibility for your own safety and the safety of others by reporting potentially dangerous conditions or concerns to the appropriate departments. You should consider making preparations for emergency events. Learn both main and alternate paths of egress from your work areas. Most importantly, discuss this document with the SDM individuals within your department. Pre-plan your group's actions. Make sure that everyone knows the basic procedures to follow in the event of an emergency situation.

This document contains scenario-specific response protocols and should be adhered to by all School of Dental Medicine students, faculty, and staff.

Although the emergency response procedures documented in this response plan are recommended best practices for the School of Dental Medicine, it is understood that critical cases or procedures may require a team of physicians and/or clinical specialists to maintain continuity of care during emergency situations, which may alter response efforts.

Fire

Upon discovery of a fire or if a fire alarm has been activated at the School of Dental Medicine (SDM) the following actions must be taken:

1. The building must be evacuated immediately. The following process for evacuation and rally/muster areas apply:

   - Evacuate the building by following the exit signs to the shortest and safest route. DO NOT USE ELEVATORS. Personnel will congregate at a safe distance from the building (100 feet) at the North, South, East or West exits until it is determined if the alarm is valid. Do not block Fire Department and Emergency Responder access to the building. The most senior faculty or staff member on each floor will ensure that all individuals evacuate. If present, an SDM departmental safety representative will assist in the complete evacuation.
   - Building and Campus officials in conjunction with the Fire Department will check the alarm panel to determine the location and validity of the alarm.
   - If the alarm is determined to be valid, all individuals, including patients and visitors, will move to one of the following mustering points:
     - Primary: Anschutz Medical Campus Building L28 ED 2 South room 1102
     - Secondary: Anschutz Medical Campus Fulginiti Pavilion
     - (See instructions below for persons in wheelchairs, who are sedated, or who are undergoing an oral surgery procedure.)
   - All individuals must stay out of the building and at one of the exit locations until an all clear is given by the Fire Department or designated emergency personnel. DO NOT re-enter the building until the Fire Department or designated emergency personnel advise you that it is safe to reenter.
   - Keep clear of emergency vehicles.
   - All individuals that are in wheelchairs, use walkers or need assistance walking downstairs, will immediately go to the north or south stairwells and wait further instructions. SDM personnel should wait with these individuals until the nature of the emergency is determined. If the alarm is valid, these individuals will begin to evacuate with the assistance of Fire Department personnel or University of Colorado Denver / Anschutz Medical Campus Police Department (CU Police). If individuals are in immediate danger any available person may assist in evacuation.
   - Individuals who are sedated, but not undergoing oral surgery at the time of the alarm, may be evacuated by wheelchair or gurney through one of the exits or will shelter in place to wait further instructions and assisted evacuation.
   - During this time surgical procedures may continue at the discretion of the Oral Surgeon. Once the alarm is determined to be valid, the Oral Surgeon and Oral Surgery staff will stop the procedure. The Rapid Response Team will assist in medical management and the preparation of patient evacuation to either the primary or secondary mustering point outlined above. The patient's student or resident will accompany the patient.
   - The Oral Surgeon or Emergency Responders may determine that once the patient is moved from the building, that EMS will be called to transfer the patient.
   - Once the alarm is determined to be valid or at the direction of the Fire Department or Emergency Responders, SDM Administrative leadership will account for all personnel that were in the building utilizing SDM recall list and the AxiUm patient accountability report. All unaccounted for or injured individuals will be reported to Fire Department or Emergency Responders.

2. If you discover a fire and an alarm has not been sounded the following action must be taken:

- Notify others in the immediate area to evacuate the building as outlined above. If a person is on fire, attempt to extinguish the fire by using a fire extinguisher, Stop-Drop-Roll technique or by smothering the fire.
- Sound the alarm: Pull the nearest fire alarm pull box (usually at or near an exit door). If you are rescuing a person and cannot access a pull station, shout FIRE!
- Contain the fire by closing doors, including those leading into hallways.
- Evacuate or you may attempt to extinguish the fire if it is safe to do so.

When responding to a fire, remember the RACE acronym: Rescue, Alarm, Confine, Evacuate or Extinguish.

To use a fire extinguisher, remember the PASS acronym: Pull, Aim, Squeeze, and Sweep. (Pull the pin, Aim the hose at the base of the fire, Squeeze the handle, and Sweep the hose across the base of the fire.)

Severe Weather/Tornado

In the event that the National Weather Service issues a severe weather or tornado warning, the University will notify the School of Dental Medicine by the public address system in the building, by campus email or the University of Colorado Anschutz Medical Campus Emergency Notification System (Campus ENS). When a severe weather announcement is made do not assume that it is safe to remain in the building or to shelter in place. Take the following actions immediately:

- Keep calm. Do not run or panic.
- Evacuate to the lowest point of the building. In the School of Dental Medicine, the lowest point is the basement. All individuals that are in wheelchairs use walkers or need assistance evacuating may use the elevators.
- The most senior faculty or staff member on each floor will ensure that all individuals evacuate. If present, an SDM departmental safety representative or their designee will assist in the complete evacuation.
- If you can't get to the evacuation point move to an interior location away from windows and glass, face the wall, and preferably, cover the back of your neck.
- The Oral Surgeon and Oral Surgery staff and the Rapid Response Team will stay in the 1st floor clinic hallway in support of ongoing surgical procedures, sedated patients and evacuation. IF YOU ARE NOT DIRECTLY INVOLVED IN ORAL SURGERY PATIENT CARE YOU MUST EVACUATE.
- The Rapid Response Team may be required to assist in medical management and evacuations on other floors.
- Remain in evacuation area until CU Police, University officials or Emergency Responders give an "all clear".

Blizzard/Heavy Snow/Flooding Heavy Rain

To be consistent with the University of Colorado Anschutz Medical Campus' policy regarding the campus remaining open during periods of inclement weather, the School of Dental Medicine will make every effort to remain open in the event of inclement weather. The decision to stay open, delay, and/or to cancel specific clinical operations or didactic classes, will be determined by the School's Executive Decision Committee and communicated to the SDM individuals by email distribution and website announcement. Notices regarding Campus closures and delays can be obtained through the Emergency Notification System (Campus ENS) or the University Emergency Information Line at 877-463-6070. In addition, announcements will be made via campus email accounts. Patients will be notified through EasyMarkit. For specific guidance on attendance, didactic class closures, clinic closures and any postponements, refer to the Inclement Weather policy.

Active Shooter

An active shooter is an armed person who has used deadly physical force on individuals and who may continue to do so while having unrestricted access to additional victims. These situations are dynamic and evolve rapidly, demanding immediate deployment of law enforcement resources to stop the attack or shooting and mitigate harm to additional victims. In general, how you respond to an active shooter will be dictated by the specific circumstances of the encounter. Be aware that there could be more than one shooter involved in the situation.

1. If an active shooter is outside your building take the following actions:

   - Seek sanctuary by proceeding to a room that can be locked and/or barricaded.
   - Close and lock all windows and doors and turn off all lights.
   - If possible, get down on the floor and ensure that no one is visible from outside the room.
   - If it is safe to do so (active shooter will not hear or see you), press a panic button in your area to notify police and ALSO call CU Police, from a campus phone by dialing 9-1-1 or 303-724-4444 from any phone. Advise the dispatchers of the events and inform him/her of your location.
   - If you can't speak, leave the line open so that the dispatcher can listen to what is taking place. Normally, the location of a 9-1-1 call (x44444) on a campus phone can be determined by the dispatcher without speaking.
   - Silence cell phone ringers and decrease the brightness of your cell phone screen.
   - Remain in place until the police, or a University official with proper identification, gives the "all clear".

2. If an active shooter is in the same building:

   - If you can do so safely, exit the building.
   - Or, seek sanctuary by proceeding to a room that can be locked and/or barricaded. Close and lock all windows and doors and turn off all lights.
   - If possible, get down on the floor and ensure that no one can see you from outside the room.
   - If it is safe to do so (active shooter will not hear or see you), press a panic button in your area to notify police and ALSO call CU Police from a campus phone by dialing 9-1-1 or 303-724-4444 from any phone. Advise the dispatchers of the events and inform him/her of your location.

- If you cannot speak, leave the line open so that the dispatcher can listen to what is taking place. Normally, the location of a 9-1-1 call on a campus phone can be determined by the dispatcher without speaking.
- Silence cell phone ringers and decrease the brightness of your cell phone screen.
- If you can do so safely, exit the building, otherwise remain in place until the police, or a University official with proper identification, gives the "all clear".

3. If an active shooter enters your clinic, office or classroom:

- If possible, run away from the shooter, preferably out of the building or to a room that can be locked and/or barricaded, Otherwise, if possible, hide under a desk, or behind a door, barricaded w/furniture or other structure. If you are hiding, turn off your cell phone ringer and decrease the brightness on your cell phone screen.
- Try to remain calm and if it is safe to do so (active shooter will not hear you or see you), press a panic button in your area to notify police and ALSO call CU Police from a campus phone by dialing 9-1-1 or 303-724-4444 from any phone. Advise the dispatchers of the events and inform him/her of your location.
- If you cannot speak, leave the line open so the dispatcher can listen to what is taking place. Normally, the location of a 9-1-1 call on a campus phone can be determined by the dispatcher without speaking.
- Attempting to overpower the shooter with force should be considered a very last resort after all other options have been exhausted.
- If the shooter leaves the area, proceed immediately to a safer place and try not to touch anything that was in the vicinity of the shooter.
- No matter what the circumstances, if you decide to flee during an active shooting situation, make sure you have an escape route and plan in mind.
- Do not attempt to carry anything while fleeing.
- Move quickly, keep your hands visible, and follow the instructions of any police officers you may encounter.
- Do not attempt to remove injured people; instead, leave wounded victims where they are and notify authorities of their location as soon as possible.
- Do not try to drive off campus until advised it is safe to do so by CU Police or University officials.

At the direction of the CU Police or Emergency Responders, SDM Administrative leadership will account for all personnel who were in the building utilizing the SDM recall list and the AxiUm patient accountability report. All unaccounted for or injured individuals will be reported to CU Police or Emergency Responders.

Bomb Threats

All bomb threats called into the School of Dental Medicine are considered real until proven otherwise. When receiving a bomb threat take the following action:

- Remain calm.
- Try to get as much information as possible from the caller/suspect or about the situation. Examples include:
  - Location of the bomb, package or object.
  - What the caller said and description (gender, type of voice etc.).
  - Exact time the bomb threat was made.
- Try to document or recall exact wording used by the caller; this can provide critical information needed by the police. Be as thorough and specific as possible.
- DO NOT USE A CELL PHONE. (Use of a cell phone could detonate the bomb.) Contact CU Police from a campus phone at 9-1-1 or any phone 303-724-4444 and report the incident.
- Provide the dispatcher with as much information as possible.
- You may need to have another person call the CU Police or 9-1-1 if you are still on the phone with the suspect.

If directed by CU Police, by ENS Alert or overhead announcement, evacuate the school to one of the following areas:
- Primary location; Anschutz Medical Campus Building L28 ED 2 South room 1102
- Secondary location: Anschutz Medical Campus Fulginti Pavilion

Do not reenter the building until the "all clear" is given by CU Police or University officials.

If the bomb threat is determined to be valid or at the direction of the Fire Department or Emergency Responders, SDM Administrative leadership will account for all personnel that were in the building utilizing SDM recall list and the AxiUm patient accountability report. All unaccounted for or injured individuals will be reported to Fire Department or Emergency Responders.

Suspicious Package

- If you discover a suspicious package or object, DO NOT touch or move it.
- DO NOT use your cell phone as this may activate an explosive device contained within the package.
- Contact CU Police from a campus phone by dialing 9-1-1 or 303-724-4444.

If directed by the CU Police, by ENS Alert or overhead announcement, evacuate the school to one of the following areas:
- Primary location: Anschutz Medical Campus Building L28 ED 2 South room 1102
- Secondary location: Anschutz Medical Campus Fulginiti Pavilion

Abduction Situation

If a School of Dental Medicine faculty, staff or student witnesses or otherwise becomes aware that a person has been abducted from the School or campus, take the following actions:

- If it is safe to do so, press a panic button in your area to notify police and ALSO call CU Police from a campus phone by dialing 9-1-1 or 303-724-4444 from any phone. Advise the dispatchers of the events and inform him/her of your location.
- If known, provide the following information:
    - Descriptions of the abductor(s) and the missing person(s),
    - The location of the abduction and the direction of flight,
    - The type of vehicle involved and the license plate number.
    - Describe any weapons seen.

If heard, relay the exact wording used by the abductor to the CU Police. The exact wording may provide critical information needed by the police. Be as thorough and specific as possible.

Protect the area where the abduction occurred so that law enforcement personnel can process it for evidence. Do not discuss details of the abduction with any other person unless requested by the CU Police, Aurora Police or other law enforcement officers.

At the direction of the CU Police or University officials, SDM Administrative leadership will account for all personnel that were in the building utilizing SDM recall list and AxiUm patient accountability report.

Hostage Situation

If a School of Dental Medicine faculty, staff or student witnesses or otherwise becomes aware of a hostage situation on campus, take the following actions:

- If it is safe to do so, press a panic button in your area to notify police and ALSO call CU Police from a campus phone by dialing 9-1-1 or 303-724-4444 from any phone. Advise the dispatchers of the events and inform him/her of your location.
- If known, provide the following information:
    - Location of the incident, suspect(s), and hostage(s)
    - Description of the suspect(s)
    - Number, conditions, and descriptions of suspect(s) and hostage(s)
    - The demands of the suspect(s) involved and any weapon(s) seen or believed to be present
    - Description of any vehicle and license plate number. Description of any weapons seen

If heard, relay the exact wording used by the suspect. The exact wording used may provide critical information needed by the police. Be as thorough and specific as possible. The person reporting a hostage or barricade incident should remain on the line with police dispatchers as long as safely possible.

At the direction of the CU Police or University officials, SDM Administrative leadership will account for all personnel that were in the building utilizing SDM recall list and the AxiUm patient accountability report. All unaccounted for or injured individuals will be reported to CU Police or University officials.

Missing Person, Child, Infant

If a School of Dental Medicine individual becomes aware that a person, child, or infant is missing they will take the following actions. (A missing person could be a patient, visitor, faculty member, student, staff member, or resident). Code Pink is the recognized code designation used for a missing child or infant. Code Silver is the recognized code designation used for a missing elderly or infirm person. These code designations are recognized and used by the CU Police.

- If it is safe to do so, press a panic button in your area to notify police and call CU Police from a campus phone by dialing 9-1-1 or 303-724-4444 from any phone. Advise the dispatchers of the events and inform him/her of your location.
- Overhead page a CODE Pink to notify the School of a missing child or infant. Overhead page a CODE Silver to notify the School of a missing elderly or infirm person. When one of these codes is announced, the School is to go immediately into lock-down.
- SDM personnel in the area will station themselves at all entrances/exits and stairwells on each floor. All exit routes are to be monitored, to include exits from interior corridors to waiting areas.
- In the case of a missing infant, all bags will be checked before the person is allowed to exit. In the case of a missing child, SDM personnel should establish that any child leaving the building has not been disguised or is being forcefully removed.
- If someone insists on leaving the premises, do not try to stop them, but make note of their physical description, the direction of their departure from the building and a description of their vehicle, if seen.
- Personnel on each floor will search bathrooms, clinical and non-clinical areas for the missing person. Spaces under desks, in radiology reading rooms (dark areas), office spaces that are not in use or are used infrequently will be searched. In the case of a missing infant or child, all cabinets in the area will be searched.
- Once the CU Police arrive, they will provide further direction.

Emergency Release of a Chemical or Substance

If an emergency release of an uncontrollable, highly toxic, flammable or unknown substance occurs at the School of Dental Medicine the following action must be taken:

- Evacuate the immediate area of all persons. DO NOT use elevators.
- Close the doors as you leave your area to contain the material, if possible. Do not endanger yourself by staying in the building to close the doors.
- Once outside the building, continue to a safe distance (a minimum of 100 feet or more when directed by emergency personnel).
- Keep clear of emergency vehicles.

- If it is safe to do so from your area and without delaying evacuation, press a panic button to notify police and/or from a safe location away from the area of the release call CU Police from a campus phone by dialing 9-1-1 or 303-724-4444 from any phone. Advise the dispatchers of the events and inform him/her of your location.

Provide the following information to the police dispatcher, if known and as it becomes available:

- The exact location of release and the area(s) affected.
- Injuries due to exposure, number (and names, if known and requested by dispatch) of person(s) affected, and conditions/symptoms.
- Hazardous product(s) released and amount released.
- Where the caller will meet Emergency Responders and a contact number to reach the caller.
- If directed by CU Police, Emergency Responders, or SDM leadership, all individuals will report to one of the following muster locations:
  - Primary: Anschutz Medical Campus Building L28 ED 2 South room 1102
  - Secondary: Anschutz Medical Campus Fulginiti Pavilion

At the direction of the Fire Department or Emergency Responders, SDM Administrative leadership will account for all personnel that were in the building utilizing the SDM recall list and the AxiUm patient accountability report. All unaccounted for or injured individuals will be reported to CU Police or Emergency Responders.

Incidental Release of a Chemical or Substance

If an incidental release of a relatively small, easily controlled known material occurs at the School of Dental Medicine, personnel causing the spill will initiate cleanup, immediately. SDM personnel trained in hazardous containment will lead the clean-up efforts. The following actions must occur:

- Ensure proper personal protective equipment (PPE) is worn by personnel initiating clean up and that proper equipment is used.
- Call the SDM Facility Director at 303-724-7141 and the University Environmental Health & Safety (EHS) Department at 303-724-0345 for advice and follow-up. EHS will notify the CU Police dispatcher.

- If there is no response from SDM Facilities Department or the spill or fumes are getting worse, press a panic button in your area to notify CU Police AND call CU Police on a campus phone by dialing 9-1-1 or 303-724-4444 from any phone. Advise the dispatchers of the events and inform him/her of your location.

Provide the following information to the CU Police 9-1-1 dispatcher, if known or as it becomes known:

- The exact location of release and the area(s) affected.
- Injuries due to exposure, number (and names, if known, and requested by dispatch) of person(s) affected, and conditions/symptoms.
- Hazardous product(s) released and amount released.
- Where the caller will meet Emergency Responders and a contact number to reach the caller.

In the event that a campus or building evacuation is required in the School of Dental Medicine, move quickly, but in an orderly fashion to the nearest exit. DO NOT USE ELEVATORS.

- Close the doors as you leave your area to contain the material, if possible. Do not endanger yourself by staying in the building to close the doors.
- Once outside the building continue to a safe distance (a minimum of 100 feet or more when directed by emergency personnel).
- Keep clear of emergency vehicles.
- If directed by CU Police, Emergency Responders, or SDM leadership, all individuals will report to one of the following muster locations:
  - Primary: Anschutz Medical Campus Building L28 ED 2 South room 1102
  - Secondary: Anschutz Medical Campus Fulginiti Pavilion

At the direction of the Fire Department or Emergency Responders, SDM Administrative leadership will account for all personnel that were in the building utilizing the SDM recall list and the AxiUm patient accountability report. All unaccounted for or injured individuals will be reported to the CU Police or Emergency Responders.

Earthquake

In the event of an earthquake on the SDM campus or nearby location, all SDM individuals will take the following actions:

- Keep calm. Do not run or panic.
- All individuals will evacuate to a safe location out of the building. Be aware of and avoid downed power lines, broken glass and other debris.
- Help and direct patients, visitors and others to the closest exit.
- DO NOT use elevators.
- The Oral Surgeon and Oral Surgery staff along with the Rapid Response Team will help with medical management or evacuation of sedated or oral surgery patients.
- The Rapid Response Team may be required to assist in medical management and evacuations on other floors.
- If directed by CU police, Emergency Responders, or SDM leadership, all individuals will report to an alternate muster location defined by Emergency Responders.

At the direction of the Fire Department or Emergency Responders, SDM Administrative leadership will account for all personnel that were in the building utilizing SDM recall list and the AxiUm patient accountability report. All unaccounted for or injured individuals will be reported to CU Police or Emergency Responders.

Air Quality

For concerns with air quality, building odors, and building projects, School of Dental Medicine individuals should contact the Facility Director at 303-724-7141. The Director will coordinate with appropriate campus officials to address such issues. University Environmental Health & Safety and University Risk Management will be contacted as needed.

Power Outages

Utility service interruptions, inoperable or disabled elevators, information services or telecommunications problems, and numerous other potential disruptions may occur in the School of Dental Medicine. In order to protect and maintain the physical facilities of the school, safety of individuals as well as to expedite repairs, please note the following actions:
For building outages, or to report damage during normal business hours:

- Contact the School of Dental Medicine Director of Facilities at 303-724-7141 or call the University of Colorado Denver (CU Denver) Facilities Operations Desk at 303-724-1777.

For building outages, or to report damage after hours or during weekends:

- Call the CU Denver Facilities Operations Desk at 303 724-1777. This number will prompt you to leave a message for the CU Denver facilities shift personnel.
- If a CU Denver representative does not return your call within 10 minutes call CU Police at 303-724-4444 from any phone and the dispatcher will contact the appropriate CU Denver Facilities Operations representative.
- In an emergency, move to a safe area and call the CU Police by dialing 9-1-1 from a campus phone or 303-724-4444 from any phone.

Since power outages are usually short in duration, the Facilities Director will contact the Facilities Operations Desk for further advice or instruction if the outage is expected to last longer than 10 minutes.

For CU Denver Information Services or Telecommunications outages contact School of Dental Medicine IT Department at 303-724-7119 or Anschutz Medical Campus and University Office of Information Technology, OIT (Campus IT) at call 303-724-4357.

Elevator Outages or Personnel Trapped inside the Elevator

Most elevators have direct communication to the CU Police by pushing a button on the interior panel. If persons are trapped in an elevator, call CU Police from a campus phone at 9-1-1 or at 303-724-4444 from any phone. **Do not attempt to open the elevator door yourself.**

CU Police and Facilities Operations personnel will respond and evaluate the situation. If they cannot open the doors, the Fire Department will be called to assist.

Police Assistance

For assistance, call CU Police by dialing 9-1-1 from a campus phone or 303-724-4444 from any phone.

Escort to parking lots

CU Police will provide escorts to and from parking lots upon request, by calling 9-1-1 from a campus phone or 303-724-4444 from any phone.

DRILLS AND TRAINING:

Emergency drills and emergency preparedness training exercises are conducted by the School of Dental Medicine. All faculty, staff, students and residents are required to participate when present during the drill or training exercise. You are expected to cooperate with all evacuation requirements whether during a drill or actual event.

Failure to participate in drills or training events may result in disciplinary action.

REVIEW AND APPROVAL:

The SDM Emergency Response Plan is vetted by members of the Infection Control and Life Safety Committee and the Sr. Associate Dean for Clinics and Professional Practice. Final approval of the SDM Emergency Response Plan is conducted by the SDM Operations Committee, Faculty Senate and SDM Executive Committee. The SDM Emergency Response Plan will be reviewed on a triennial basis or sooner, as needed.

APPENDIX - A

Contact Phone # and Notification System

Contact	Phone Number
Campus 9-1-1	Call 9-1-1 from any campus phone or 303-724-4444 from any phone
Campus Police	Call 9-1-1 from any campus phone or 303-724-4444 from any phone
Aurora 9-1-1 Dispatch or Police	9-1-1 from cell phone
University of Colorado Anschutz Campus Emergency Management (Emergency Information)	1-877-463-6070
University of Colorado Anschutz Campus Environmental Health and Safety	303-724-0345
School of Dental Medicine Facility Director	303-724-7141
University of Colorado Anschutz Campus Facilities Operations Desk	303-724-1777
School of Dental Medicine Information Technology (IT)	303-724-7119
University of Colorado Anschutz Campus Office of Information Technology (OIT)	303-724-4357
Dr. Johnson, School of Dental Medicine Sr. Associate Dean of Clinics & Professional Services	303-724-6976
School of Dental Medicine Office of the Dean	303-724-7100

Anschutz Medical Campus Emergency Notification System (Campus ENS):

To sign up for Campus ENS go into your employee portal at www.my.cu.edu and do the following:

- Under "Quick Links" (left hand column of page), click on "Personal Information"
- On the pop-up screen, click on "Change Phone Numbers" and add your cell phone number (choose "Cellular" as the phone type in the drop down list)

III. Patient Care and Management

3.1   Standards of Care

OVERVIEW:
The following standards of care are designed to guide faculty, staff and students in the delivery of patient care at the University of Colorado School of Dental Medicine. These guidelines are in no way meant to abridge the professional judgment of faculty as to what is feasible, achievable and in the best interest of patients in any particular situation. These standards have been developed with the knowledge that patients have the right to decide what treatment they wish to accept, and the faculty has the right to decide if the School is able to provide reasonable care with-in conditions set by the patient.

STANDARDS of CARE

1. We ensure that patients are good candidates for care in our educational Comprehensive Care Program setting by providing a screening exam to determine if the patient's dental care needs are within the scope of the student clinics.
2. We recognize the diversity of our patients and their individual needs.
3. We provide our patients with a General Consent to Treat document and allow time for questions to be asked and answered.
4. We maintain a complete electronic health record for each patient that includes a health history, and promote responsible medication management.
5. We maintain and store patients' Protected Health Information (PHI) securely in accordance with the Health Insurance Portability and Accountability Act (HIPAA).
6. We will ensure that our patients are fully informed of the costs of their treatment by providing an individualized treatment plan to every comprehensive care patient.
7. Emergency dental services are available at the CU School of Dental Medicine five days a week during clinic hours with call coverage available after hours.
8. We provide patients with access to care that occurs in a timely fashion based on their specific treatment needs.
9. We prepare faculty, staff, and students to provide care in the event a patient has a medical emergency in the clinics.
10. We follow up-to-date patient care safety standards.
11. We will ensure that patients are evaluated on a yearly basis to assess for any new oral disease or conditions including cavities.
12. We will provide our patients with education on oral health care.
13. We will ensure that patients receive preventative care.
14. We will ensure that patients receive appropriate follow-up care.
15. We will ensure that patients receive lasting care.
16. We are committed to patient satisfaction. We take each patient concern seriously and will work with our patients to find solutions.

3.2   Patient's Rights and Responsibilities

OVERVIEW:
The patient's rights and responsibilities are contained in the Patient's Rights and Responsibilities brochure.

The Patient's Rights and Responsibilities brochure is provided to each new patient as a part of the new patient documentation, which is either mailed or emailed to the patient. The Patient's Rights and Responsibilities brochures are also found throughout SDM at the front desk and other information centers. In addition, the Rights and Responsibilities are rotated on digital displays found throughout SDM.

PATIENT'S RIGHTS AND RESPONSIBILITIES (ENGLISH)

At the CU Dental Clinics at the University of Colorado School of Dental Medicine, we care deeply about our patients and are proud to provide patient-centered care. We invite you to review your rights as a patient as well as your responsibilities. Together, we can ensure that you receive excellent dental care.

CU Dental Clinics Patient's Rights & Responsibilities

We are proud to provide positive change in the lives of our patients. While a patient, you can count on:

1. Receiving treatment regardless of race, creed, color, religion, gender, age, national origin, sexual orientation, veteran status, individual handicap or sources of payment for care.
2. Having access to interpreter services or the use of auxiliary aids, upon request, when you do not speak or understand the language.
3. Receiving considerate, respectful care recognizing your personal and cultural values and preferences.
4. Receiving advance knowledge of the anticipated/estimated cost of treatment, and the opportunity to request and receive an itemized, detailed explanation of the total bill for your care.
5. Participating in informed decisions concerning your health care. Knowing about and accepting or refusing participation in research projects, investigations, or clinical trials affecting your health and treatment. You may refuse to participate in any filming or recording.
6. Having a designated representative exercise your rights if you are unable to participate in your care or treatment decisions.
7. Having access to emergency care.
8. Having patient care in consideration of your medical history and that promotes responsible medication and pain management.

9. Obtaining complete and current information concerning your condition, diagnosis, treatment, and any known prognosis. (If it is not medically advisable to give a patient this information, it should be given to a legally authorized individual.)

10. An understanding of your individualized treatment plan and giving informed consent. You, or your legally authorized representative, has the right to:
    a. An explanation of the recommended treatment or procedure.
    b. An explanation of the expected outcomes of various treatments or procedures.
    c. An explanation of the risks and benefits.
    d. An explanation of the alternatives with the risks and benefits.
    e. An explanation of the consequences if no treatment is pursued.
    f. Refuse any drug, test, procedure or treatment. You also have the right to request treatment. However, you may not demand treatment considered medically unnecessary or inappropriate.
11. Having continuity of care and completion of your treatment, and being informed of any continuing health care requirements following treatment.
12. Having patient care consistent with your total needs and in an appropriate sequence.
13. Receiving treatment that meets the standard of care in the profession that is evidence-based, accessible and integrates the best research evidence, with patient needs and values, and the knowledge and experience of the dental profession and our faculty.
14. Knowing the identity, professional status and responsibilities of all individuals providing care to you.
15. Obtaining education on oral health care.
16. Having safe clinic practices and environments.
17. Being informed of the School's rules and regulations applicable to your conduct as a patient to include information on how to file a concern with our Patient Advocate. The School will not retaliate or bar services to patients/families/caregivers because a complaint was made.
18. Confidentiality of all communication and clinical records related to your care, including:
    a. To have any discussion or consultation involving your care conducted discreetly.
    b. To limit access to your dental record to individuals directly involved in your treatment, and including those who monitor its quality.
    c. Have all communications and other records pertaining to your care, including the source of payment for treatment, treated as confidential.

We ask that you partner with us in your dental care by following the University of Colorado School of Dental Medicine rules and regulations affecting patient care and conduct as outlined below:

1. Follow the treatment plan recommended by the School and approved by the patient in a timely manner.
2. Attend, on time, all scheduled appointments and give at least 48-hours' notice if you need to cancel an appointment.
3. Update the dental school on changes to your contact information (e.g. telephone number, mailing address).
4. Provide accurate, current and complete information about present complaints, past illnesses, hospitalizations, medications, and other matters relating to your health and dental health. The patient also has the responsibility of reporting unexpected changes in his/her condition to the responsible provider.
5. Make it known that you clearly understand a proposed course of treatment, and what is expected of you by giving your informed consent. Feel free to ask questions if you do not understand any directions or information given to you.

6. Arrive for your appointments free from the influence of alcohol or recreational drugs.
7. Assure that the financial obligations for your dental care are fulfilled as promptly as possible. This includes making payment at the time of treatment, as well as providing accurate insurance information and asking questions you may have concerning your bill.
8. Protect your personal belongings.
9. Be considerate and respectful of the rights of other patients, visitors, and of School personnel. The dental school retains the right to limit or restrict services to anyone for behaviors deemed inappropriate by faculty or staff.
10. Respect the property of others.
11. Remember you are responsible for the outcome if you refuse treatment or do not follow instructions.

Access to Dental Records

Should you or your designated representative need copies of your dental records, we are happy to assist you. Please submit your request in writing to CU School of Dental Medicine, Dental Records Department, Mail Stop 841, 13065 East 17th Avenue, Aurora, CO 80045. You may email a request for records to sdmrecords@ucdenver.edu. Copies are made and available within five to ten business days; patients will be responsible for any fees related to duplication of your dental record.

Addressing Patient Concerns

Should you have questions or concerns about your care while receiving treatment at any of the CU Dental Clinics, our Patient Advocate Office will work with you to address your concerns. Patients may submit requests for information or concerns, either verbally or in writing, to the Patient Advocate Office at (303) 724-7040 or via email at sdm-ptadvocate@ucdenver.edu.

13065 East 17th Avenue
Mail Stop 841
Aurora, CO 80045

dental.cuanschutz.edu

303-724-6900

PATIENT'S RIGHTS AND RESPONSIBILITIES (SPANISH)

En CU Dental Clinics en la Facultad de Medicina Dental de la Universidad de Colorado (University of Colorado School of Dental Medicine), nos preocupamos profundamente por nuestros pacientes y estamos orgullosos de brindar atención centrada en el paciente. Lo invitamos a revisar sus derechos como paciente así como sus responsabilidades. Juntos, podemos asegurarnos de que reciba una excelente atención dental.

Derechos y responsabilidades del paciente de CU Dental Clinics

Estamos orgullosos de brindar un cambio positivo en la vida de nuestros pacientes. Como paciente, puede contar con:

1. Recibir tratamiento independientemente de su raza, credo, color, religión, sexo, edad, nacionalidad, orientación sexual, condición de veterano, discapacidad individual o fuentes de pago por la atención.
2. Tener acceso a servicios de interpretación o al uso de ayudas auxiliares, a pedido, cuando no hable o no entienda el idioma.
3. Recibir atención considerada y respetuosa reconociendo sus valores y preferencias personales y culturales.
4. Saber con anticipación el costo previsto/estimado del tratamiento y la oportunidad de solicitar y recibir una explicación detallada y desglosada de la factura total por su atención.
5. Participar en decisiones informadas sobre su atención médica. Conocer y aceptar o rechazar la participación en proyectos de investigación, investigaciones o ensayos clínicos que afecten su salud y tratamiento. Puede negarse a participar en cualquier filmación o grabación.
6. Tener un representante designado que ejerza sus derechos si no puede participar en sus decisiones de atención o tratamiento.
7. Tener acceso a la atención de emergencia.
8. Recibir atención como paciente en consideración de su historial médico y que promueva la medicación responsable y el manejo del dolor.
9. Obtener información completa y actualizada sobre su condición, diagnóstico, tratamiento y cualquier pronóstico conocido. (Si no es médicamente aconsejable proporcionar esta información a un paciente, se debería informar a una persona legalmente autorizada).
10. Comprensión de su plan de tratamiento individualizado y entrega del consentimiento informado. Usted, o su representante legalmente autorizado, tiene derecho a:
    b. Una explicación del tratamiento o procedimiento recomendado.
    c. Una explicación de los resultados esperados de varios tratamientos o procedimientos.
    d. Una explicación de los riesgos y beneficios.
    e. Una explicación de las alternativas con los riesgos y beneficios.
    f. Una explicación de las consecuencias si no se sigue un tratamiento.
    g. Rechazar cualquier fármaco, prueba, procedimiento o tratamiento. También tiene derecho a solicitar tratamiento. Sin embargo, no puede exigir un tratamiento que se considere médicamente innecesario o inapropiado.
11. Tener la continuidad de la atención y la finalización de su tratamiento, y estar informado de cualquier requisito de atención médica continua después del tratamiento.

12. Recibir atención como acorde con sus necesidades y en una secuencia apropiada.

13. Recibir un tratamiento que cumpla con el estándar de atención en la profesión que esté basado en evidencias, que sea accesible e integre la mejor evidencia de investigación, con las necesidades y valores del paciente, y el conocimiento y la experiencia de la profesión dental y nuestra equipo de docentes.

14. Conocer la identidad, el estado profesional y las responsabilidades de todas las personas que le brindan atención.

15. Obtener educación sobre el cuidado de la salud bucal.

16. Tener prácticas y entornos clínicos seguros.

17. Estar informado de las reglas y regulaciones de la escuela aplicables a su conducta como paciente para incluir información sobre cómo presentar una inquietud ante nuestro defensor de pacientes. La escuela no tomará represalias ni prohibirá los servicios a los pacientes/las familias/los cuidadores porque se haya presentado una queja.

18. La confidencialidad de todas las comunicaciones y registros clínicos relacionados con su atención, que incluyen:
    a. Tener cualquier conversación o consulta que involucre su cuidado llevado a cabo de manera discreta.
    b. Limitar el acceso a su registro dental a las personas directamente involucradas en su tratamiento, incluidas aquellas que controlan su calidad.
    c. Que todas las comunicaciones y otros registros relacionados con su atención, incluida la fuente de pago del tratamiento, se traten de forma confidencial.

Le pedimos que se asocie con nosotros en su atención dental siguiendo las reglas y regulaciones de University of Colorado School of Dental Medicine, que afectan la atención y la conducta del paciente, según se describe a continuación:

1. Seguir el plan de tratamiento recomendado por la escuela y aprobado por el paciente de manera oportuna.

2. Asistir puntualmente a todas las citas programadas y avisar con al menos 48 horas de anticipación si necesita cancelar una cita.

3. Notificar a la escuela de odontología sobre cambios en su información de contacto (por ejemplo, número de teléfono, dirección postal).

4. Brindar información precisa, actual y completa sobre quejas actuales, enfermedades previas, hospitalizaciones, medicamentos y otros asuntos relacionados con su salud general y salud dental. El paciente también tiene la responsabilidad de informar al proveedor responsable ante cambios inesperados en su condición.

5. Entregar su consentimiento informado para dar a conocer que entiende claramente un curso de tratamiento propuesto y lo que se espera de usted. No dude en hacer preguntas si no comprende las instrucciones o la información que se le proporcione.

6. Llegar a sus citas libre de la influencia del alcohol o de las drogas recreativas.

7. Asegurarse de que las obligaciones financieras de su atención dental se cumplan lo antes posible. Esto incluye realizar el pago en el momento del tratamiento, así como proporcionar información precisa sobre el seguro, y hacer las preguntas que pueda tener sobre su factura.

8. Proteger sus pertenencias personales.

9. Ser considerado y respetuoso con los derechos de otros pacientes, visitas y del personal de la escuela. La escuela de odontología se reserva el derecho de limitar o restringir los servicios a cualquier persona por comportamientos considerados inapropiados por el cuerpo docente o el personal.
10. Respetar la propiedad ajena.
11. Recordar que usted es responsable del resultado si rechaza el tratamiento o no sigue las instrucciones.

Acceso a los registros dentales

Si usted o su representante designado necesitan copias de sus registros dentales, estaremos encantados de ayudarle. Envíe su solicitud por escrito a CU School of Dental Medicine, Dental Records Department, Mail Stop F841, 13065 East 17th Avenue, Aurora, CO 80045. Puede enviar una solicitud de registros por correo electrónico a sdmrecords@ucdenver.edu. Las copias se realizan y están disponibles en un plazo de cinco a diez días hábiles; los pacientes serán responsables de los honorarios relacionados con la duplicación de su registro dental.

Tratamiento de las inquietudes de los pacientes

Si tiene preguntas o inquietudes sobre su atención mientras recibe tratamiento en cualquiera de las Clínicas Dentales de CU, nuestra Oficina de Defensa del Paciente trabajará con usted para abordar sus inquietudes. Los pacientes pueden enviar solicitudes de información o inquietudes, ya sea verbalmente o por escrito a la Oficina del Defensor del Paciente al (303) 724-7040 o por correo electrónico a sdm-ptadvocate@ucdenver.edu.

13065 East 17th Avenue
Mail Stop 841
Aurora, CO 80045

dental.cuanschutz.edu

303-724-6900

3.3   Health Insurance Portability and Accountability Act (HIPAA)

The School of Dental Medicine follows the University of Colorado Office of Regulatory Compliance (ORC) Policies on Health Insurance Portability and Accountability Act (HIPAA).

All HIPAA policies, form, and other information can be found on the Office of Regulatory Compliance website at: http://www.ucdenver.edu/academics/research/AboutUs/regcomp/hipaa/Pages/policies-forms.aspx

Below you will find the ORC's General Rule regarding HIPAA.

HIPAA Policy 1.1

Title: General Rule: Uses and Disclosures of Information
Source: Office of Regulatory Compliance
Prepared by: Assistant Vice Chancellor for Regulatory Affairs
Approved by: Vice Chancellor for Research
Effective Date: July 1, 2013
Replaces: 02/26/03
Applies: All UCD campuses

I.   **Introduction**
  A.   *Purpose*
        The purpose of this policy is to outline the general circumstances under which a UCD faculty member, employee, student, trainee or volunteer with access to protected health information (PHI) may use or disclose protected health information (PHI) under the Privacy Rule of the Health Insurance Portability and Accountability Act (HIPAA).

  B.   *Reference*
        45 C.F.R. § 164.502(a) and § 164.506

  C.   *Applicability*
        It is the responsibility of anyone who uses or discloses PHI in any capacity at UCD to follow this policy. This includes faculty, staff, students, trainees, volunteers, etc.

II.   **Policy**
  A.   Permitted Uses or Disclosures of Protected Health Information (PHI)
        UCD faculty, employees, students, trainees, or volunteers are not permitted to use or disclose protected health information (PHI) except in the following circumstances:

        • The individual who is the subject of the PHI, requests his/her own information;

- For the treatment, payment or health care operations of UCD;

- For the treatment activities of a health care provider (other than UCD); or,

- For the payment activities of another covered entity or health care provider (other than UCD).

- For activities listed below, if the covered entity (CE) and the UCD each have or had a relationship with the individual whose information is being used or disclosed to the CE and the information pertains to the relationship described above:
  - Use or disclosure is for the purpose of health care fraud and abuse detection or compliance;
  - Conducting quality assessment and improvement activities, including:
    - Outcomes evaluation and development of clinical guidelines, provided that the obtaining of generalizable knowledge is not the primary purpose of any studies resulting from such activities;
    - Population-based activities relating to:
      - Improving health or reducing health care costs
      - Protocol development
      - Case management and care coordination
      - Contacting of health care providers and patients with information about treatment alternatives;
  - Reviewing the competence or qualifications of health care professionals;
  - Evaluating practitioner and provider performance and health plan performance;
  - Conducting training programs in which students, trainees, or practitioners in areas of health care learn under supervision to practice or improve their skills as health care providers;
  - Training of non-health care professionals;
  - Accreditation;
  - Certification;
  - Licensing; or
  - Credentialing Activities

- Incidental disclosures that are incident to a use or disclosure otherwise permitted or required by this policy and provided that the UCD faculty, employee, trainee, student or volunteer has complied with the requirements of the Minimum Necessary and Safeguard Policies.

3.4   Patient Application, Screening, and Acceptance

Title: Patient Application, Screening, and Acceptance
Source: Clinical Operations
Effective Date: August 6, 2018

INTRODUCTION

To ensure appropriate and safe patient care along with adequate learning experiences for students and residents, the School of Dental Medicine (SDM) has a centralized screening process for all potential patients interested in Comprehensive Care treatment.

PURPOSE

During the screening process, faculty will first determine if a pre-doctoral/ISP (International Student Program) student can effectively treat the patient. If too complex, the patient may be referred to the General Practice Residency (GPR) program, Graduate Periodontics program, Oral and Maxillofacial Surgery or the Faculty Practice for examination or the patient may be referred for care outside of the School of Dental Medicine. The following outlines the steps individuals will experience in becoming a patient at the School of Dental Medicine.

POLICY

Application Process

Persons who wish to become a patient at the School of Dental Medicine call the School's main phone number (303-724-6900) or the CU Dental Team Care Clinic's number (303-724-2273) and are scheduled for a screening appointment. Patients are appointed in the order in which they call. Screening is done at minimal/no charge to the patient and does not guarantee acceptance into one of the School's programs.

At the screening appointment, the patient learns about the School's clinics and about the aspects unique to the academic mission of the School, such as time commitment, fees, and length of time to complete care. Staff, students and faculty emphasize these features during the screening process.

Steps in Screening Process (See also Policy 3.5 Patient Screening Procedures and Status)

When a patient calls for an appointment, initial demographic information is entered into the electronic database, hereinafter referred to as axiUm. The status of the patient is entered as "New

Screening" upon being appointed. A patient information packet is either mailed or emailed to the patient. The patient information packet contains:

1. Welcome letter
2. Patient Rights and Responsibilities Brochure
3. General Information and Consent for Treatment form

4. Dental and Medical History Form
5. Directions, map, and parking information

On the day of the appointment, patients are registered and given the option to review a copy of the HIPAA and General Information and Consent for Treatment form, after which they provide an electronic signature. Patients are also given the option to obtain a copy of the HIPAA form and another copy of the General Information and Consent for Treatment form (a first copy was mailed or emailed to the patient prior to the appointment). Each patient is appointed for one hour, during which an abbreviated medical history, chief complaint and patient expectations are determined. The dental student conducts a brief, non-invasive examination. Screening faculty members review the findings, make a final determination regarding acceptance or non-acceptance, and approve the findings in axiUm. Appropriate examination and radiographs are ordered and approved in axiUm. (See Policy 3.5 Patient Screening Procedures and Status)

If a patient is accepted for treatment, he/she is given a letter that reviews and reiterates the information that was discussed. The letter states the dollar amount needed for the subsequent examination and films. The patient status in axiUm is changed to "Accepted," and their name is placed in a pool for future assignment to a student. See Screening Accept Letter.

If a patient is not accepted, he/she is given a letter that states the reason. If appropriate, the patient is referred for screening in the General Practice Residency (GPR), Graduate Periodontics, Oral and Maxillofacial Surgery or the Faculty Practice. At times, a patient may be referred to an outside provider. In this case, information about alternative sites/programs is provided. Patient status in axiUm will be changed to "Not Accepted," which means the patient cannot be screened again except in special circumstances. See Screening Non-Accept Letter.

Fees, Time Commitment and Availability

Fees in the student and resident programs are approximately 30-50% less than fees charged in private practice. The lower fees are in exchange for the increased amount of a patient's time that is required for treatment by a student. Patients who are accepted for treatment are expected to be able to meet **at least one 3-hour appointment per week.** Patients must also have a flexible schedule, and should be available for several different clinic sessions in a given week (AM or PM).

Payment Policy

Payment for services is required as they are rendered. Advanced payment of 50% of the total fee is required for laboratory-fabricated restorations and denture services. All major credit cards and personal checks are accepted. Most dental insurance plans and Medicaid are honored.

Patient Scheduling

Patients should give 48 hours-notice if they cannot keep an appointment. Patients who fail to meet appointments two or more times may be discontinued from the program.

Screening Appointment

SDM conducts screenings throughout the year. Full-time faculty members supervise the screening process. The screening appointment is not a thorough diagnostic examination, but rather a short appointment to determine if pre-doctoral/ISP (International Student Program) students can effectively manage their care safely.

Acceptance into the one of the School's programs depends on several factors, including but not limited to patient needs and desires, suitability as a patient in one of the School's programs, understanding of the special nature of a school program, realistic expectations, procedures appropriate to student abilities, and availability of time and resources to obtain care in a timely fashion. Reasons for non-candidacy into the pre-doctoral/ISP (International Student Program) student clinical program may include, but are not limited to, the following:

- Complicated restorative dental treatment needs
- Multiple difficult fillings and/or significant esthetic considerations
- Many cavities, significant root decay, cavities on most or all teeth requiring immediate attention
- Multiple crowns/caps existing, replacement of many teeth with individual implants and/or full mouth rehabilitation
- No or negative ridge remaining after your teeth were extracted, for fabricating a denture
- Severely worn teeth/loss of vertical dimension (loss of mouth space for replacement teeth)
- Suspicious mass found during intra- or extra-oral examination requiring expedited care
- Treatment expectations that are not practical to achieve in the school setting
- Medical condition is deemed too complex or unstable:
    o Severe heart disease
    o Severe diabetes (or other endocrinopathies)
    o Severe blood disease
    o Severe kidney problems
    o Severe seizures (Epilepsy)
    o Active Tuberculosis (TB)
    o Severe joint pain/problems
    o Bisphosphonate Use (Brittle bone treatment) and teeth in need of extraction
    o Other
- Time constraints
- Financial limitations

If a patient is deemed to be too medically or dentally complex or if their care requires urgent treatment, if appropriate, the patient will be referred for screening in the General Practice Residency (GPR), Graduate Periodontics, Oral and Maxillofacial Surgery or the Faculty Practice. At times, a patient may be referred to an outside provider.

Following appropriate management of the medical or dental complexities or management of urgent treatment needs, the patient may be screened again to determine if they are a suitable candidate for the pre-doctoral/ISP (International Student Program) student clinical program.

The patient is informed of their acceptance or non-acceptance at the end of the screening appointment and is provided with a letter explaining the same, see below.

The following medically compromised patients are not routinely accepted for treatment by SDM students unless stable and coordinated with patient's physician (referral to GPR, Graduate Periodontics, Oral-Maxillofacial Surgery or the Faculty Practice is appropriate):

1. Severe cardiopulmonary disease (uncontrolled hypertension, MI/CVA within the previous 6 months)
2. Severe congestive heart failure/arrhythmia/insufficiency, in need of IV antibiotic coverage
3. Severe endocrinopathies (uncontrolled diabetes of any type)
4. Hematological diseases (all types of hemophilia and coagulation disorders, leukemia)
5. Severe renal insufficiency (post renal transplant, hemodialysis)
6. Severe uncontrolled convulsive disorder (epilepsy)
7. Active tuberculosis – patients are referred to PCP or Infectious Disease clinic, and/or appropriately equipped (N95 masks) community dental provider

The following dentally compromised patients are not accepted for treatment:

1. Fixed Prosthodontics: Patients with severely worn dentition requiring full mouth rehabilitation.
2. Removable complete dentures: No or negative ridge, for whom implants are not feasible. Also, patients whose expectations appear unrealistic.

ACCOUNTABILITY

All faculty, staff, residents and students are responsible for the safety of our patients, visitors and each other. All individuals are responsible for reading and following this policy.

AUTHORITY

The Sr. Associate Dean of Clinics and Professional Practice, the faculty responsible for patient care, directors, managers, and supervisors have the authority to enforce this policy per professional practice and community standards.

REVIEW AND APPROVAL
The Sr. Associate Dean of Clinics and Professional Practice, the Operations Committee, Faculty Senate and SDM Executive Committee grant final approval of the policy. The policy is reviewed on a triennial basis or sooner, as needed.

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

SCREENING ACCEPT LETTER

Dear Patient,

Welcome to the University of Colorado School of Dental Medicine! During our screening process today, you have been *preliminarily* accepted as a patient in the CU Dental Team Care Clinics. As a patient in the CU Dental Team Care Clinics, you will be treated by a dental team – made up of dental faculty supervising your care, a dental student, and highly experienced dental technicians. Let us take the opportunity to inform you of what to expect next:

Appointments and Treatment Planning

- You will be matched with a dental student who will call you to schedule your first appointment. You should be contacted by your student within one week. If you do not hear from your student, please call 303-724-2273 to let us know.

- At your first appointment, you will need to bring approximately $132. This amount will cover the cost of a comprehensive examination and necessary initial x-rays. Please note: additional x-rays may be needed in the future and are not included in the initial fee.

- The comprehensive examination may take several 3-hour appointments, but you will only be charged once for this series of appointments. This in-depth examination ensures that the dental faculty member has the opportunity to supervise and help your student develop the treatment plan that is most appropriate for you. This also provides the teaching opportunity necessary for the student to learn. It is important that these visits be completed in a timely manner. Should you fail to complete the series of appointments required for your initial examination and choose to re-start at a later date, you will need to start the process over with a new student and additional fees will apply. Appointments are scheduled from 9 am – 12 noon or 2 pm – 5 pm, Monday through Friday.

- Based on the findings of the comprehensive examination, you will meet with your CU Dental Team faculty and dental student to discuss the recommended treatment plan. No treatment will be provided until your treatment plan is complete and you have approved of your plan. At this crucial point, it may be decided that your dental needs are better served in another setting than our student comprehensive care clinic. If we determine that we cannot provide the necessary dental care for you in a safe and efficient manner, we will make the appropriate referral for you.

- Treatment outside the scope of the CU Dental Team Care Clinics may be referred to another CU Dental Clinic or a specialist outside the school.

Payments

- Once treatment begins, you will need to pay as treatment is provided. Multiple visit procedures, such as crowns and dentures, can be paid in two installments. The first half at the initiation of the procedure and the second half at the delivery appointment. You may elect to make additional payments on your treatment plan any time during treatment, as the school does not provide payment plans. Should you have questions about insurance plans, our payment office would be happy to assist you. You are encouraged to understand your own insurance limitations and the costs for each treatment before your next scheduled visit.

Urgent/Emergency Care

- Prior to being assigned to a dental student, you can be treated in our emergency clinic for any urgent dental needs. After you have been assigned to a CU Dental Team, you will first call your dental student or call your patient care coordinator between 8 am – 5 pm M-F. For emergencies between 5 pm and 9 pm, please first try your dental student. If you are unable to reach your dental student, or between the hours of 9 pm and 8 am, please call 720-848-0000.

Welcome again to the University of Colorado School of Dental Medicine. We encourage you to know your rights and responsibilities and to review the Welcome to CU Dental Clinics/Patient's Rights and Responsibilities. We hope this will be a successful relationship and we look forward to providing you with the best dental care possible.

Sincerely,

University of Colorado School of Dental Medicine
Dental Team Care Clinics

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

SCREENING NON-ACCEPT LETTER

Dear Patient,

During the screening process you participated in today, the faculty determined that we cannot meet your dental needs in the CU Dental Team Care Clinics at this time. The reason(s) are as follows:

- ☐ Your dental needs are too complex for our dental students:
    - ☐ Complicated restorative dental treatment needs
    - ☐ Severe periodontal (gum) disease
    - ☐ Multiple difficult fillings and/or esthetic considerations
    - ☐ Many cavities, significant root decay, cavities on most or all teeth requiring immediate attention
    - ☐ Multiple crowns/caps existing, replacement of many teeth with implants and/or full mouth rehabilitation
    - ☐ No or negative ridge remaining after your teeth were extracted, for fabricating a denture
    - ☐ Severely worn teeth/loss of vertical dimension (loss of mouth space for replacement teeth)
    - ☐ Possible bone reshaping surgery and/or multiple extractions needed
    - ☐ Suspicious mass found during intra- or extra-oral examination requiring referral to another provider for expedited care
- ☐ Your medical condition is deemed too complex or unstable:
    - ☐ Severe heart disease
    - ☐ Severe diabetes (or other Endocrinopathies)
    - ☐ Severe blood disease
    - ☐ Severe kidney problems
    - ☐ Severe seizures (Epilepsy)
    - ☐ Active Tuberculosis (TB)
    - ☐ Severe joint pain/problems
    - ☐ Bisphosphonate Use (Brittle bone treatment)
    - ☐ Other_____
- ☐ Time constraints: _____
- ☐ Financial limitations:_____
- ☐ Other:_____
    _____

If you ever need emergency services, we have an urgent care clinic located on the first floor of the dental school. Our Emergency and Urgent Dental Care Clinic is open Monday-Friday when the dental school is in session. Patients are seen on a first come first serve basis. The main doors of the School open at 8 a.m. and the Urgent Care/Emergency Clinic begins seeing patients at 9 a.m. It is recommended that patients arrive early to register as the clinic sometimes fills to capacity due to high demand. The basic Emergency and Urgent Dental Care Clinic fee is $56.00 which includes a limited diagnostic exam, medical review and a radiograph of the area of concern. Any additional procedures such as extractions or root canals will incur additional fees. Every attempt has been made to keep our fees as low as possible.

The purpose of the Emergency and Urgent Dental Care Clinic is to provide relief of emergency problems, such as pain, swelling, bleeding or trauma. Treatment is provided by third and fourth year dental students under the supervision of School of Dental Medicine faculty. Please call 303-724-6900 for additional information.

The University of Colorado School of Dental Medicine sincerely thanks you for your interest and time spent in our dental student program.

3.5   Patient Screening Procedures and Status

OVERVIEW:
As outlined in Section 3.3, all potential Comprehensive Care patients for the School of Dental Medicine are screened through a centralized clinic to determine if a patient's treatment needs are appropriate for pre-doctoral/ISP students to perform. If too complex, the patient may be referred to the General Practice Residency program or Faculty Practice for examination, or the patient may be referred for care outside of the School of Dental Medicine. The School's Orthodontics Residency Program conducts its own screening for potential orthodontic patients.

The following outlines student and faculty responsibilities when assigned to the Screening Clinic.

SCREENING FORM:
Students and faculty use a template screening note in axiUm intended to reduce the time needed to identify potential treatment needs and desires, medical issues that may have an impact on treatment, and the patient's desired timing of treatment (based on the patient's schedule flexibility and finances). This information is intended to allow the patient to be treated to the level and at the pace that he/she desires, as well as to provide guidance for the students regarding their patient management responsibilities.

The following information is collected in axiUm during the initial screening appointment: (See sample axiUm Screening Template note Appendix B.)

- Chief Complaint, stated in the patient's own words; history of Chief Complaint
- Summary of medical history, allergies and medications (Abbreviated to determine critical information. A more detailed medical history is taken in the medical/dental history form in Axium and then reviewed by the assigned provider as part of the Oral Diagnosis.)
- ASA type, the need for a medical consultation, and determination of urgency of dental needs
- Vital signs
- Patient availability, patient's ability to fund treatment
- Patient expectations of treatment and outcomes

Following the interview, an extraoral and intraoral examination is performed to assess potential needs as well as an oral cancer screening examination.
The student then presents the patient to the covering faculty. The student and the faculty will review the information and make a determination. The faculty member will examine the patient. The patient is notified of the outcome, (accepted to CUDT clinics, internal referral, or referred to outside provider).

After reviewing the above information, the following derived information is also entered into the template note in Axium, by the student with the guidance of the covering faculty:

- Anticipated treatment needs codes.
- Determination of acceptance or non-acceptance written in the faculty comment section (allows for text entry to further explain or expand on the findings/determinations of the screening process).
- Disposition of patient (accepted to CUDT clinics, internal referral, or referred to outside provider).
- An entry for "Next visit" in which the student writes plan for next visit.

After the completion of the template note, if the patient is accepted:

- The anticipated treatment needs are populated in the patient's record;
- The comprehensive examination (simple, moderate, complex) is planned;
- The "caries risk assessment" form is planned;
- The appropriate radiographs are planned:
  - ➢ Full mouth series radiographs or
  - ➢ Panoramic radiographs or
  - ➢ Individual periapicals or bitewing radiographs, as indicated for the individual patient.

Depending on the outcome of the screening appointment, status for all screened patients will be updated in axiUm to "Accepted" or "Not accepted":

- Records of patients with a status of "Accepted" are matched in axiUm, by the Screening Coordinator, using the Patient Assignments module in axiUm. Once assigned to a student, the patient status is updated to "Active." This is done by the Screening Coordinator.

- Records of patients with a status of "Not Accepted" are placed in a pool in axiUm which is unavailable for rescreening. Exceptions may be noted in the record to allow rescreening if problems such as medical issues or availability, noted initially, have been resolved. This is done on a case-by-case basis.

PATIENT STATUS:

Current status designations available in axiUm are as follows:

- Accept: Patients accepted at screening.

- Active: Patients assigned for active treatment to a student.

- Board patient: Patients who were screened by student candidates solely for licensing board examinations.

- Delay: Patients who have requested delay in treatment..

- Discontinued: Patients who have been dismissed from the program. Not to be reinstated without special consideration, if at all.

- Emergency: Patients whose initial visit to the school is for emergency care.

- Inactive: Patients whose treatment is discontinued for a variety of reasons, including but not limited to, moving out of the area, treatment complete at this site, no further treatment desired.

- Limited Care: Patients who have only one or two items requiring treatment, or who need definitive treatment such as endodontic procedures and stabilization. No comprehensive care is rendered without screening.

- Not Accepted: Patients who were determined at screening to be not a good match for the pre-doctoral program

- Screen: New patients who are interested in becoming patients at UCSDM

STUDENT AND FACULTY PARTICIPATION IN SCREENING:

Third- and fourth-year dental students, as well as first- and second-year students in the International Student Program, are assigned to a rotation, with a minimum of six students assigned to each session. There are 8 chairs per session and 12 patients scheduled per session. One or two faculty members from the Restorative Department are assigned to each session.

Sessions occur 4 days per week (8 sessions). Since all patients have been entered into axiUm, they are temporarily assigned to specific students for the day. Once the session is completed, the patients seen are no longer part of the student's patient pool, unless the patient's needs match the student's needs. This will be determined by the Screening Coordinator, in communication with the student's Clinic Care Coordinator and the Axium "request" queue.

If students have a family member, friend, or patient referred by one of their own patients, or someone they have treated while on a rotation and wish to continue treating comprehensively, they may request an "overflow" chair for a session. These chairs make use of the time available from patients who fail to show for screening. Such patients will be assigned to the student who requested the chair and screened the patient.

3.6   Acceptance of Medically Compromised Patients

Title: Acceptance of Medically Compromised Patients
Source: Department of Surgical Dentistry
Effective Date: January 1, 2008
Revised Date: October 22, 2018; February 2022

INTRODUCTION:

It is the intent of the University of Colorado School of Dental Medicine (SDM) to provide safe, quality dental care to a broad range of patients in an educational environment. The focus of the pre-doctoral clinic is to provide students with fundamental experiences in various aspects of dentistry.

PURPOSE:

SDM seeks to minimize risk to the medically compromised patient during dental treatment in the pre-doctoral or ISP (International Student Program) programs.

POLICY:

Patients who desire oral care may present with medical or oral health conditions that are best managed in a treatment environment other than an undergraduate training program. Extremely complex patients (medically and/or dentally complex) are most safely treated in the General Practice Residency (GPR) program, Graduate Periodontics program, the Faculty Practice, or Oral and Maxillofacial Surgery who could decide to treat the patient in an outpatient or inpatient hospital environment. Patients may be referred to a community provider.

Assessment

Patients are screened as described in Policies 3.4 and 3.5. Screening includes taking a health history, personal interview, and a brief clinical examination. An ASA classification (American Society of Anesthesiology) should also be determined. See Appendix A for an outline of ASA classifications. An ASA III status is described as severe systemic disease or substantive functional limitations; a patient with one or more moderate to severe diseases. If an ASA III patient is stable, they are acceptable in the student clinic if all other screening criteria are met. If some question remains, but the patient is otherwise stable for acceptance, a medical consult may be sent with the patient to be completed by their primary care provider or other medical provider. The consult should also be sent directly to the medical provider by the student or staff member The patient will bring the completed form to the initial comprehensive examination or the provider may return the completed form. A verbal consult is acceptable as long as the conversation is documented in the electronic health record. Preferably, a verbal consult will be followed with a written medical consult.

Other medical consults may be done as part of the comprehensive examination procedure.

The following guidelines are to be used in this decision making process:

A. The following types of medically compromised patient problems should **NOT** be routinely admitted for care in the undergraduate program (CUDT) at SDM **unless** the patient has had an appropriate medical consultation and dental care is coordinated with the patient's provider and with SDM faculty approval.

   1. Uncontrolled hypertension (See Appendix B for Blood Pressure Guideline Recommendations)

   2. Severe cardiopulmonary disease
      a. Previous myocardial infarction (MI) less than 6 months
      b. Severe congestive heart failure
      c. Severe cardiac insufficiency
      d. Severe cardiac arrhythmias
      e. Previous cerebral vascular attack (CVA) less than 6 months
      f. Patients in need of IV antibiotic coverage during appointments
      g. Patients dependent on full-time oxygen delivery

   3. Severe endocrinopathies
      a. Uncontrolled diabetes of any type

   3. Hematological Diseases
      a. All types of hemophilia and other coagulation disorders
      b. All types of leukemia and lymphoma
      c. All anticoagulant therapy patients

   4. Severe Renal Insufficiency
      a. Post-renal transplant
      b. Hemodialysis

   5. Severe Convulsive Disorder (Epilepsy)
      a. Unstable seizure history
      b. Seizures within one year

   6. Active Tuberculosis – Refer patient to primary care provider (PCP) or Infectious Disease clinic, and/or appropriately equipped (N95 masks) community dental provider.

B. Medically compromised patients who are accepted should be carefully monitored as to their clinical progress within the undergraduate program. Supervising faculty should minimize the length and number of appointments for medically compromised patients whenever possible within the constraints of the educational program.

REFERENCES:

ASA (American Society of Anesthesiology) Physical Status Classification System accessed Sept. 2018
https://www.asahq.org/resources/clinical-information/asa-physical-status-classification-system

Little and Falace. Dental Management of the Medically Compromised Patient. 9th edition, 2018, Chapter 3.

ACCOUNTABILITY:

All faculty, staff, residents and students are responsible for the safety of our patients, visitors and each other. All individuals are responsible for reading and following this policy.

AUTHORITY:

The Sr. Associate Dean of Clinics and Professional Practice, the faculty responsible for patient care, directors, managers, and supervisors have the authority to enforce this policy per professional practice and community standards.

REVIEW AND APPROVAL:

The Sr. Associate Dean of Clinics and Professional Practice, the Operations Committee, Faculty Senate and SDM Executive Committee grant final approval of the policy. The policy is reviewed on a triennial basis or sooner, as needed.

APPENDIX A

ASA Physical Status Classification System
Last approved by the ASA House of Delegates on October 15, 2014

ASA PS Classification	Definition	Examples, including, but not limited to:
ASA I	A normal healthy patient	Healthy, non-smoking, no or minimal alcohol use
ASA II	A patient with mild systemic disease	Mild diseases only without substantive functional limitations. Examples include (but not limited to): current smoker, social alcohol drinker, pregnancy, obesity (30 < BMI < 40), well-controlled DM/HTN, mild lung disease
ASA III	A patient with severe systemic disease	Substantive functional limitations; One or more moderate to severe diseases. Examples include (but not limited to): poorly controlled DM or HTN, COPD, morbid obesity (BMI $\geq$ 40), active hepatitis, alcohol dependence or abuse, implanted pacemaker, moderate reduction of ejection fraction, ESRD undergoing regularly scheduled dialysis, premature infant PCA <60 weeks, history (>3 months) of MI, CVA, TIA, or CAD/stents
ASA IV	A patient with severe systemic disease that is a constant threat to life	Examples include (but not limited to): recent (< 3 months) MI, CVA, TIA, or CAD/stents, ongoing cardiac ischemia or severe valve dysfunction, severe reduction of ejection fraction, sepsis, DIC, ARD or ESRD not undergoing regularly scheduled dialysis
ASA V	A moribund patient who is not expected to survive without the operation	Examples include (but not limited to): ruptured abdominal/thoracic aneurysm, massive trauma, intracranial bleed with mass effect, ischemic bowel in the face of significant cardiac pathology or multiple organ/system dysfunction
ASA VI	A declared brain-dead patient whose organs are being removed for donor purposes	

The addition of "E: denotes Emergency surgery: (An emergency is defined as existing when delay in treatment of the patient would lead to a significant increase in the threat to life or body part)

APPENDIX B

Little and Falace. Dental Management of the Medically Compromised Patient. 9th edition, 2018, Chapter 3.

Blood Pressure Guideline Recommendations			
Blood Pressure	**Dental Treatment Recommendation**	**Risk Assessment**	**Follow-up Recommendation**
< 160/100	Any Required	None needed	If BP ≥ 120/80 but ≤ 140/90 encourage patient to see physician. Document this in the patient's record. (EHR/axiUm). If BP > 140/90 (Stage 2 HTN), encourage patient to see physician within 1 month, and document this in the patient's record (EHR/axiUm).
≥ 160/100 but < 180/110	Risk Assessment and Intraoperative BP Monitoring Required	<u>Anticipated Treatments:</u> Procedures not requiring local anesthesia are permitted. Procedures requiring local anesthesia can be performed but **only** with the approval of the covering faculty, considering the type and amount of local anesthesia and vasoconstrictor, recommendations from the medical consult, the time it will take to complete the appointment and	Consult with or Refer Patient to Physician promptly. Document in patient's record (EHR/axiUm). Completed and returned Consult Form in the patient's record (EHR/axiUm)

		the invasiveness of the procedure. <u>Please see Little and Falace's Dental Management of the Medically Compromised Patient, Chapter 3, for guidance and risk determination in the dental management of patients with Hypertension</u>	
≥ 180/110	Defer **All** Dental Treatment	None Needed: Treatment Deferred	Refer Patient to Physician Immediately. Document in patient's record (EHR/axiUm). Completed and returned Consult Form in the patient's record (EHR/axiUm)

School of Dental Medicine
UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

HYPERTENSION CONSULT FORM

Our patient (Name:_____ DOB:_____) presented with three sequential blood pressure (BP) readings of ≥ 160/100 today. Today's date: _____

Time			
Blood Pressure			

To receive routine care at the School of Dental Medicine we require the blood pressure (BP) to be below 160/100, unless in your professional opinion, you think a higher limit is acceptable for this patient.

Please evaluate your patient and determine if they need medical management of hypertension or adjustment of current, hypertensive medications.

Please complete the appropriate options below.

_____ Patient is acceptable for routine treatment (fillings, dental extractions, cleaning using local anesthetic) with blood pressure of 160/100 to 180/110.

_____ No routine treatment (fillings, dental extractions, cleaning using local anesthetic) until the blood pressure is under 160/100.

_____ Other recommendations:_____
_____

_____

Signature of Physician or designee:_____

Note: We do **not** provide routine treatment with blood pressure at or over 180/110

Thank you for your help.

Attending Dentist Signature:_____

Title: Treatment of the Pregnant Patient
Source: Department of Applied Dentistry
Effective Date: January 1, 2008

PURPOSE:

To establish guidelines for treatment of pregnant patients

GENERAL POLICY:

Female patients of child bearing age who are pregnant or who may be pregnant may have treatment at the UCSDM. The dental care provider should consult with the patient's physician (primary health care provider) prior to providing dental care to the patient. Pregnant patients without a primary health care provider should seek care prior to receiving dental care. Referrals to the OB-GYN clinics at University Hospital may be arranged.

High risk pregnancy patients shall not be treated in the undergraduate clinic, and should be referred to the General Practice Residency for treatment. High risk pregnancy is defined as a pregnancy in which the mother is compromised by a systemic disease (i.e., diabetes mellitus, drug or alcohol addiction, hypertension, bleeding disorders, cardiovascular disease, lung disease, cancer, etc.) or the patient has a history of miscarriage, preterm (premature) labor, or spontaneous abortion. In general, treatment should be directed towards preventive care and the control of active disease to prevent the transmission of caries-causing bacteria to the infant after birth.

IMPLEMENTATION:

Patient Admission

1. Pregnant patients can be accepted for comprehensive care.
2. High risk pregnant patients should be referred to the General Practice Residency for treatment.

Treatment Planning

1. The UCDSDM protocol for health data collection will be used to evaluate the patient's health status. Prior to prescribing medications, female patients of child bearing age should be questioned regarding the possibility of being pregnant, and post-partum patients should be questioned regarding breast-feeding.
2. Medical consults should be obtained prior to treatment. Telephone consultation should be obtained if written consultation is not feasible. Telephone consults must be documented in the treatment notes in the patient's axiUm record, and should be followed up with a written consult which will be scanned into the Attachments section of the electronic health record.

3. Patients without a primary health care provider (physician, nurse practitioner, nurse-midwife)

should be referred to the University Hospital OB-GYN clinics and urged to seek a primary health care provider. A copy of the written referral will be scanned into the Attachments section of the electronic health record.

4. Emergency or urgent care procedures can be entered into axiUm directly as planned procedures. For non-urgent care, the axiUm treatment planning module will be used, treatment being phased and sequenced with regard to timing suitable for the pregnant patient.

Informed Consent

The concept of informed consent is rooted in medical ethics and has been codified as legal principle. The dental patient must be provided with full information concerning risks, benefits and alternative procedures available to respond to her oral health condition. Specific consent should be obtained for any invasive/surgical procedures in compliance with the prevailing standard of care. No additional or special informed consent is necessary because of pregnancy.

Radiation Hygiene

Radiographic imaging of oral tissues is not contraindicated in pregnancy and should be utilized as required to complete a full examination, diagnosis and treatment plan.

1. Use of ionizing radiation should be restricted to the minimal number of exposures needed to diagnose and treat the patient.

2. Radiation safety procedures outlined in the UCSDM Clinical Policy Section 2.3 should be followed if radiographs are to be taken.

Treatment Guideline
1. Goal

The goal of treatment of the pregnant patient is to institute preventive measures and to control active disease, in consultation with the patient's physician to insure the safety of the mother and child. Dental treatment for a pregnant woman who has oral pain, an emergency oral condition or infection should not be delayed as the consequences of not treating an active infection during pregnancy outweigh the possible risks presented.

2. Treatment considerations

Higher anxiety levels associated with pregnancy may intensify the stress of a dental appointment. Dental care during pregnancy should accommodate these changes with short appointments, judicious use of drugs and radiographs, and avoidance of flat supine positioning.
   a. Maintain optimal oral hygiene, including prophylaxis, throughout pregnancy.
   b. Avoid the use of unsafe medications* during pregnancy and in the post-partum breast-feeding patient.
   c. Refer high risk pregnancy patients to the General Practice Residency Clinic for triage.
   d. Provide health education to the pregnant patient regarding oral hygiene, tobacco cessation, discontinuing alcohol, and nutrition.

3. <u>Drugs of choice</u>

Ideally, no medication should be administered during pregnancy, especially during the first trimester. However, drugs listed below may be given (with considerations as noted) if needed, unless otherwise contraindicated by the patients' medical history or by the patient's physician. A medical consultation is necessary prior to prescribing any medication to a pregnant or potentially pregnant patient.

   a. <u>Analgesics:</u> Acetaminophen and codeine (avoid in first trimester) are the drugs of choice.
   b. <u>Antibiotics:</u> Penicillin and non-estolate erythromycin are the drugs of choice for oral infections.
   c. <u>Anesthetic:</u> Local anesthetics such as lidocaine and mepivacaine with vasoconstrictor are acceptable.
   d. <u>Nitrous oxide</u> analgesia is generally <u>not</u> acceptable during pregnancy in the dental school setting. However, nitrous oxide may be used in rare instances when topical or local anesthetics are inadequate and in consultation with the prenatal care provider.
   e. <u>Sedative agents</u> and medications utilized in conscious sedation are <u>not</u> acceptable during pregnancy in the dental school setting.

Pharmacological Considerations for Pregnant Women
(From: Oral Health During Pregnancy: A National Consensus Statement, 2012. Washington, DC: National Maternal and Child Oral Health Resource Center.

Pharmacological Considerations for Pregnant Women

The pharmacological agents listed below are to be used only for indicated medical conditions and with appropriate supervision.

Pharmaceutical Agent	Indications, Contraindications, and Special Considerations
Analgesics	
Acetaminophen	May be used during pregnancy.
Acetaminophen with Codeine, Hydrocodone, or Oxycodone	
Codeine	
Meperidine	
Morphine	
Aspirin	May be used in short duration during pregnancy; 48 to 72 hours. Avoid in 1st and 3rd trimesters.
Ibuprofen	
Naproxen	
Antibiotics	
Amoxicillin	May be used during pregnancy.
Cephalosporins	
Clindamycin	
Metronidazole	
Penicillin	
Ciprofloxacin	Avoid during pregnancy.
Clarithromycin	
Levofloxacin	
Moxifloxacin	
Tetracycline	Never use during pregnancy.
Anesthetics	Consult with a prenatal care health professional prior to using intravenous sedation or general anesthesia.
Local anesthetics with epinephrine (e.g., Bupivacaine, Lidocaine, Mepivacaine)	May be used during pregnancy.
Nitrous oxide (30%)	May be used during pregnancy when topical or local anesthetics are inadequate. Pregnant women require lower levels of nitrous oxide to achieve sedation; consult with prenatal care health professional.
Over-the-Counter Antimicrobials	Use alcohol-free products during pregnancy.
Cetylpyridinium chloride mouth rinse	May be used during pregnancy.
Chlorhexidine mouth rinse	
Xylitol	

3.8   Faculty Supervision Policy

Title: Faculty Supervision Policy
Source: Dean' Office
Effective Date: January 1, 2008

PURPOSE

To control treatment of UCSDM patients in an effort to prevent unauthorized care being rendered without proper supervision.

GENERAL POLICY:

Students are not permitted to administer any drugs or to proceed with any stage of patient care without the direct supervision of appropriate faculty. Failure to comply with this policy may result in disciplinary action by the Student Performance Committee and/or the Office for Clinical Operations.

IMPLEMENTATION:

F. WHEN FACULTY SUPERVISION IS REQUIRED

   Faculty supervision is required for all clinical procedures at the School of Dental Medicine.

G. INITIATION TREATMENT/PERMISSION TO PROCEED

1. Students are required to receive permission to proceed with a treatment service from the assigned supervising faculty member prior to initiating any stage of treatment. Students may seat their patient 5 minutes prior to the formal start of the clinic session, and may proceed with verbal interactions with the patient including medical history review, informed consent and patient education.

2. The faculty grants formal permission by giving a start check in axiUm. (Faculty may give verbal permission to start and follow-up with a start check in axiUm.)

3. Students are not authorized to proceed and faculty members are <u>not</u> authorized to grant permission to proceed if any of the following are present.
   - An unsigned and/or undated health questionnaire (updated within the last year);
   - An absence of an approved treatment plan for treatment (exceptions for diagnosis, urgent care);
   - An absence of documented informed consent (signed and dated by patient);
   - A locked dental record (exceptions may be approved in writing in the treatment progress notes by the faculty of the Office of Clinical Operations)
   - Failure to follow UCSDM infection control procedures.

4. Limited Treatment Plans - In the event that it becomes advisable to proceed with treatment before a comprehensive complete treatment plan can be approved, supervising faculty may approve limited treatment. Limited care treatment plans should be documented in the axiUm patient information system and signed by the patient.

H. FACULTY AVAILABILITY

Supervising faculty are required to be available for students during the entire clinic session. It is the responsibility of the supervising faculty to provide alternative supervision if he or she will be temporarily unavailable.

I. COMPLETION OF TREATMENT/PATIENT DISMISSAL

Students are required to receive permission from supervising faculty prior to the final dismissal of the patient from the clinic. Supervising faculty have the discretion to determine whether a final faculty clinical evaluation is necessary prior to the patient's dismissal.

J. FACULTY AXIUM SWIPE CARDS (University Badges)

At no time should a faculty member handover his/her University badge, which act as axiUm swipe card, to students or residents.

K. TREATMENT DOCUMENTATION

Students are responsible for timely documentation of all treatment they have provided to the patient. Progress notes should be written during the same session that treatment is provided, or as soon thereafter as possible. Supervising faculty are responsible to be available to review and approve completed progress notes during each session.

3.9   Student/Resident Responsibilities for Assigned Patients

OVERVIEW

Students and residents at UCSDM develop a pool of patients who will allow a varied and rich experience in providing dental treatment. Adhering to the concept of patient-centered comprehensive care, students and residents have responsibilities as clinicians in the management and appropriate treatment of the patients assigned to them, as well as specialty residents who have been co-assigned through the internal referral process as a dental care provider (i.e. Graduate Periodontics Residents). In such instances, the resident and student must remain in constant contact regarding the progression of treatment in the specialty area, as the student remains the primary dental care provider for the patient.

GPR RESIDENTS

General Practice Resident patient pools are assigned through transfers from the previous GPR class, new patients, and referrals from the School of Dental Medicine's Screening Clinic. It is the responsibility of each resident to ensure that his/her patients are treated in a timely manner and in accordance with the standards of care outlined in section 3.1 of this manual and with the patient-center comprehensive care model. Through external referrals, residents may also provide limited treatment to appropriate patients.

ORTHODONTIC RESIDENTS

Orthodontic resident patient pools are assigned through transfers from the previous graduating class, new patient screening, and referrals from the School of Dental Medicine's various clinics (ADC, Heroes, Healthy Smiles). It is the responsibility of each resident to ensure that his/her patients are treated in a timely manner and in accordance with the standards of care outlined in section 3.1 of this manual.

GRADUATE PERIODONTICS RESIDENTS

Graduate Periodontics resident patient pools are assigned through transfers from the previous graduating class, and referrals from the School of Dental Medicine's CUDT clinic or external referrals. It is the responsibility of each resident to ensure that his/her patients are treated in a timely manner and in accordance with the standards of care outlined in section 3.1 of this manual. Graduate Periodontics residents are also responsible for ensure continuous communication with students when patients are assigned to them from the CUDT clinic.

CUDT STUDENTS

Each student is assigned to a group which is comprised of ten students in the same class. A Comprehensive Care faculty member is designated as the Practice Leader, and one of the Clinic Care Coordinators is also assigned to the group. The Practice Leader also serves as the student's advocate. In Team and Practice meetings as well as in individual advocate meetings, the students, faculty member and coordinator work together to ensure that appropriate and timely care is provided to each patient and that each student obtains a sufficient variety of experiences to become a competent beginning General Dentist..

New Patients - "New Patients" are those patients who have not been previously assigned to a dental student for Comprehensive (or Limited) care.

Student Responsibility:
1. Review patient's Electronic Health Record (EHR) prior to scheduling.
2. Schedule patient for Comprehensive Oral Examination within 2 weeks of assignment.
3. Complete Oral Diagnosis and Treatment Plan within 4 weeks of assignment.
4. Contact Practice Leader or coordinator within one week if unable to comply with OD obligations in a timely manner, or if case is inappropriate for the student's clinical educational experience.
5. Document management or scheduling problems using the Contact Notes in axiUm.

Transfer Patients - "Transfer Patients" have been previously assigned and treated by another UCSDM student.

Student Responsibility:
1. Review patient records and planned treatment/sequencing in axiUm prior to scheduling.
2. Schedule patient as appropriate, consistent with treatment plan, or within 2 weeks.
3. Contact Practice Leader or coordinator within one week if unable to comply with scheduling obligations in a timely manner, or if case is inappropriate for clinical educational experience.
4. Document management or scheduling problems using the Contact Notes in axiUm.

Shared Patients - "Shared Patients," also referred to as "co-assigned patients," are those new or transferred patients who are permanently assigned to more than one student provider. The secondary student(s) providing treatment are termed "secondary provider(s)." **See below for co-assignment responsibilities**.

Guidelines for Shared Patient Assignments/Co-Assignments:
1. A student may schedule an assigned patient with another student, but must have the approval of his/her Team or Practice Leader.
2. Team and/or Practice Leaders will approve the co-assignment with the consent of the patient and based on the best interests of the patient (e.g., timing of treatment, skill level of student provider, etc.).
3. The assigned student remains responsible for the overall management of his/her patient's timing of treatment and quality of care.

Primary Student Responsibilities for Assigned Patients
The following are responsibilities of the primary assigned student:

1. Appropriately Sequenced and Timely Treatment - Appropriate appointment intervals may vary and depend on several factors, most significantly the quantity and quality of each patient's treatment needs, and the patient's availability relative to the student's clinic schedule. In general, all active patients should be seen for one appointment every two weeks. In the early part of the student's

clinical education this treatment interval is extended. Students should document in the patient treatment notes and in the Contact Notes any reasons for delays in appointing active patients for more than three weeks, and review with Group Leader, and if necessary, send appropriate letters.

2. Standard of Care - Students are responsible to provide care consistent with the School's Standard of Care document (see section 3.1 and the Dental Clinical Education Manual).

3. Emergency Care - Students must be available for each assigned patient's emergency care. During regular school hours, emergency care may be provided by another student in the same Group if the primary student is unavailable. After hours, the School makes available 24-hour emergency care for all patients of record (see Emergency Dental Care Policy and Procedures, Section 3.13).

4. Periodontal Maintenance and Periodic Examination - Students are responsible to provide timely periodontal maintenance therapy and periodic examinations to all assigned patients, according to appropriate recall intervals. This includes those patients who are still in active treatment under an incomplete treatment plan.

5. Transfer and Case Disposition - All active patients must be transferred appropriately, with all data in axiUm up-to-date and signed. The Group Leader for the transferring student must review each patient's records regarding work completed at UCSDM by student, periodic examination and periodontal maintenance, and sign off on the transfer, before the patient can be transferred.

Secondary Provider Responsibilities for Assigned Patients

Patients, who are assigned to a program (e.g., comprehensive care group, pediatrics, special care clinic, etc.) or to a student, may be co-assigned to be appointed by another student, termed a "student associate." It is anticipated that these appointed patients will provide approximately 25% of the students' clinical experience.

Students share in the responsibility of treating the assigned patients, and are expected to manage their co-assigned patients consistent with the patient's classifications. The following are responsibilities of the secondary provider:
1. Review patient EHR and treatment plan with primary assigned student and/or program faculty prior to seeing patient to confirm timing and sequencing of care.
2. With patient and covering faculty present, confirm timing, sequencing and appropriateness of scheduled treatment.
3. Provide treatment as appropriate.
4. Provide follow-up care as needed, related to the treatment provided.
5. Coordinate rescheduling of patient with appropriate primary student provider or program faculty/staff.
6. Document management or scheduling problems using the Contact Notes in axiUm.

Special Assignment/Block Rotation Patients

1. Students are required to attend all block rotation assignments and be prepared to treat all appointed patients.
2. Program staff members are responsible for scheduling and appointing patients based on the program block schedule.

Student Appointment Requests for Patients

1. Students request appointments for their own assigned patients through axiUm.
2. Student responsibility:
   If a student is scheduled to be in clinic or on rotation (OS, Emergency, Pedo, etc., in the clinic rotation block schedule), but has no patient available, or if a patient fails to appear for a scheduled appointment, the student must check in with his/her Patient Care Coordinator. The Coordinator an emergency patient whose primary student is unavailable. If no patient needs to be seen, the student may do other things, but is still expected to be available in the building if needed.

3.10   Informed Consent

OVERVIEW

It is the policy of University of Colorado School of Dental Medicine to provide dental care that preserves the autonomy and dignity of all patients. This requires that the faculty, residents, students and staff recognize that health care is provided on the request of and for the benefit of the patient. Therefore, patients have the right to be informed about the material aspects of their care and treatment prior to their consenting to undergo treatment.

Consent affirms that the patient has the sole authority to determine what specific medical or dental treatment, if any, they will allow to be performed upon their body.

NO PROCEDURE MAY BE PERFORMED, EVEN IN AN EMERGENCY, IF THE PATIENT OR THEIR REPRESENTATIVE OBJECTS TO IT.

A dental procedure performed without the patient's consent is considered by law to be a battery, which may subject the dentist and/or the School to legal liability. This is applicable either when the dentist treats the patient without obtaining consent or when the dentist properly obtains consent for one procedure and performs a substantially different one.

In addition, even though consent may be obtained, the consent process may be so deficient that it would be considered negligence. Under this theory, the dentist has an affirmative duty to the patient, based on the dentist-patient relationship, to disclose relevant material facts and risks of treatment, and thereafter to obtain the patient's voluntary, competent and knowledgeable consent.

DEFINITION:

Informed consent is the active documented, shared decision-making process between the dentist, or dental hygienist, and the patient. Although dental auxiliaries and other staff may assist, it is the dental or dental hygiene faculty, residents and students who must obtain the informed consent. There are four basic elements, which much satisfied: (1) The patient must be an adult patient (or emancipated minor patient) or parent or legal guardian of the patient, (2) The patient or surrogate must be competent ("sound mind"), (3) The decision must be an informed decision and (4) The decision must be made voluntarily by the patient or surrogate.

Satisfying the Elements of Consent

1. Adult Patient, Emancipated minor or guardian
    a. Adult: A person 18 years of age or older.
    b. Emancipated minor: A minor fifteen years of age or older who is living separate and apart from his or her parent(s) or guardian(s) and is managing his or her own financial affairs, regardless of the source of income.
    c. Any person who has contracted a lawful marriage.
    d. Parents or legal guardian for minor. If parents are divorced, the parent with legal custody must give consent. If the parents have joint custody, then either parent may sign. Foster or stepparents may not consent without documented authorization.

e. Substitute decision-maker for incompetent adult, in order of priority:
    i. An agent appointed in a medical durable power of attorney.
    ii. A court-appointed guardian.
    iii. A proxy decision-maker under Colorado Law.
    iv. Consult with Office of Clinic Operations Faculty to clarify status of any substitute decision-makers prior to treatment

2. Competent
   Generally, any decisions related to the patient's capacity to consent to treatment should be made by the patient's physician. A patient is competent to consent to treatment, or refuse treatment, if they have the mental capacity to make an informed decision about the proposed treatment. This capacity consists of:
   a. The ability to comprehend information relevant to the treatment decision which is being made,
   b. The ability to deliberate in accordance with the patient's own values and goals, and
   c. The ability to communicate with caregivers.

3. Informed Decision
   The patient must be able to make a knowledgeable decision, based on the information presented in terms a lay person can understand, including:
   a. The nature of the treatment provided;
   b. The purpose of the treatment;
   c. The benefits to be reasonably expected;
   d. The risks involved as well as their probability of occurrence;
   e. Expected treatment outcomes;
   f. Treatment alternatives, including no treatment, and their benefits and risks.
   g. If the patient does not speak English, no treatment should be rendered without first obtaining an interpreter for the consent process.

4. Voluntary Decision
   The consent must include an offer to answer any questions and an instruction that the patient is free to accept or reject the procedure.

Methods of Obtaining Consent

Written Consent – Written on the appropriate form should be obtained whenever possible.
   • General Consent – General consent for treatment is gained for patients (1) in the application and screening process, and (2) in oral diagnosis and treatment planning process and/or (3) in the emergency clinic.
     a. General consent is documented by patient electronic signatures in axiUm for the General Consent Form, Interim Treatment Plans and Treatment Plans.
     b. Specific Consent – Specific Consent is obtained for certain procedures and is documented on specified forms or by a signature in axiUm for:
        • Endodontic Treatment
        • General Consent for Treatment

- Graduate Periodontal Surgery
- HIPAA/Privacy Notice
- Immediate Denture Acknowledgement
- IV Bisphosphonate
- Oral Bisphosphonate
- Pre-doc Periodontal Surgery
- Restraint
- Sedation
- Surgery
- Research (form as approved by the Colorado Multiple Institutional Review Board (303) 724-1055)

Telephone Consent - If it is not possible to obtain written consent, telephone consent may be used with approval from Office of Clinic Operations faculty or covering faculty. Consent by telephone must be witnessed and documented in the treatment notes in axiUm, indicating the exact time and nature of the consent given. Telephone consents must be witnessed by two individuals, including at least one supervising faculty member. Immediate steps should be taken to procure confirmation in writing as soon as possible, and which, once received, will be scanned into the Attachments section of the patient's EHR in axiUm.

3.11 Oral Diagnosis and Treatment Planning Process (CUDT Clinics)

Screening Appointment

- Medical history review and screening clinical examination during screening session (dental and medical history form and axiUm screening form are completed and entered in axiUm [see Section 2.5, Appendix C Screening Scale])
- Treatment needs categorized into axiUm sortable format
- Acceptance per stated criteria
- Coordinators to make appropriate assignment to next available student (with regard to patient treatment needs and student experience needs)

↓

First Oral Diagnosis (OD) Appointment/Head & Neck Exam

(2.5 - 3 Hrs.) *Radiology/OD and/or Diagnostic Faculty*

- Begin OD (Health History interview with patient, reviewed and signed in axiUm with covering Faculty)
- Radiographs (taken in Radiology clinic)
- Gather other diagnostic data and record in axiUm
- Review head and neck radiograph findings and other data with covering faculty, obtain electronic signature from covering faculty
- Determine need for specialty consults
- Impressions and facebow/bite registration for mounted study models

↓

Second Oral Diagnosis Appointment (if needed)

(2.5 - 3 Hrs) *Restorative Department Faculty*

- Complete remaining data entry, review and obtain electronic signatures from covering faculty
- Specialty consults determined and/or completed
- Begin to identify problems for Treatment Plan module in axiUm

↓

If necessary: Specialty Consults/Initial Treatment
(1-3 Hrs) Group/Spec Faculty

- Specialty Consult
- Initial Treatment with Specialty, if appropriate

↓

Treatment Plan Presentation
(10-30 minutes) Restorative Department Faculty

- Faculty, student and patient
- Treatment plan options presented
- Faculty and patient: selection and approval (electronic signatures) of treatment options in axiUm
- Patient given copy of phased/sequenced treatment plan with fees
- This approval process provides informed consent for treatment

---

Outside Clinic *Radiology and/or Restorative Department Faculty* Consult

- Complete, review and obtain electronic signature for Radiographic Interpretation (axiUm)
- Use films and models to begin charting findings in axiUm
- Review medical findings and medications

Outside Clinic *Restorative Department Faculty* Consult

- Review and approve problems and diagnoses, and prepare detailed phased/sequenced treatment plan in axiUm Treatment Planning module
- Develop optional treatment plans, phased and sequenced
- Obtain faculty approval for one version for presentation

3.12   Case Presentation

Patient Management: Nine Steps of Case Presentation
1. **Diagnosis:** Use educational aids whenever possible. 　"These radiographs show…"
2. **Treatment Alternatives:** Present "no treatment" as the first alternative – 　"If we don't treat at this time…" 　If there is a clear choice that you would feel is the best treatment, present this alternative next – 　"The best approach is…" 　Present the remaining alternatives, starting with what you feel are in the patient's best interest – 　"But, there are other alternatives…" 　Review the versions of treatment developed in axiUm by student and faculty member.
3. **Benefits, Risks, Prognosis and <u>Patient Responsibilities</u>:** Don't minimize the patient's responsibilities, including home care, future treatment potential and finances. 　"Let me explain what is involved in each of these choices…"
4. **Verify Patient Understanding:** Ask the patient to repeat back the alternatives, risks, responsibilities, etc. 　"Can you tell me in your own words what I have just described to you…"
5. **Clarify Patient Emotions:** As you note verbal and non-verbal cues from the patient, ask them how they feel about their choices. Resist the temptation to change the patient's values at this time. 　"How do you feel about these alternatives…you seem concerned about…"
6. **Discussion:** Give the patient every opportunity to get any more information from yourself or the faculty. 　"Is there anything else you need to know to make a decision…"
7. **Treatment Decision:** Ask the patient to decide on a treatment alternative.   Do not challenge his/her choices at this time. At best you will "sell" him/her on treatment he/she is not yet ready for, and it will many times result in "buyer's remorse" that will be demonstrated through missed appointments, failure to pay and/or general dissatisfaction in treatment. 　"Based on everything we have talked about, what do you believe would be the best treatment for yourself…" 　At this time, the axiUm versions can be modified and consolidated to reflect the patient's choice of treatment. Faculty approval can be obtained at this time.
8. **Post-Decision Encouragement:** Regardless of the choice of the patient at this time, give him/her positive encouragement. 　"Good, I think that's a sound choice" or "That's a good first step…" or even "I'm sorry you are unable to start treatment at this time, but at least you are aware of what your dental needs are…"
9. **Document:** Obtain the patient's electronic signature in axiUm. Provide a printout of the sequenced treatment plan, including the patient signature, to the patient. If the patient elects not to start treatment, make sure to document this, and the reasons for refusal, in the treatment notes.
<u>**Note:**</u> The right of the patient to decide on his/her course of treatment is his/her non-transferable legal right. Do not allow the patient to put the responsibility of the decision in your hands ("whatever you think, you're the dentist…"). If you allow the patient to shift the decision to the dentist, the patient no longer is assuming the risks of treatment and may not be truly committed to the treatment. 　"I know it's a difficult decision. Is there any other information I can give you so that you can decide?"

3.13   Documentation of Treatment Policy

Title: Documentation of Treatment
Source   Dean's Office
Effective Date: January 1, 2008

PURPOSE:

To create and maintain a legal record of all diagnostic and treatment services rendered by the UCSDM and to comply with the confidentiality law of the State of Colorado.

GENERAL POLICY:

All dental records, including any part thereof, are the property of the UCSDM; however, patients retain the right to all information contained therein. Records are to be stored as follows: Paper charts are stored in the archives of the UCSDM in a manner which fulfills both the requirements of the statute of limitations and confidentiality laws of the State of Colorado. Responsibility for compliance with this provision rests with the Senior Associate Dean for Clinics and Professional Practice or his/her designee.

Active patient records exist in the axiUm electronic data base and are stored on the dedicated servers. Access to records is restricted by provider status, passwords, and electronic security systems.

IMPLEMENTATION:

1. Access to patient records in axiUm requires a sign-in procedure and a password. Level of access differs depending on the user status: staff, faculty, student, financial personnel. (See 5b below)

2. Health Questionnaires: Health questionnaires must be completed in axiUm and approved by electronic capture of the patient's signature. Updates of the health history must be done at reasonable intervals and signed by both the patient and supervising faculty, electronically as above. Patients with a more complex and dynamic health status should have the health history updated accordingly. Students should seek the counsel of supervising faculty to determine appropriate update intervals. **Medical Alerts** appear on the screen for the active dental record.

3. Treatment Progress Notes: Treatment progress notes should be completed at the conclusion of each appointment as follows:

    a. Entries will be made in a note, either a "general", "SOAP" or "Template note" format, electronically attached to the procedure(s) completed on that day.
    b. All entries by the student are date- and time-stamped by the axiUm system, and approved by supervising faculty. The supervising faculty member is responsible to sign each progress note electronically after reviewing the complete progress note.
    c. Corrections to entries must be done through the axiUm system administrator, or the Group Leader, depending on the access level required.
    d. All notes must be entered into axiUm no later than 24 hours following the conclusion of the appointment.

4. Forms: Data collection and treatment notes, attachments and forms are to be completed in axiUm in a timely manner.

5. Confidentiality:

   a. Students, faculty and staff must respect the confidentiality of patient records at all times as appropriate per HIPAA compliance.
   b. Access to the dental records should only be granted to those students, faculty and staff who are involved in the treatment of the patient, who are involved in the administration of the patient's care (data processing, billing, etc.), who are involved in quality management, or for educational reasons as directed by faculty and shall be limited to those activities.
   c. Displayed records in the clinic and semi-public places should be shielded or minimized from view as much as practical in consideration of the clinician's need to see the record during patient care.

6. Forgeries of faculty signatures, including inappropriate use of a faculty members' signature card, are both illegal and a violation of the Code of Conduct of the UCSDM. Such behavior will result in criminal and/or disciplinary action by the UCSDM.

7. Requests for Duplicate Records: All dental records, including any part thereof, are the property of the UCSDM; however, patients retain the right to all information contained therein. Pursuant to C.R.S. 24-1-801 et seq., all requests for release of records must be received in writing, signed and dated by the patient or their legal guardian. No part of a patient's dental record may be released to either the patient or his/her representative unless the written release is conveyed to the UCSDM using the UCSDM records release form or in a letter signed by the patient or the legal guardian of a minor child. All records releases are managed by the Patients Advocate and the Senior Associate Dean for Clinics and Professional Practice or his/her designee. An accompanying entry in the treatment notes indicating that copies of the record have been released must be made. Original records are retained within the axiUm data base.

8. All inquiries regarding patient records should be directed to the Senior Associate Dean for Clinics and Professional Practice for appropriate disposition. The contents of a patient's record are not to be discussed over the telephone, email or fax with the exceptions to include but are not limited to consultation with other health care professionals and necessary administration or appropriate recipient(s) with the patient's written consent.

3.14   Emergency Dental Care Policy

Title: Emergency Dental Care Policy
Source: Department of Surgical Dentistry
Effective Date: January 1, 2008; revised March 1, 2015

OVERVIEW:

As a resource for the community to access emergency/urgent dental care, the UCSDM not only provides emergency care to patients of record through their respective dental home within the School, but also makes available emergency/urgent care for those individuals who would otherwise not have access to dental care.

GENERAL POLICY:

The primary responsibility for emergency care and follow-up care of UCSDM patients rests with the assigned student provider or dental resident, working with covering faculty. In the event that a student provider is unavailable to provide care, patients of record may be seen in their UCSDM Comprehensive Care Groups (on call chairs), Pre-doctoral Program Emergency Clinic, or the GPR Clinic. These clinics will also provide care to patients who are not patients of record on a space available, fee for service basis. **Abusive and uncooperative patients will not be treated, consistent with UCSDM policies.**

Student/Resident Responsibility

Student Availability:
- Students/residents must provide their patients with after-hours number to contact in case of emergency, as well as the UCSDM dental emergency number, (303) 848-0000.
- **Students/residents should not provide their own home numbers, but are required to have a means of patient contact (pager, cell phone, email).**
- Students must provide after-hours contact numbers to their Patient Care Coordinators.
- Students/residents should remind their patients **NOT** to contact the UCH Emergency Room for dental emergencies unless they are life threatening..

During Scheduled Clinic Hours: Students/residents should be prepared to accommodate their patients' dental emergencies within their regular clinic schedule. Program Directors, Clinic Managers, Group/clinic faculty and CU Dental Teams Clinic Care Coordinators, depending on the clinic the patient is being seen, should be consulted to assist in prioritizing these patients and to make decisions regarding needed care for the regularly scheduled patients. If the assigned student is unavailable the patient will be seen in one of the on-call clinic chairs that are available on a daily basis to manage assigned patient urgencies and emergencies.

During Scheduled Classes: Students/residents who are attending scheduled classes/lectures will not routinely be expected to provide care, and patients may be directed to contact the group coordinator/clinic manager to schedule emergency care with another student/resident in the group/program (on-call clinic chair) or Emergency Clinic.

After Hours: Students/residents should triage their patients initially by phone, and must contact the GPR resident on-call (720-848-9111) if there is potential need to see a patient after hours. If it is determined that the patient must be seen, the student should arrange to meet with the resident to provide care in the General Practice Residency Clinic.

Pre-doctoral Program Emergency Clinic Operation:
Hours: 9:00 AM – 12:00 PM; 2:00 PM – 5:00 PM; depending on availability, the first 6-8 patients are seen in each session, Monday through Friday.

Scope of Care: The Emergency Clinic is limited to evaluations and palliative treatment for patients who are in pain and/or who have swelling or trauma. The clinic is not to be used by students for comprehensive dental care. All patients of record may be seen for emergency evaluation and palliative care in an on-call chair in the comprehensive care clinic. Walk-in patients are seen on a space available basis or no more than 8 patients per session. Patients may have minor restorative treatment if time permits, or if an additional student is available in the pre-doctoral clinics. Patients may be re-appointed and/or referred for treatment in the Emergency, Oral Surgery, Screening, or General Practice Residency.

- Oral Surgery: Patients should be routinely referred to the Oral Surgery Clinic for extractions during the session. In the event that the patient cannot be seen within a reasonable time, emergency faculty may choose to provide the treatment in the emergency clinic depending on availability of students and/or treatment space.
- Endodontics: Patients may be accepted through the Emergency Clinic for treatment limited to endodontics and/or build-up of a tooth. One-half down payment must be received prior to opening the tooth, with the balance due upon completion. Assigned patients will be referred to their dental student provider or resident for endodontic treatment under endodontic supervision. In the event that UCSDM is unable to assign the patient to a student provider or resident in a reasonable period of time, the patient may be referred outside UCSDM for further dental care. All endodontic patients must provide an electronic signature in axiUm after reviewing the Consent for Endodontic Treatment with a UCSDM representative.

Emergency Clinic Phone: (303) 724-6900 option 1

Patient Education: UCSDM staff should explain scope of services and financial policies with patients prior to scheduling appointments. Upon arrival, patients are given a copy of "Patient Rights and Responsibilities" and are required to prepay for this appointment, which includes a limited oral evaluation and a periapical X-ray.

Patient Registration: All patients must be registered in axiUm, and have read and signed (electronically) the General Consent and HIPAA forms.

Fees: All fees must be paid at the time of service and are applied regardless of the location of treatment. Fees do not include prescriptions, medications and/or follow-up care.

Walk-in Patients: Patients must pay the emergency examination and anticipated radiographic fees prior to seating. All treatment provided is fee for service and should be handled under regular UCSDM financial policies (payment is due on the day of the appointment, 1/2 down is expected for endodontic treatment, etc.).

Patients of Record (including screened and unassigned patients): Emergency evaluation fees may not apply if the emergency is related to care rendered in UCSDM Clinics (e.g., lost temporary, post-operative complication, etc.). All other treatment is provided on a fee for service basis as described above for the walk-in patient.

Previously Discontinued or Delayed Patients
Patients who are discontinued should be treated in the clinic for 30 days following discontinuance from the program if the emergency is a result of treatment rendered at UCSDM.

Financial Discontinuance -These patients are expected to pay any anticipated fees prior to being seated in the clinic. Emergency care should be limited to short-term, acute care. After 30 days, patients who are discontinued from the program for outstanding accounts (e.g., "locked charts") may be seen in the Emergency Clinic for treatment at the discretion of the covering faculty or the Office of Clinic Operations.

Discontinued for Other Reasons (e.g., missed appointments, etc.) – After 30 days, discontinued patients may be treated in the Emergency Clinic for treatment at the discretion of the covering faculty or the Office of Clinic Operations. Regular financial policies apply for these patients, on a fee for service basis. Patients discontinued because of disruptive or abusive behavior should not be treated.

Exceptions to Immediate Payment of the Emergency Fee
Emergency and Office of Clinic Operations faculty have the discretion to treat patients without immediate payment from time to time, most often when there are extenuating circumstances including treatment of a minor, when the patient is visibly swollen, or when failure to provide treatment would constitute a danger to the overall health of the patient.

Protocol for scheduling "On-Call" patient visits during student breaks:

During student breaks, patients will continue to have urgent and emergent needs that must be addressed. The following is the protocol for the student's role in identifying and addressing a patient's urgent/emergent need and the staff's role in scheduling the patient in the appropriate SDM clinic:

> **Student:**
>
> If the student is in town, we expect the student to meet his/her patient at the School after contacting one of the clinic coordinators or front desk staff who will set up an appointment with the on-call faculty member on the 2nd floor.
>
> If the student is not in town, the student should contact one of the clinic coordinators or front desk staff to schedule an appointment with another student and the on-call faculty member on the 2nd floor.

If the patient is in pain and/or has swelling, the on-call faculty member on the 2nd floor will determine if your patient needs to be seen in the Emergency Clinic.

The students should not tell their patient to walk-in without an appointment.

Students are not allowed to bring their own patients in for non-urgent care during the breaks (certain exceptions exist but must be approved and covered by faculty).

SDM Staff:

When scheduling for student who is out of town or for a patient who has contact SDM directly regarding a possible urgent/emergent need, please refer to the following questions to determine the best clinic for the patient to be seen:

1. Determine if this is a patient of record
   a. If this is a patient of record (undergoing comprehensive care treatment at SDM), proceed to the next question.
   b. If this is not a patient of record, the emergency clinic is the only option.

2. Determine the nature of problem
   a. What happened?
   b. When?

3. Ask if the patient is in pain
   a. Severe pain that must be referred to the emergency clinic includes pain that is keeping the patient awake at night, swelling, fever, etc.
   b. Pain that should be addressed in the on-call clinic includes denture soreness, sensitivity to cold due to broken temporary crown, etc.

Referring care to the Emergency Clinic

During student breaks, its necessary to communicate with the Emergency Clinic staff if a patient of record needs care in that clinic. The Emergency Oral Surgery clinics have limited staff and student providers and therefore limited space to see patients.

If a patient needs to be seen, please send an email to the General Residency Program & Emergency Clinic Manager, the Oral Surgery Clinic Coordinator; and copy the Director of Clinical Operations and Patient Advocacy.

The email should include:

1. Patient's name and DOB
2. Reason for ER appointment
3. Best contact number

The patient will be contacted by one of the above individuals to schedule an appointment in the Emergency Clinic.

3.15   Electronic Records/Duplicate Records

Title: Request for Duplicate Records Policy and Procedure
Source: Patient Advocate Office
Effective date: 02/01/2015
Applies: All SDM Clinics

Policy:
The dental record is legal documentation preserved to protect the interests of the patient, the dentist, student/resident, and the health care facility (University of Colorado School of Dental Medicine). It contains the official documentation of the dental and health care services performed by a dentist or other licensed health care professional at the UCSDM. UCSDM is the owner of the dental record, but the patient is the owner of the information contained within. UCSDM shall protect the confidentiality of that information. Release of information contained in the dental record shall be coordinated by the Patient Advocate Office. The University of Colorado Legal Office may be contacted for guidance in non-routine situations.

Patient records will be released only upon the receipt of the Authorization to Release Dental Information form (attached as Addendum A) and payment of appropriate fees. The release of patient records is managed by the Patient Advocate Office. The Authorization to Release Dental Information form must be completed and signed by the patient, patient's legal guardian, or a legally designated representative. Questions regarding the proper release of information or legitimacy of a request should be referred to the Patient Advocate Office. Reasonable fees for duplication will apply to routine and special requests. The records will be released within 5-10 business days of receipt of the signed, completed authorization form and payment of fees.

Procedure:
1. A patient's records will be released once a completed and signed Authorization to Release Dental Information form is received by the Records Clerk.
   a. The Records Clerk will receive notice of the records request through the electronic health record system AxiUm:
      i. The front desk/admin staff will either complete an Authorization to Release Dental Information form electronically in AxiUm (if the patient is present) or transfer information from a paper form into AxiUm.
      ii. The request is first forwarded to the Payment Office to enter applicable charges and receive payment.
      iii. The Payment Office will then forward the request to the Records Clerk.
   b. The Records Clerk will review the requests and obtain duplicate copies of the appropriate patient records.
   c. Records related to legal matters will be forwarded to the Patient Advocate for additional

review.

2. Records eligible for release include but are not limited to: treatment notes, treatment plan, radiographs, perio chart, contact notes, attachments, and billing information.

3. Records not eligible for release include: student grades, competence, dispensing of instruments, student productivity, and lab cases.

4. The payment for duplication can be made by any method accepted in the Payment Office.

5. The Records Clerk will record which documents were released and send the records to the patient/legal guardian/legally designated representative, or inform the patient the records are ready for release. The method by which the documents are released will be recorded in AxiUm.

Release of Records:

1. The duplicate records can be released to the patient or an authorized individual in person, by mail, email, or to a patient's dental office or legal representative:
   a. Records released in person: The patient must present a valid form of ID upon delivery. If the records are to be released to an authorized person, that individual must present a written and signed statement from the patient and a valid ID.
   b. Records released by mail: The Records Clerk will mail the records to the address indicated on the Authorization form.
   c. Records released by email: The Records Clerk will email the records following the University of Colorado Denver policy for encryption if the records are to be emailed outside of the school's domain. (See University of Colorado Denver Encrypted Email Internal User Guide 2/24/2010). Only certain records can be emailed due to file transfer size limitations.

2. The records may be released to a dental office or legal representative designated by the patient. The records will be mailed or emailed as appropriate.

3.16   Abbreviations, acronyms, symbols, and dose designations

Title: Abbreviations, acronyms, symbols and dose designations
Source: Clinical Operations and Quality and Patient Safety
Effective Date: January 22, 2018
Revised Date: October 4, 2018; October 22, 2018

INTRODUCTION:

Health information comes from many sources such as patients, SDM personnel including students and residents, community providers, health insurance companies, risk managers, and others who may need information or data from the SDM health record. Using a standardized data set or language "can lead to greater data integrity and reliability, as well as an increased potential for ease of use by internal and external systems and users." Safe patient care relies on consistent understanding and application of a common language.

PURPOSE:

The University of Colorado School of Dental Medicine (SDM) uses standardized and approved abbreviations, acronyms, symbols and dose designations to document in the electronic or written health record or any other document that may be related to patient care. SDM recognizes a list of prohibited abbreviations, acronyms, symbols and dose designations (DO NOT USE list). These tools are intended to provide safe patient care through creation of a common language.

The abbreviations, acronyms, symbols and dose designations included on the DO NOT USE list have been implicated in several serious patient safety events or harmful medication errors and are not to be used in SDM documentation.

The approved list and the DO NOT USE list apply to all patient care documentation whether electronic or paper versions, both typed and handwritten.

SCOPE:

This policy applies to all SDM individuals: faculty, staff, residents, and students who are communicating in the electronic health record, paper documentation, or other healthcare related documentation.

POLICY:

SDM personnel will use the abbreviations, acronyms, symbols and dose designations outlined in Appendix A, "Alphabetical Index of Commonly Used Dental Abbreviations".

SDM personnel will not use the abbreviations, acronyms, symbols and dose designations included in Appendix B, "Do Not Use List of Abbreviations, Acronyms, Symbols, and Dose Designations".

The items on the "Do Not Use List" should never be used when communicating medical information. This includes internal communications, telephone/verbal prescriptions, computer-generated labels, labels for drug storage bins, medication administration records, as well as pharmacy and prescriber computer order-entry.

REFERENCES:

The Joint Commission 2016 Standards for Ambulatory Care, Information Management, Standard IM.02.02.01, page IM-9.

The Joint Commission, "Facts about the Official "Do Not Use" List of Abbreviations", June 30, 2016. https://www.jointcommission.org.

Institute for Safe Medication Practices, ISMP 2015, ISMP's List of Error-Prone Abbreviations, Symbols, and Dose Designations, www.ismp.org.

ACCOUNTABILITY:

All faculty, staff, residents and students involved with patient care or electronic health record documentation to include insurance, billing, risk management and any other related documentation are responsible to follow this policy.

AUTHORITY:

The Operations Committee and the Sr. Associate Dean of Clinics and Professional Practice have the authority to enforce this policy per evidence-based and professional practice standards.

REVIEW and APPROVAL:

Members of the Operations Committee and the Sr. Associate Dean for Clinics and Professional Practice vet this policy. The SDM Operations Committee, Faculty Senate, and SDM Executive Committee conduct final approval of the policy. This policy will be reviewed on an annual basis or sooner, as needed.

Appendix A: Alphabetical Index of Commonly Dental Used Abbreviations

Alphabetical Index of Commonly Used Dental Abbreviations
(effective date April 15, 2019)

Word or Term	SDM recommendations
A	
accelerated osteogenic orthodontics	AOO
acid etch	etch
acidulated phosphate fluoride	APF
Acquired Immune Deficiency Syndrome	AIDS
additional	add'l
adjust(ed) (ment)	adj
adult prophylaxis	pro
after noon	PM
AIDS Related Complex	ARC
alginate	alg
alveolar bone graft	ABG
amalgam	amal
ambulatory procedure unit	APU
anesthesia; anesthetic	anes
anterior	ant
anterior-posterior	AP
apicoectomy; apical root canal surgery	apico
appointment	appt
approximately	approx
archwire	AW
as needed	prn
as soon as possible	ASAP
Asymmetry, Borders, Color, Diameter, Evolving	ABCDE
attachment loss	AL
Attention Deficit Disorder	ADD
Attention Deficit Hyperactivity Disorder	ADHD
Automatic External Defibrillator	AED
B	
band and bond	BB
before noon	AM
beta-titanium	TMA
biopsy	bx
bisphenol-a-glycidyl methacrylate	bis-gma
bite wing x-ray	bw
bleeding on probing	BOP
blood pressure	BP
Bridge	FDP
buccal	B
build up	BU
by mouth	po
C	

calcium hydroxide	CaOH
calculus	calc
capsules	caps
carbon dioxide	CO_2
cardiopulmonary resuscitation	CPR
carpule	carp
Celsius	C°
cement(ation)	cem
cementoenamel junction	CEJ
centimeter	cm
centric relation	CR
centric relation occlusion	CRO
cephalometric image	ceph
cerebrovascular accident	CVA
cervical-pull headgear	CPHG
chief complaint	CC
child prophylaxis	child pro
chronic obstructive pulmonary disease	COPD
classification of jaw relation; Angle Class I	Cl I
classification of jaw relation; Angle Class II	Cl II, D1 or D2
classification of jaw relation; Angle Class III	Cl III
closing loop archwire	CLAW
closed coil spring	CCS
combination headgear	Combi HG
complete denture	CD
complete lower denture	/CD
complete upper denture	CD/
composite	comp
comprehensive exam/complete exam	Comp ex
computer aided design/manufacture	CAD/CAM
cone beam computerized tomography	CBCT
congestive heart failure	CHF
consultation	cons
continuous positive airway pressure	CPAP
coronary artery disease	CAD
crossbite	X-bite
crown and bridge	C&B
crown lengthening	CL
curve of spee	COS
D	
day	d
decayed, missing or filled teeth	DMFT
deciduous	decid
demineralized freeze-dried bone allograft	DFDBA
demonstrate	demo
dental assistant	asst
dental history	DHx
dental hygiene	hyg

dentoalveolar distraction osteogenesis	DDO
diagnosis	Dx
differential diagnosis	DDx
discontinued or discharged	d/c
direct bond	DB
discussed	disc
distal	D
Do Not Use	DNU
duplicate(d)	dup
E	
each	ea
Electrocardiograph	ECG
edentulous	edent
electric pulp test	EPT
electronic health record	EHR
emergency	emer
endodontics	endo
engage self ligation	ESL
epinephrine	epi
evaluat(ion) (e)	eval
examination	Ex, exam
extra oral	EO
extract (ion)	ext
extra-oral exam	EOE
F	
Fahrenheit	F
family history	Fam Hx
father of child	FOC
female	F
fixed dental prosthesis	FDP
fluoride	fl
follow up	f/u
for example	eg
fracture	Fx
frequency	freq
frequent	freq
full gold crown	FGC
full mandibular denture	/F
full maxillary denture	F/
full mouth debridement	FMD
full mouth probe	FMP
full mouth series	FMX
G	
gallon	gal
gastroesophageal reflux disease	GERD
general; generalized	gen
general practitioner	GP
glass ionomer	GI

gold	Au
gram	gm
guided tissue regeneration	GTR
gutta percha	gp
H	
health history	HHx
height	ht
Hepatitis A virus	Hep A
Hepatitis B virus	Hep B
Hepatitis C virus	Hep C
Herpes Simplex Virus	HSV
high blood pressure	HBP
high-pull headgear	HPHG
high volume evacuation	HVE
history	Hx
History and Physical	H&P
history of present illness	HPI
home care instructions	POI
hot and cold	H&C
hour	hr
Human Immunodeficiency Virus	HIV
hydrogen peroxide	H_2O_2
hydroxyapatite	HA
hypertension	HTN
I	
identification	ID
immediate full upper/immediate full lower denture	IFU/IFL
immediately	stat
implant-retained	I/R, i/r
impression	imp
inch	in
incisal	I
incise & drain	I&D
increased	incr
indirect bond	IND, IDB
inferior alveolar	IA
internal	int
interproximal reduction	IPR
intra oral	IO
intramuscular	IM
intra-oral exam	IOE
intravenous	IV
J	
K	
Kobayashi tie	K-tie
L	
laboratory	lab
large	lg

last menstrual period	LMP
lidocaine	lido
light cured	LC
limited oral exam	LOE
lingual	ling
liquid	liq
liters per minute	L/min
local anesthesia	LA
local anesthetic rubber dam	LARD
lower archwire	LAW
lower left	LL
lower left quadrant	LLQ
lower lingual holding arch	LLHA
lower right	LR
lower right quadrant	LRQ
M	
male	M
mandib(ular) (le)	Man, Mn
mandibular full denture	/CD
mandibular partial denture	/P
maxi(lla) (llary) (mum)	Max, Mx
maxillary anchor plates	MAP
maxillary anterior guidance orthotic	MAGO
maxillary full denture	CD/
maxillary partial denture	P/
maximal incisal opening (finger breath)	MIO (FB)
maximum intercuspation	max IC
medical history	Med Hx
medications	meds
mercury	Hg
mesial	M
microgram	mcg
microimplant-assisted rapid palatal expansion	MARPE
minute	min
mitral valve prolapse	MVP
mother of child	MOC
Multiple Sclerosis	MS
myocardial infarction	MI
N	
Necrotizing Ulcerative Gingivitis	NUG
negative	neg
new patient	NP
next visit	nv
nickel titanium or nitinol	NiTi
nitrous oxide	N2O
no known allergies	NKA
no known drug allergies	NKDA
no significant findings	NSF

non-carious cervical lesion	NCCL
nonsteroidal anti-inflammatory drug	NSAID
non-working interference	NW, NWI
norepinephrine	NE
not applicable	n/a
nothing by mouth	npo
number	#
O	
observe	obs
Obsessive Compulsive Disorder	OCD
occlus(al) (ion)	occ, occl
office visit	ov
ointment	oint
open coil spring	OCS
operat(ion) (ory)	op
oral contraceptives	OC
oral health record	EHR, ehr
oral hygiene	oh, OH
oral hygiene instructions	OHI
oral surgery	OS
orthodontics	ortho
ounce	oz
overbite	OB
overjet	OJ
over the counter	OTC
oxygen	O_2
P	
palatal	P
palpation	palp
panoramic image	pan, pano
panoramic radiograph	pan, pano
partial denture	PRDP
partial lower denture/partial upper denture	PL,PU
partial maxillary denture over partial mandibular denture	P/P
partial removable dental prosthesis	PRDP
patient	Pt, pat
patient presents to clinic	PPTC
Pediatric dentistry	pedo
percussion	pere
periapical	pa
periodic oral exam	POE
periodontal ligament	pdl
periodontal screening and recording	PSR
permanent	perm
personal protective equipment	PPE
polyvinyl siloxane	PVS
porcelain	porc
porcelain fused to metal	PFM

positive	pos or +
post and core	P & C
post operative	Post op
post operative instructions	POI
post operative instructions given	POIG
power chain	PC
prefabricated	prefab
preliminary	prelim
premedicate	premed
pre-operative	pre op
prepar(e) (ation)	prep
prescription	Rx
preventive resin restoration	PRR
prophylaxis	prophy
prosthodonti(cs) (st)	Prosth
provisional	prov
Q	
quadrant	quad
R	
radiograph	rad
rapid palatal expander	RPE
range of motion	ROM
recement	recem
recommend(ed)	rec
re-evaluation	re-eval
registered dental hygienist	RDH
removable	rem
removable partial denture	PRDP
removable prosthodontics	PRDP
resin modified glass ionomer	RMGI
respiration	resp
restor(ation) (e)	rest
reverse curve of spee	RCOS
reverse-pull facemask	RPFM
reviewed medical history	RMH
Rheumatoid Arthritis	RA
room (room air)	Rm (Rm air)
root canal therapy	RCT, rct
root planing and scaling	SRP
rubber dam	RD
S	
saturation	SAT or sat
scaling and root planing	SRP
self-ligating	SL
separator	Sep
Septocaine	Septo
sexually transmitted infection (disease)	STI
signs and symptoms	S/S

silver	Ag
sodium chloride	NaCl
sodium fluoride	NaF
stainless steel	SS
stainless steel crown	SSC
stannous fluoride	SnF
steel tie	S-tie
subacute bacterial endocarditis	SBE
surgical extraction	surg ext
surgically assisted rapid palatal expansion	SARPE
T	
tablet	tab
telephone	phone
temperature	temp
temporary	temp
temporary anchorage device	TAD
temporomandibular joint	TMJ
temporomandibular joint disorder	TMD
times	x
toothbrush abrasion	TBA
transcutaneous electric nerve stimulation	TENS
transpalatal arch	TPA
treatment	Tx
treatment plan	TxP
tuberculosis	TB
U	
unknown	unk
upper arch	UA
upper arch wire	UAW
upper left	UL
upper left quadrant	ULQ
upper right	UR
upper right quadrant	URQ
V	
vasoconstrictor	vaso
venereal disease	VD
versus	vs
vertical bitewings	vert bw
vertical dimension of occlusion	VDO
W	
water	H2O
with	w/
within normal limits	wnl
without	w/o
working length	WL
X	
xylocaine	xylo
Y	

years old	y/o, yo
Z	
zinc oxide eugenol	ZOE
zinc phosphate	ZnPO4
1:100,000 epinephrine	1:100 K epi
	1:100 k epi

Appendix B: Prohibited Abbreviations, Acronyms, Symbols, and Dose Designations (DO NOT USE list)

Prohibited Abbreviations, Acronyms, Symbols and Dose Designations (DO NOT USE list)
(effective date January 22, 2018)

Word or Term	Potential Problem	Use Instead
U or u (unit)	Mistaken for "0" (zero), the number "4" (four) or "cc"	Write "unit"
IU (International Unit)	Mistaken for IV (intravenous) or the number "10" (ten)	Write "International Unit"
Q.D., QD, q.d., qd (daily) Q.O.D., QOD, q.o.d. qod (every other day)	Mistaken for each other Period after the Q mistaken for "I" and the "O" mistaken for "I"	Write "daily" Write "every other day"
Trailing zero (X.0) mg Lack of leading zero (.Xmg)	Decimal point is missed	Write X mg Write 0.X mg Exception: a "trailing zero" may be used only where required to demonstrate the level of precision of the value being reported, such as for laboratory results or imaging studies that report size of lesions. It may not be used in medication orders or other medication-related documentation.
MS MSO4 and MgSO4	Can mean morphine sulfate or magnesium sulfate Confused for one another	Write "morphine sulfate" Write "magnesium sulfate"
>	More than confused with less than; confused with the opposite of the term intended	Write "more than"

<	Less than confused with more than; confused with the opposite of the term intended \<10 mistaken for 40	Write "less than"
Abbreviations such as mg or ml with a period following the abbreviation	The period is unnecessary and could be mistaken as the number 1 if written poorly.	Use mg or ml without a terminal period.
Large doses without properly placed commas (eg, 100,000 units)	100,000 has been mistaken for 10,000 or 1,000,000	Use k or K to designate 1000's, for example 1:100,000 epinephrine could be written as 1:100k epinephrine

3.17   Written Correspondence

All written correspondence to patients related to treatment is managed by the CU Dental Teams Clinic Care Coordinators as directed from the Office of Clinic Operations and Patient Advocate Office. Students are responsible to monitor their patient practice, document certain routine patient interactions in the Contact Notes in axiUm, and request appropriate written correspondence be sent to their patients. Written correspondence is intended to assist the student in managing his/her patient pool by either communicating UCSDM appointment policies or shifting the responsibility of continuing care to the patient. During the course of treatment, many patients will move from an "active" status to "inactive," "delayed," or "discontinued" status. Although each case must be handled individually, most patient situations fall into one of several broad categories.

Unable to Contact

Difficulty contacting patients may be a result of disconnected phones, change of address, patient choosing to leave the program without notice. When the student has made unsuccessful attempts to contact the patient, the following steps should be taken:

1. Document all attempts to contact patient in the Contact Notes feature in axiUm. At minimum, two documented attempts that are one week apart should be made before sending a letter.
2. Request the Clinic Care Coordinator to send an Unable to Contact (UTC) letter, noted in Contact Notes.
3. Patients are asked to respond within fixed period of time (30 days from date of letter). The letter (generated in axiUm) moves burden of contact/continuing care to patient.
4. If patient responds within the stated time period, continue treatment.
5. If the patient does not respond, the patient may be marked "Inactive."
6. Records of patients who contact the school after the stated time will be reviewed for reinstatement, new assignment and periodic exam, or rescreening. This will be determined by the coordinator.

Delay of Treatment

Patient may choose to delay their treatment with their dental student for a variety of reasons including vacations, changes in work schedule, finances, health, etc. All delays should have written correspondence verifying the patient's delay.

1. Document the patient's request to delay treatment in the Contact Notes feature in axiUm, noting the patient's reason.
2. Request the Patient Care Coordinator to send a Delay of Treatment letter. This letter (generated in axiUm) requests that the patient respond within four months of his/her intention to continue care. This moves burden of continuing care to patient. Status of patient is changed to "Delay."
3. If patient responds within the stated time frame, continue treatment.
4. If no response, the patient is marked "Inactive."
5. Patients who contact the school at a later date will be rescreened or reassigned if appropriate.

Missed Appointments

Patients are asked to give 48 hour-notice if they cannot keep an appointment. Patients are told at initial screenings that if they miss more than 2 appointments and/or reschedule with less than 48-hour notice, or are unable to schedule and keep appointments on a regular basis, they are subject to being referred out of the program. When this initially occurs, students should do the following:

1. If patient calls regarding appointment difficulty, the student should express their concerns for the patient's situation and attempt to identify if there is a barrier to care (e.g., financial difficulty, apprehension/fear, dental education, transportation, etc.). If the student can do anything to remove the barrier, the patient may be able to make the appointment. This contact is recorded in the Contact Notes feature in axiUm.
2. If the patient cannot keep an appointment, the student should express disappointment that the time was specially set-aside for the patient. The student should remind the patient of the school's policy and inform the patient that a "Missed Appointment" letter will be sent out by the School. Reschedule the patient if possible.
3. Document the patient's missed or rescheduled appointment in the Contact Notes, noting the patient's reason. The "Missed Appointment" letter is documented in the Contact Notes, as well. Letter will outline the school's policy with the patient.
4. After two such missed appointments, patient is subject to dismissal. This should be documented and discussed with Practice Leader and Coordinator.
5. Note that in certain situations, it may be appropriate to discontinue a patient after one failed appointment. Consult with Practice Leader and Coordinator regarding this.

Difficult to Appoint

Patients are asked to commit to making appointments at least two times per month in order for care to progress in a timely manner. Patients who are difficult to appoint and/or who will not commit to coming for a regular appointment routine may not be appropriate candidates for care at the School. Under these circumstance the student provider should do the following:

1. Document attempts to make appointments for the patient. The student should express their concerns for the patient's situation and attempt to identify if there is a barrier to care (e.g., financial difficulty, apprehension/fear, dental education, transportation, etc.). If the student can do anything to remove the barrier, the patient may be able to make the appointment. This contact is recorded in the Contact Notes feature in axiUm.
2. If the patient cannot commit to a regular appointment routine, student should remind the patient of the school's policy and inform the patient that an "Ineffective Appointment" letter will be sent out by the School.
3. If the patient fails to maintain a regular appointment routine after the letter is sent, the patient is subject to dismissal. This should be documented and discussed with Practice Leader and Coordinator.

Patient Requests Discontinuance from UCSDM

From time to time, patients may choose to leave the UCSDM system. Under these circumstances, the student provider should do the following:

1. Document the patient's request to discontinue treatment in axiUm, noting the patient's reason.
2. The student should advise their Patient Care Coordinator to send a letter requesting patient to respond within fixed period of time if they do not wish to discontinue treatment. This action moves burden of continuing care to patient. Letters are documented in Contact Notes.
3. Patients will be informed that their records are available upon written request, for a reasonable fee. Emergency care is available on a fee-for-service basis for 30 days.
4. If patient responds within time frame, and wishes to continue treatment, patient may be reassigned.
5. If no response, patient will be marked "Discontinued."
6. Patients who contact the school at a later date will be reviewed for new assignment or rescreening, by the coordinator.

UCSDM Discontinues Patient for Cause

From time to time, patients may not be able to fulfill their responsibilities. Typically, these include failure to make timely payments, failure to make and keep appointments in a timely manner, failure to comply with behavioral expectations, and failure to come to mutual agreement on treatment philosophy. Under these circumstances, the student provider should do the following:

1. Document the rationale to discontinue treatment in the Treatment Notes (requires faculty electronic signature) after consultation with Practice Leader and Patient Care Coordinator, and with the patient (faculty or staff intervention with the patient is often appropriate).
2. The Coordinator is asked to send a certified letter to document the rationale for the dismissal from the program. The letter will state that emergency care will be provided for 30 days, that records are available upon written request for a reasonable fee, and that they have a fixed period of time to contact the UCSDM if they wish to appeal the decision in writing to discontinue treatment.
3. If patient requests an appeal within the stated time frame, the case will be reviewed by the Practice leader in consultation with the Team Leader, CU Dental Teams Clinic Care Coordinator, student and will together make a recommendation to the Office of Clinic Operations.
4. Patients who contact the school at a later date will be not be re-admitted into the program unless authorized by the Office of Clinic Operations.

Delays and Discontinuance Due to Finance (also outlined in Section 6.1)

The School ages accounts at 30, 60, 90, and 120 days past due. This information is available on the patient card in axiUm. For past due accounts students must consult with the Payment Office staff to discuss why the patient hasn't paid, and determine if the treatment rendered is incomplete (e.g., a three-unit bridge which is only temporarily seated). The patient shall also receive a letter of non-payment and will be informed that their treatment will be delayed until payment is received. The patient's name will be added

to a list of like patients, which is forwarded to the Office of Clinic Operations.

At 120 days, the payment staff locks the record in axiUm. At this point, the student is unable to continue treatment. At 120 days of non-payment, an account is considered very delinquent and will be sent to the state collection agency. At this point, two letters will be sent the patient:

1. A letter will be sent from the Payment Office stating that the account will be turned over to our collection agency unless it is paid in full within the first 20 days of the month, and that they have been referred out of our program. The chart will be locked in axiUm for all patients that are in a collection status. All patient charts are automatically locked by the clinic computer system when the account balance reaches 120-days delinquent. A copy of the delinquent letter is found in axiUm under attachments.
2. A letter will be sent from the Office of Clinical Operations stating treatment is discontinued because the patient's account was sent to collections. The letter will state the patient may be considered for re-admittance into the dental program upon reconciliation of the account, with the provision that payments would be required in advance of treatment. Patients will be informed that their records are available upon written request, for a reasonable fee. Emergency care is available on a fee-for-service basis for 30 days

IV.   Office of Patient Advocacy

4.1   Office of Patient Advocacy

Location: 2nd Floor Clinic
Phone: 303 724-7040
Fax: 303 724-7066
Hours of Operation: Monday – Friday, 8:00 am - 5 pm

PERSONNEL:

> Emily Reddick, MPA - Director of Clinical Operations and Patient Advocacy
> Giuliana Marquez - Patient Advocate

OVERVIEW:

The Office of Patient Advocacy at the School of Dental Medicine provides a comprehensive program for all phases of patient advocacy. A comprehensive program includes training programs for preventing and mitigating patient-related issues; systems of early detection and intervention; developing protocols to manage risk; and interacting in a proactive manner with patients, families, faculty, students and residents to resolve patient issues.

The mission of the Office of Patient Advocacy is to serve as a resource to the patients of the University of Colorado School of Dental Medicine who have concerns or want to provide feedback about their experience. The office is also available to answer questions regarding clinic policies and procedure of the school.

It is the policy of University of Colorado School of Dental Medicine to allow its patients to submit a request for information, or an expression of concern. Such expressions may be submitted verbally or in writing. In order to address any expression of concern from the patient and prevent future concern, it is the goal of the Office of Patient Advocacy to:

- Develop protocols for dental staff, faculty, students and residents to proactively report and respond to patient issues.
- Collaborate with dental staff, faculty, student and resident health care providers to complete inquiries of patient complaints and/or self-reported incidents by faculty, staff and/or students, events or legal cases.
- Recommend steps for action to respond to and resolve issues reported by patients.
- Recommend steps for action to mitigate legal exposure for the University. This includes recommendation in an emergency or immediate action situation.
- Effectively communicate with the health care team, patients and their families, School of Dental Medicine Administration and, as necessary, legal counsel/University Risk Management.
- Develop educational presentations and educate dental care providers on preventative behaviors and legal concepts pertinent to dental practice. This education occurs in formal classroom settings, during orientation of all new employees, periodically during monthly faculty senate and staff meetings, committees, and directly with providers and staff when quality of care concerns arise.

- Represent the School of Dental Medicine in peer reviews, legal matters, quality and performance improvement committees, and as legal representatives.
- Review and investigate reported dental care occurrences and determine risk potential
- Detect trends and similarities among multiple occurrences and ensure that they are addressed appropriately
- Prepare case reviews for quality assurances purposes
- Act as a liaison with legal counsel and Risk Management if even may involve litigation
- Investigate patient complaints about care
- Coordinate and/or prepare response to licensing boards or other 3rd parties.
- Act as a consultant with patient representatives to evaluate the level of quality of care concern and risk on a complaint. If appropriate, refer cases to Risk Management.

Division of Language and Disability Services:
The Division of Language and Disability Services is housed within the Patient Advocate Office. The primary function of the Division of Language and Disability Services is to coordinate services for Limited English Proficient (LEP) persons and persons with disabilities as classified by the Americans with Disabilities Act (ADA).

OTHER INFORMATION:
The office personnel will inquire all patient concerns regarding patient care at the School of Dental Medicine.

4.2   Policy for Provision of Patient Services to Limited English Proficient (LEP) and Hearing Impaired Patients

Title: Provision of Patient Services to Limited English Proficient (LEP) and
                    Hearing Impaired Patients
Source: Dean's Office
Effective date: October 20, 2011
Revised date: December 31, 2014

INTRODUCTION:
The University of Colorado School of Dental Medicine (CU SDM) is committed to diversity and equality in access to care for its patients.

In an effort to provide access to care to limited English proficient persons ("LEP") and hearing impaired patients, all members of the CU SDM health care team (clinical faculty, staff and dental program enrollees (students and residents)) must work together to assess our patients' needs, and to provide appropriate interpretation and translation services to address a patient's individual communication needs.

Policy Focus and Intent
The intent of this policy is to formalize the interpretation and translation activities of the School of Dental Medicine, and bring them together into one administrative area in the School: **The Division of Language Services**, housed within the Office of Patient Advocacy.

Upon an initial intake or contact with the School, a staff member should assist with or determine whether a patient needs interpretation or translation services. If necessary, staff will use a language identification card (see Addendum A). All LEP persons will be immediately notified of the availability of language assistance, free of charge. In addition, if a LEP person needs interpretive assistance a note will be included in their medical record.

Information regarding the procedures related to accessing interpretation services shall be kept at each reception area and other points of patient contact throughout the School.

While this policy details the interpretation and translation resources that may be accessed through on-demand electronic resources accessed via phone and web conferencing, the school puts a premium on face-to-face interactions between patients and healthcare team members that are an important part of patient care and educational experiences.

Opportunities for Face-to-Face Interpretation
The CU SDM is a very diverse environment. At any given time, SDM faculty, staff, and students represent as many as 25 countries on its health care team. Together, these health care team members are fluent and proficient in dental terminology in many different languages, and some team members can sign using American Sign Language. The diverse team members provide CU SDM with a unique

opportunity to provide face-to-face, one-on-one communication techniques to serve LEP persons and hearing impaired patients. Because the CU SDM general practice residents are affiliated with the University of Colorado Hospital, additional opportunities to access interpretation and translations resources are available to patients seen in the General Practice Residency clinic. All translation services should go through the School of Dental Medicine's Language Services Division. SDM has certified at least one staff member as a Spanish translator to assist with translation of documents in that language.

The Division of Language Services will annually survey SDM faculty and staff to identify languages spoken and levels of proficiency.   If an LEP person is identified as needing assistance, SDM staff should try to contact or utilize internal interpreters for assistance.

On-Demand Over-the Phone Interpretation
In addition to utilizing on-site interpreters, staff members have access to over-the-phone translation services from CyraCom, LLC for LEP persons. Information on how to use CyraCom's services and CyraCom handsets are available at the front desks of every clinic. CyraCom provides translation services for 170 languages.

Family Members as Interpreters
Some LEP persons may prefer or request to use a family member or friend as an interpreter. However, family members or friends of the LEP person will not be used as interpreters unless specifically requested by that individual and after the LEP person has understood that an offer of an interpreter at no charge to the person has been made by SDM. Such an offer and the response will be documented in the person's file. If the family member or friend is not competent or appropriate for any reason, competent interpreter services will be provided to the LEP person. Children under the age of 18 will not be allowed to act as an interpreter.

In-Person American Sign Language Services
On-site interpretive services may be requested in advance (at least 3 business days' notice), through the Division of Language Services.

In the event there is an emergency patient, or a last minute appointment (less than 3 business days' notice) for an individual needing an American Sign Language interpreter, health care team members must work with the Division of Language Services to arrange for a web conference with an interpreter from CyraCom, LLP.

Translation Services
Vital documents will be available in Spanish. If additional documents need to be translated, contact the Division of Language Services.   Annually the Division of Language Services will survey faculty and staff to determine whether additional vital documents need to be translated in other languages based on the patient population.

Ongoing Evaluation
On an ongoing basis, the administration will assess changes in demographics, types of services or other needs that may require reevaluation of this policy and its procedures. In addition, the administration will regularly assess the efficacy of these procedures.

CU | School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Addendum A

IF YOU NEED AN INTERPRETER

Please point to your language. We will call an interpreter.

Spanish –Español	Por favor, señale su idioma. Llamaremos a un intérprete.
Amharic –አማርኛ	"እባክዎ ቋንቋዎን ጠቁመው ያሳዩ። እንድ አስተርጓሚ እንጠራልዎታለን።"
Arabic –العربية	رجاء ،أشر إلى لغتك . سندعوا لك مترجما.
Bosnian –Bosanski	Molim vas pokazite na vas govorni jezik. Mi cemo pozvati prevodioca.
Cambodian – ខ្មែរ	សូមចង្អុលទៅភាសារបស់អ្នក ។ យើងនឹងទូរស័ព្ទទៅអ្នកបកប្រែម្នាក់ ។
Cantonese –廣東話	請指示您所講的語言。我們會找翻譯。
Creole – Creole	S'il vous plait, signale ki less ki language ou. Na va rele yon intepete.
Farsi– فارسی	لطفا به زبانى كه حرف ميزنيد اشاره كنيد. ما يک مترجم صدا ميكنيم.
French –Français	S'il vous plait; montrez nous la langue que vous parlez. Nous vous appellerons un interprète.
Hindi – हिन्दी	कृपया अपनी भाषा की ओर इशारा कीजिये । हम एक अनुवादक को बुलायेंगे ।
Japanese –日本語	あなたの国の言葉を指してください。通訳者におつなぎします。
Korean–한국어	당신의 모국어(母國語)를 가리켜 주십시요통역관(通譯官)을 연결시켜 드리겠습니다.
Laotian – ລາວ	ກະລຸນາ ບອກເຖິງພາສາຂອງທ່ານ. ພວກເຮົາຈະຮຽກຫາຜູ້ແປນາຍພາສາ.
Mandarin – 國語	請指示您所講的語言。我們會找翻譯。
Portugese –Português	Por favor, aponte seu idioma. Nós chamaremos um intérprete.
Romanian –Română	Vă rugăm, indicați limba dumneavoastră. Vă vom chema un interpret.
Russian –Русский	Пожалуйста, укажите на ваш язык и мы позовем переводчика.
Somali –Af-Soomaali	Fadlan noo tilmaan afkaaga. Waxaan kuugu yeeri turjubaan.
Thai – ภาษาไทย	กรุณาเลือกภาษาที่คุณต้องการ เราจะติดต่อล่ามให้คุณ
Urdu – اردو	برائے مہربانی اپنی زبان کی نشاندہی كريں۔ ہم ايک ترجمان کو بلائیں گے۔
Vietnamese – Tiếng Việt Nam	Xin hãy chỉ vào ngôn ngữ của quí vị. Chúng tôi sẽ gọi người thông ngôn.

4.3   Auxiliary Aids Policy

Title: Auxiliary Aids and Services for Persons with Disabilities
Source: Office of Patient Advocacy
Effective Date: December 3, 2012

POLICY:

The University of Colorado School of Dental Medicine will take appropriate steps to ensure that persons with disabilities, including persons who are deaf, hard of hearing, or blind, or who have other sensory or manual impairments, have an equal opportunity to participate in our services, activities, and programs. The procedures outlined below are intended to ensure effective communication with patients/clients involving their dental conditions, treatment, services and benefits. The procedures also apply to, among other types of communication, communication of information contained in important documents, including consent to treatment forms, the Patient's Rights and Responsibilities document, patient information and instruction forms, financial and insurance benefits forms, etc. All necessary auxiliary aids and services shall be provided without cost to the person being served.

All faculty, students, resident, and staff will be provided written notice of this policy and procedures, and those who may have direct contact with individuals with disabilities will be trained in effective communication techniques, including the effective use of interpreters.

PROCEDURES:

1. Identification and assessment of need:

   The University of Colorado School of Dental Medicine provides notice of the availability of and procedure for requesting auxiliary aids and services through notices in our brochures, handbooks, print/radio /television advertisements, etc. and through notices posted in waiting rooms, lobbies, etc. When an individual self-identifies as a person with a disability that affects the ability to communicate or to access or manipulate written materials or requests an auxiliary aid or service, staff will consult with the individual to determine what aids or services are necessary to provide effective communication in particular situations.

2. Provision of Auxiliary Aids and Services:

   The University of Colorado School of Dental Medicine shall provide the following services or aids to achieve effective communication with persons with disabilities:

   A. For Persons Who Are Deaf or Hard of Hearing

   (i)   For persons who are deaf/hard of hearing and who use sign language as their primary means of communication, the Patient Advocate Office/Director of Language Services is responsible for providing effective interpretation or arranging for a qualified interpreter when needed. In the

event that an ASL interpreter is needed, the Patient Advocate Office/Director of Language Services is responsible for:

(a) Maintaining a list of qualified ASL interpreters on staff showing their names, phone numbers, qualifications and hours of availability;

(b) Contacting the appropriate ASL interpreter on staff to interpret, if one is available and qualified to interpret; or

(c) Obtaining an outside interpreter if a qualified ASL interpreter on staff is not available. Purple Language Services has agreed to provide ASL interpreter services. The agency's telephone numbers are:
- (303) 321-6772 M-F 8:00 a.m. to 5:00 p.m.
- (720) 936-8714 Emergency line (after 5:00 p.m.)

The University of Colorado School of Dental Medicine also provides ASL interpreter service through Purple Video Remote Interpreting (VRI) service for emergency situations. The Director of Language Services houses a laptop equipped with the VRI software that can be used anywhere in the building.

(ii) For communicating by telephone with persons who are deaf or hard of hearing, the University of Colorado School of Dental Medicine utilizes relay services for external telephone with TTY users or video relay service users. We accept and make calls through a relay service. The state relay service number is 711. The University of Colorado School of Dental Medicine also provides a video relay service for persons who are deaf or hard of hearing to make outgoing calls.

(iii) For the following auxiliary aids and services, staff will contact their Clinic Manager and/or the Patient Advocate Office/Director of Language Services, who is responsible to provide the aids and services in a timely manner:

- Assistive listening devices
- Telephone handset amplifiers
- Digital display of clinic announcements
- Telephones compatible with hearing aids
- Staff available to serve as note-takers

(iv) Some persons who are deaf or hard of hearing may prefer or request to use a family member or friend as an interpreter. However, family members or friends of the person will not be used as interpreters unless specifically requested by that individual and after an offer of an interpreter at no charge to the person has been made by the facility. Such an offer and the response will be documented in the person's file, and a Waiver of Interpreter Services form must be signed. If the person chooses to use a family member or friend as an interpreter, issues of competency of interpretation, confidentiality, privacy and conflict of interest will be considered. If the family member or friend is not competent or appropriate for any of these reasons, competent interpreter services will be provided.

NOTE: Children will <u>not</u> be used to interpret, in order to ensure confidentiality of information and accurate communication.

B. For Persons Who Are Blind or Who Have Low Vision

   (i) Staff will communicate information contained in written materials concerning treatment, benefits, and services by reading out loud and explaining these forms to persons who are blind or who have low vision.

   The following types of large print, recorded, and electronically formatted materials are available: consent to treatment forms, the Patient's Rights and Responsibilities document, patient information and instruction forms, financial and insurance benefits forms, etc. These materials may be obtained by calling the Patient Advocate Office/Director of Language Services at (303) 724-7040.

   (ii) For the following auxiliary aids and services, staff will contact their Clinic Manager and/or the Patient Advocate Office/Director of Language Services, who is responsible to provide the aids and services in a timely manner:

- Reformatting documents into large print
- Taping or recording of print materials not available in alternate format

   Staff are available to assist persons who are blind or who have low vision in filling out forms and in otherwise providing information in a written format.

A. For Persons with Speech Impairments

   To ensure effective communication with persons with speech impairments, staff will contact their Clinic Manager and/or the Patient Advocate Office/Director of Language Services who is responsible to provide the aids and services in a timely manner:

- Writing materials
- Computers
- Universal symbol flashcards
- Communication boards

D. For Persons with Manual Impairments

   Staff will assist those who have difficulty in manipulating print materials by holding the materials and turning pages as needed. For these and other auxiliary aids and services, staff will contact their Clinic Manager and/or the Patient Advocate Office/Director of Language Services who is responsible to provide the aids and services in a timely manner.

4.4   Management of Patient Issues and Concerns

Title: Protocol for Management of Patient Issues and Concerns
Source: Clinical Operations
Effective Date: March 26, 2012

INTRODUCTION:
This protocol should be used when a patient issue and/or concern arises within the School of Dental Medicine either in person or by phone. Patient issues and concerns should be brought to the attention of the clinic manager or coordinator. If the clinic manager or coordinator is unable to assist the patient, the patient should be referred to the Patient Advocate Office.

PROTOCOL:
The clinic manager or coordinator will initially attempt to address the patient's concerns. If the clinic manager is unavailable, or after the clinic manager or coordinator has made all reasonable efforts to find solutions to the issue/concern without resolution, the patient should be referred to the Patient Advocate Office. The patient may also be referred to the Patient Advocate Office if they request to speak to the "Dean" or to a person with "more authority."
A student, faculty, or staff member may also proactively engage the Patient Advocate Office to seek guidance for recommended action to resolve patient issues or for clarification of UCSDM policies related to the patient's issue/concern.
A note must be entered in the patient's dental record by the student, faculty or staff member, indicating the details of the interaction with the patient and also noting if the patient was directed to the Patient Advocate Office.

Patient Advocate Procedure:
For all UCSDM patient issues and concerns that are referred to the Patient Advocate Office, the patient advocate will:

1. Record the time, date and content of the patient advocate's receipt of a patient's issue/concern.
2. Respond to a patient by phone within one business day.
3. Initiate the collection and documentation of the details of the patient's issue/concern, including direct quotes from the patient, in the Patient Contact Notes in AxiUm.
4. Determine compliance with mandatory reporting if the patient complaint is suggestive of sexual harassment, violation of Title VI, or racial/ethnic discrimination.
5. Determine the patient's desired outcome.
6. Complete the UCSDM Patient Advocate Office Encounter Form and UCSDM Patient Advocate Office Case Data Information form.
7. Review the patient notes in AxiUm, as well as any other pertinent information relating to the complaint, i.e. letters, statements, etc.
8. Contact the student/resident directly involved in the occurrence or patient's treatment.
9. Verify information collected and documentation of the occurrence.

10. Gather other input from the student/resident, staff, and faculty who may have relevant information regarding the occurrence.
11. Follow up with the patient regarding the status of the complaint inquiry weekly and notify the patient promptly when updated information is available.
12. Work with the patient to find a satisfactory resolution whenever possible.
13. If needed, the patient advocate may request the presence of a faculty member or a member of the School's administration for assistance in resolving the patient's issue/concern in a face-to-face meeting. In this meeting, the patient advocate will be the facilitator of the discussion.

4.5   Patient Complaint and Grievance Policy

Title: Patient Complaint and Grievance Policy

Effective Date: September 11, 2015

Approved by: School of Dental Medicine Administration

Purpose:

The purpose of this policy is to:

1. Provide a standardized process to document complaints and grievances received by the University of Colorado School of Dental Medicine.
2. Provide a process to review, investigate, and resolve a patient's/patient advocate's complaint or grievance within a reasonable time frame.
3. Provide a process to help identify, investigate and resolve systemic problems through identification and analysis of trends.
4. Provide a quality improvement approach to evaluate the effectiveness of the complaint and grievance process and to identify and implement improvements as indicated.

Roles and Responsibilities:

1. University of Colorado School of Dental Medicine (UCSDM) is committed to providing quality care and proactively addressing patient needs. Patients have the right to express concerns and expect resolution in a timely manner. The School is committed to responding to and investigating complaints or grievances about any aspect of a patient's care. The School informs patients and his or her family about the complaint resolution process.

2. The UCSDM Executive Committee has delegated formal oversight of the complaint and grievance process to the Patient Advocate Office and School's Quality Management Committee. The Quality Management Committee has designated specific responsibilities to the following roles:
   - Patient Advocate Office: Retains day-to-day operations responsibility for complaint and grievance process. Collects and analyzes data for presentation to Quality Management Committee, Operations Committee, Faculty Senate, and Executive Committee for review and recommendation.
   - The Patient Advocate Office maintains a procedure for systematic notification in and resolution of complaints and grievances, including documentation of results/outcomes.
   - The Quality Management Committee monitors complaints and grievances to ensure compliance with these procedures as well as review trends to improve patient care and services and ensure customer satisfaction.

Definitions:

Patient:

Patients of UCSDM and/or their families have a right to seek information or express complaints or grievances regarding care provided in the school without fear of retribution, coercion, discrimination, reprisal or unreasonable interruption in care.

Information concerning the patient complaint/grievance procedure is provided to each patient and/or their representative at the time of admission. This information is also posted in the lobby and throughout the School in both English and Spanish.

The following explanation of UCSDM grievance procedure will be made available to all patients/families in the CU Dental Clinics Patient's Rights and Responsibilities brochure:

> "Should you have questions or concerns about your care while receiving treatment at any of the CU Dental Clinics, our Patient Advocate Office will work with you to address your concerns. Patients may submit requests for information or concerns, either verbally or in writing, to the Patient Advocate Office at 303-724-7040 or via email at sdm-ptadvocate@ucdenver.edu. In addition, patients have the right to file a 504/ADA grievance with the University of Colorado Employment Rights and Investigation Manager at (303) 724-9694."

Complaint:

A verbal complaint that is made by a patient, or on a patient's behalf that can be resolved immediately should be resolved immediately by staff present. If the complaint cannot be resolved at the time of the complaint by staff present, is postponed for later resolution, is referred to other staff for later resolution, requires investigation, and/or requires further actions for resolution, then the complaint is a *grievance* for the purposes of these requirements. A complaint is considered "resolved" when the patient is satisfied with the actions taken on their behalf. Examples: increasing room temperature, or furnishing a requested copy of the bill.

Grievance:

A complaint regarding patient care and meets one of the following:
1. A patient concern that is not resolved to the patient's/family's satisfaction promptly by the staff involved.
2. Any written, emailed or faxed complaint.
3. Any complaint that is referred to other staff for investigation or for later resolution.
4. Any complaints related to abuse, neglect, or patient harm.
5. Complaints related to the UCSDM non-compliance with CMS (Center for Medicare and Medicaid) Conditions of Participation.
6. Attachment to or written complaint on a satisfaction survey requesting resolution.
7. Any request to handle a complaint as a formal complaint or grievance.

Grievances <u>are not</u>:
- ➤ Billing issues (except those that are related to rights and limitations provided under 42 CFR 489 as part of the Medicare provider agreement including allowable charges, deductibles, coinsurance and copayments).
- ➤ Information obtained from patient satisfaction surveys unless an included complaint meets definition 4, 5, 6, or 7 above.
- ➤ Post-visit verbal communication that would routinely have been handled during the visit.

Disability:
(As defined by Section 504 of the Rehabilitation Act and the Americans with Disabilities Act.) A person is considered to have a disability if s/he: 1) has a physical or mental impairment which substantially limits one or more major life activity; 2) has a record of such an impairment; or 3) is regarded as having such an impairment. Such impairments may include, but are not limited to, blindness, deafness, paraplegia, and contagious disease. A major life activity is a function such as self-care, manual task, walking, seeing, hearing, speaking, breathing, learning and working.

Patient designated representative:
A person authorized to act on behalf of the patient by state law, by court order or in writing in accordance with the policies and procedures of the UCSDM. In this policy, the reference to patient will include the patient or the patient designated representative.

Section 504/Americans with Disabilities (ADA) coordinator:
The Section 504/Americans with Disabilities Act (ADA) coordinator for patient complaints is located within the University of Colorado Employment Rights and Investigation Office. The Employment Rights and Investigation Manager is responsible to consult with the UCSDM to ensure compliance with and to carry out the UCSDM's responsibilities under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act, including investigation of any complaints concerning the UCSDM's obligations under these laws.

<u>Complaint & Grievance Investigation Process:</u>

1. Patient complaints and grievances are voiced by the patient either in person, by phone, mail, email, or by fax. Patient issues and concerns should be resolved at a lower level whenever possible; an initial attempt to resolve the issue or concern should be made by the staff who receives the complaint. If the initial attempt to resolve the concern is unsuccessful, or the matter requires review above the level of the staff that received the initial complaint, the matter should be escalated to the clinic care coordinator, clinic manager, or the Patient Advocate Office.

2. The clinic care coordinator or clinic manager will attempt to address complaints received from a patient or referred by staff, students, or faculty at UCSDM.

3. Matters may be directly referred to the Patient Advocate Office if:
   a. The clinic care coordinator or clinic manager is unavailable;
   b. After the clinic care coordinator or clinic manager has made all reasonable efforts to find solutions to the issue/concern without resolution;
   c. The patient requests to speak to the "Dean" or to a person with "more authority."

4. A student, faculty, or staff member may also proactively engage the Patient Advocate Office to seek guidance for recommended action to resolve patient issues or for clarification of UCSDM policies related to the patient's issue/concern.

5. A note must be entered in the patient's dental record (in the patient contact notes section) by the student, faculty or staff member who initially received the complaint, detailing the interaction with the patient and also noting if the patient was directed to the Patient Advocate Office.

Patient Advocate Procedure:

1. For all UCSDM patient complaints/grievances that are referred to the Patient Advocate Office, the patient advocate will initiate the following protocol:

    a. Respond to a patient by phone within 1-2 working days to acknowledge receipt of their complaint/grievance.
    b. Take detailed notes of the patient's stated complaint/grievance, including direct quotes from the patient, and documenting conversations in the "Patient Contact Notes" in the EHR (AxiUm).
    c. Determine the patient's desired outcome.
    d. Determine compliance with mandatory reporting if the patient complaint is suggestive of sexual harassment, violation of Title VI, or any type of discrimination. (If indicated, see number 5 in this section).
    e. Review the treatment history, patient notes as well as any other pertinent information relating to the complaint in the EHR, i.e. letters, statements, etc.
    f. Contact the student/resident/staff/faculty directly involved with the patient's concern.
    g. Log the complaint or grievance in the Safety Intelligence Complaint Module (see Logging and Managing Complaints).
    h. All copies of written documentation should be maintained by the Patient Advocate Office.

2. After investigating the grievance, the patient advocate shall provide the patient with written notice of its decision within 7 calendar days that contains the name of the school, contact person, the steps taken on behalf of the patient to investigate the grievance, the results of the grievance process, and the date of completion. UCSDM is not required to provide an exhaustive explanation of every action taken by the school or to include the results of peer review or statements that could be used in a legal action against the school. When the patient communicates via email, the school may provide its response via email.

3. If the grievance includes notice of claim or threat of litigation, or indicates a quality or safety issue requiring professional peer review, the grievance will be forwarded to Professional Risk Management, the Senior Associate Dean of Clinical Operations and Professional Practice, and the Director of Quality Management. In these instances, the case investigation will be under the direction of the risk manager. The patient advocate will communicate to the patient in writing regarding the investigation within 7 calendar days.

4. Grievances may be complicated and may require an extensive investigation. If the grievance is not resolved or if the investigation is not complete within 15-30 working days, UCSDM's written response should address that the school is still working to resolve the complaint and state that the School will follow up with another written response within a stated number of days.

5. Grievances alleging discrimination on the basis of race, color, ethnicity, religion, gender, national origin, disability, or is indicative of sexual harassment or abuse will be reviewed with the Senior Associate Dean of Clinical Operations and Professional Practice and the Director of Quality Management, and if found to be substantive will are forwarded to the following internal departments:

    a. University of Colorado Human Resources Office: for grievances alleging discrimination (race, color, ethnicity, religion, gender, national origin, disability) and claims of sexual harassment.

b. Professional Risk Management: for grievances alleging physical abuse.

In these instances, the case investigation will be under the direction of the designated individual in the Human Resource Office or Professional Risk Management. Individuals with limited English proficiency must be provided with effective communication methods for effective exchange of information. The complaint will be investigated as per procedure above, and a written response provided to the complainant within 7 calendar days. An individual who files a complaint may pursue other remedies, which include filing with:

> The Office for Civil Rights
> Department of Health and Human Services
> 1961 Stout Street, Room 08-148
> Federal Office Building
> Denver CO 80294-3538
> 303-844-2024

6. Other notices of dissatisfaction may be received from patient/family satisfaction surveys. All survey responses are forwarded to the Patient Advocate Office. Responses with a complaint should be logged in the Safety Intelligence Complaints Module, but a written response is not required since the School solicited the information unless the patient requests resolution or the nature of the complaint involves a serious safety event.

7. Trending, Analyzing and Reporting complaints and grievances for Quality Improvement:
The entries in the Safety Intelligence Complaints Module shall be summarized, aggregated, analyzed, and trends identified and presented to Quality Management Committee, Faculty Senate, and the Executive Committee on a regular basis for review and recommendations related to quality improvement.

Additional Investigation:

1. If a complaint or grievance warrants additional review, the patient advocate will work with the Senior Associate Dean of Clinical Operations and Professional Practice and Director of Quality Management to delegate a formal review of the grievance, when necessary, by forming a sub-committee of the Quality Management Committee.

2. A written response to the complainant within 7 working days. The letter shall include:
    a. The name of the SDM contact person,
    b. Steps taken on behalf of the patient to investigate the grievance,
    c. The results of the grievance process,
    d. The dates of completion (if applicable),
    e. Is signed by the Senior Associate Dean of Clinical Operations and Professional Practice or Designee

3. If the grievance is received via email, the written response may be sent via email containing the above five required elements. A copy of the email should be kept with the written response.

    a. If resolution is not possible within 15-30 working days, the letter will indicate an anticipated resolution date.
    b. A follow-up letter will then be sent once the resolution has been achieved.

4. The Quality Management Committee sub-committee, if convened, makes recommendations for further actions and provides a summary report of its recommendations to the Quality Management Committee.

5. If the patient is not satisfied with the resolution of the grievance, upon patient's request, the patient advocate will forward the complaint to the Senior Associate Dean of Clinical Operations and Professional Practice.

Unresolved Grievances:

A grievance is considered resolved when the patient is satisfied with the actions taken on their behalf. There may be situations where the school has taken appropriate and reasonable actions on the patient's behalf in order to resolve the patient's grievance and the patient remains unsatisfied. In these situations, the school may consider the grievance closed. However, the patient will be informed of other reporting options as identified below:

➢ The grievance can be referred to the Senior Associate Dean of Clinical Operations and Professional Practice for further investigation.
➢ The grievance may be filed with the Colorado State Board of Dental Examiners. The Colorado State Board of Dental Examiners is located at:

> Colorado State Board of Dental Examiners
> 1560 Broadway, Suite 1350, Denver, CO 80202
> (303) 894-7800
> Email: dora_registrations@state.co.us

Logging and Managing Complaints:

1. Upon receipt of the complaint/grievance, the patient advocate (or designee) enters the complaint on the Safety Intelligence Complaint Module.

2. Each of the following 10 elements are required:

   - Complainant Name/ Patient Chart Number: The complainant's name or patient chart number may be used for identification purposes.
   - Summary of Complaint/Grievance: A brief description of the issue should be written in this field.
   - Date Complaint/Grievance First Received: The date that the complaint/grievance is first received.
   - Source of the Complaint/Grievance: How was the complaint/grievance received, communication to staff, email, survey.
   - Subject(s) of Complaint/Grievance: Categorizations of the complaint based on nature of complaint.
   - Location/ service name: If applicable, location within UCSDM where complaint/grievance occurred.
   - Clinical Service: If applicable, type of dental service provided when complaint/grievance occurred.
   - Written Response: Indicate date response letter is sent either via mail or e-mail.
   - Date Issue Closed (Resolved): The date closed would be the date the issue is resolved. This means that reasonable review has been completed, findings communicated to the complainant, and no further follow-up/action is required.
   - Comments: A brief summary of the complaint or grievance should be in this field with a note regarding the patient/family involvement and their satisfaction/dissatisfaction of the resolution.

References:

42 CFR 416.50

4.6   Patient Discontinuation Policy

Title: Patient Discontinuation Policy, Procedure and Guidelines
Source: Clinical Operations
Effective Date: December 3, 2012

POLICY:

The provision of safe, effective dental care is based on a relationship of mutual trust and respect between the dental care provider and the patient. In addition, to maintain a safe therapeutic environment, good order and civil interaction should be maintained at all times within the facility. Occasionally this collaborative relationship, and/or safe environment, may be seriously disrupted by acts or omissions of the patient or others that may require the discontinuation of the patient from care and/or loss of his/her eligibility for care. Termination of care at the University of Colorado School of Dental Medicine (UCSDM) will be done in a nondiscriminatory way and will be implemented only when there is just reason for such action.

Causes that may warrant patient's discontinuation from care or loss of eligibility for care at the UCSDM include but are not limited to:

- Lack of patient compliance
  - ➢ The patient repeatedly fails to make or keep appointments, which result in negative clinic consequences.
  - ➢ Persistent refusal to follow/a demonstrated history of failure to comply with prescribed treatment protocols and procedures.
  - ➢ Failure to comply with the patient responsibilities, as outlined in the University of Colorado School of Dental Medicine Patient Rights and Responsibilities, including non-payment, lack of contact, and extended delay of treatment.
  - ➢ Limited care patients who fail to complete endodontic therapy.
- Unreasonable and/or unrealistic treatment expectations, given the nature of the learning institution and limitations in providing care.
- Inappropriate patient behavior: violent, aggressive, abusive, disruptive, or persistently rude (verbal and/or physical) behavior by the patient directed towards providers, staff members, patients, or visitors.
- By patient request.

Recommendations for discontinuation from care or termination of eligibility for care will be addressed by the student's Practice Leader or the Program/Practice Director. **Patients cannot be discontinued without approval from the Practice Leader or the Program/Practice Director, and the discontinue letter must be signed by the Practice Leader or the Program/Practice Director**

PROCEDURE:

- Students/residents or staff members should initially discuss concerns with regards to patient discontinuation with the coordinator or clinic manager. The coordinator or clinic manager will review the issue and determine the appropriate course of action based on UCSDM guidelines for patient discontinuation.
- In some cases, the coordinator or clinic manager will draft a customized discontinue letter to the patient based on the documented reason(s) for discontinue stated in the policy in collaboration with the input of the student/resident provider. Other circumstances may warrant review by the student's Practice Leader or the Program/Practice Director before a letter is drafted.
- In addition to outlining the reason(s) for discontinuation, the discontinue letter shall include:
  - ➢ A statement of the reason for discontinuation.
  - ➢ The date the discontinuation becomes effective.
  - ➢ Definition of a grace period that will be allowed for the patient to find an alternative source for dental care. The option to continue a procedure that has been initiated and is at an irreversible point must be given, with stipulation as to the circumstances of care. It must be determined that the patient's dental/health care is not in immediate danger.
  - ➢ A statement that the patient's record is available with written authorization according to the UCSDM Records Release Policy.
- The final decision to discontinue a patient from the UCSDM will be made by the student's Practice Leader or the Program/Practice Director. Additional review or consultation with the Clinic Dean may be necessary.
- All letters regarding discontinuation should be approved and signed by the student's Practice Leader or the Program/Practice Director.
- Any final discontinue letter should be sent to the patient via certified mail.
- Documentation of the discontinuation must be recorded in the patient's treatment record, including the discontinue letter (to be stored in the attachments section of the chart), and the patient shall be marked "inactive."

GUIDELINES:

Lack of Patient compliance:

- Failed/missed appointments
  - ➢ The patient is notified after the 1st unexcused missed appointment that future unexcused missed appointments may be grounds for discontinue from the School of Dental Medicine.
  - ➢ The 2nd unexcused missed appointment will result in a discontinue letter.
  - ➢ In some circumstances, a patient may be "reinstated" after signing an agreement letter stating that there can be no more unexcused missed appointments.

- Refusal to follow and/or failure to comply with prescribed treatment protocols and procedures
  - ➢ The patient is notified verbally of UCSDM treatment protocols and procedures and a note is made in the patient's treatment notes with faculty approval.
  - ➢ If the refusal/failure to comply continues, the patient is sent a customized letter outlining the choice to continue care with the stipulation of adherence to UCSDM treatment protocols and procedures or the option to seek treatment elsewhere. The letter requests a response from the patient within a specified time period, normally 30 calendar days.
  - ➢ A final discontinue letter is sent if the patient indicates their choice to seek care elsewhere, for continued refusal/non-compliance, or if the patient does not respond to the previous letter within the requested timeframe.
- Failure to comply with the patient responsibilities
  - ➢ The patient is notified verbally of UCSDM patient responsibilities and a note is made in the patient's treatment notes with faculty approval
  - ➢ Certain non-compliance issues are addressed below.
    - ▪ <u>Non-payment:</u> The patient is placed on "financial hold" status when they fail to pay for dental procedure(s), and they are unable to schedule an appointment until the balance is paid. The patient is also sent a financial delay letter by the coordinator. After 120 days past due, the patient is sent to collections. At this point, the patient is sent a clinic letter stating they are discontinued for lack of payment, with the option to pay the balance and continue treatment with the provision they would be required to pay in advance for any future treatments.
    - ▪ <u>No contact:</u> After several documented attempts to contact the patient over a one-week period, the patient is sent a letter requesting a response within 30 calendar days of receipt of the letter. If there is no response within 30 calendar days, the patient is sent a discontinue letter with the option to be re-screened at a future date.
    - ▪ <u>Extended delay of treatment:</u> A patient may request a delay in treatment for various reasons. Upon request for delay, a patient is sent a letter explaining it will be their responsibility to inform their coordinator or provider if/when they are interested in continuing treatment. A follow up letter is sent four months later with option to continue treatment or be discontinued and re-screened at a future date. The letter requests a response from the patient within 30 calendar days. If there is no response from the patient after 30 calendar days, the patient is considered discontinued and this is recorded in the patient record.
  - ➢ For other non-compliance issues, the patient is sent a customized letter outlining the choice to continue care with the stipulation of adherence to UCSDM patient responsibilities or the option to seek treatment elsewhere. The letter should request a response from the patient within a specified time period, normally 30 calendar days.

> A final discontinue letter should be sent if the patient indicates their choice to seek care elsewhere, for continued refusal/non-compliance, or if the patient does not respond to the previous letter within the requested timeframe.

- Limited care patients who fail to complete endodontic therapy:
  > The consent for endodontic therapy treatment states a patient may be discontinued for failure to give 24-hours notice for cancellation of an appointment. If a patient misses one or two appointments, a letter is sent to the patient notifying the patient they have been discontinued from the program. The letter can also be used when several documented attempts have been made to contact the patient over a reasonable span of time.
  > The endodontic therapy code will be changed to reflect a pulpal debridement had been completed rather than the endodontic therapy.

Unreasonable and/or unrealistic treatment expectations:

> Should the patient express unreasonable/unrealistic treatment expectations during the course of treatment, attempts are made and documented to convey UCSDM policies and procedures that address the specific unreasonable/unrealistic patient expectations.
> If the issue persists, the patient is sent a letter outlining the choice to continue with care at UCSDM with the stipulation of adherence to UCSDM policies and procedures, or the option to seek treatment elsewhere, with a request for a response within a specified time period, normally 30 calendar days.
> A final discontinue letter is sent if the patient indicates their choice to seek care elsewhere, for continued unreasonable/unrealistic treatment expectations, or if the patient does not respond to the previous letter within the requested timeframe.

Discontinue for inappropriate patient behavior:

> If a patient exhibits inappropriate behavior towards the student/resident, faculty, staff, patients, or visitor(s), the patient can be dismissed from UCSDM. Notes of the behavior must be well documented in the patient's chart by all who witnessed or were directly involved.
>   - Inappropriate behavior is defined as violent, aggressive, abusive, disruptive, or persistently rude behavior (either verbal or physical).
> Depending on the severity of the patient's behavior, UCSDM may offer to complete previously initiated treatment that is at an irreversible point and agree not to initiate any further treatment for the patient. In a more severe case or if no treatment has been initiated, the patient may be directed to seek dental care elsewhere. If so, efforts must be made to assist the patient in seeking outside care. This decision should be made by the Clinic Dean.
> In some instances, the incident should also be reported using the Patient Safety Network.

Discontinue by patient request:

> ➢ The patient is sent a letter confirming their request to be discontinued from care at UCSDM.

4.7   Guidelines for Parents, Legal Guardians, Designated Representatives, Family Members, and Friends in the Dental Clinics

Title: Guidelines for Parents, Legal Guardians, Designated Representatives, Family
                        Members, and Friends in the Dental Clinics
Source: Office of Clinical Operations and Patient Advocacy
Effective Date: May 16, 2017

INTRODUCTION:

The School of Dental Medicine (SDM) recognizes that at times patients would like to have their friends, family members, legal guardian, designated representative, or caregiver accompany them into the dental clinic. However, for safety and privacy reasons of the patient and other patients, the School of Dental Medicine restricts access to the dental clinics to only those who are necessary for the safe provision of care or treatment.

PURPOSE:

The purpose of these guidelines is to explain the School's policy for parents, legal guardians, designated representatives, family members and friends who wish to accompany the patient into the dental clinics. The policy defines designated representatives who may accompany patients into the dental clinics and outlines typical situations where it may be necessary to have the patient's representative present in the dental clinics.

POLICY:

The SDM does not allow anyone other than patients in the dental clinics due to risk of injury, as well as to protect patient privacy and confidentiality, including the privacy and confidentiality of other patients in the vicinity. Parents, legal guardians, designated representatives, family members, and friends of the patient should wait in reception areas during patient visits. SDM does not allow minors who are accompanying patients to be in the dental clinics due to risk of injury. Minors must wait in the reception area and must be supervised by a responsible adult at all times.

Certain exceptions to this policy may apply for circumstances such as:
- Patients who need to be accompanied for a medical condition.
- Patients with a mental or physical disability, or other special needs.
- Patients with Limited English Proficiency needing interpretation or communication assistance (this cannot be provided by a minor).
- Patients who have requested a representative or surrogate decision maker per CMS §416.50 Q-0219 – Q-0222.

DEFINITIONS:

<u>Designated Representative:</u> A patient may designate a representative or surrogate in accordance with applicable State law to make health care decisions on his or her behalf or to otherwise assist the patient

during his or her treatment. Designation may be in writing, as in an advance directive or medical power of attorney, or may be oral (verbal). Written designation may occur before the patient presents to the School of Dental Medicine (SDM) or during the registration process. Oral designation may take place at any time during the patient's visit. The patient's representative or surrogate includes, but is not limited to, an individual who could be a family member or friend who accompanies the patient.

Depending on the designation the patient makes, the patient's representative or surrogate may make all health care decisions for the patient during his or her visit, or may act in a more limited role, for example, as a liaison between the patient and the SDM to help the patient communicate, understand, remember, and cope with the interactions that take place during the visit, and explain any instructions to the patient that are delivered by the staff. If a patient is unable to fully communicate directly with the staff, then the staff may give patient rights information to the patient's representative or surrogate.

REFERENCES:

(Centers for Medicare and Medicaid) CMS (*Rev. 137, 04.01.15*) §416.50 Q-0219 – Q-0222

ACCOUNTABILITY:

All faculty, staff, residents and students are responsible for following these guidelines, SDM requirements, federal and state requirements or statutes.

AUTHORITY:

The Institutional Quality Committee and the Sr. Associate Dean for Clinics and Professional Practice have the authority to enforce this policy.

REVIEW and APPROVAL:

The Clinic Managers Committee and the Sr. Associate Dean for Clinics and Professional Practice vet the SDM Guidelines for Parents, Legal Guardians, Designated Representatives, Family Members and Friends in the Dental Clinic. The SDM Operations Committee, Faculty Senate and SDM Executive Committee conduct final approval of the policy. This policy will be reviewed on an annual basis or sooner, as needed.

V.   CUDT Clinic Policies, Protocols and Guidelines

5.1   Competencies for the New General Dentist

COMPETENCIES FOR THE NEW DENTIST

The general dentist is competent to provide primary oral health care, with the assistance of dental specialists, allied dental professionals, and other health care providers. Practicing general dentistry requires that a general dentist is competent in the application of a complex set of behaviors and abilities to independently treat and manage the oral health needs of their patients.   The University of Colorado has Competency statements that are aligned with the ADEA Competencies for the New General Dentist, and have been formulated to describe, guide and evaluate the attainment of competency of UCSDM graduates to enter dental practice settings. The statements should be seen as dynamic rather than static.

The competencies include professional/practice competencies, as well as patient care competencies organized into six domains. The six domains are:

> 1) Critical Thinking,
> 2) Professionalism
> 3) Communication and Interpersonal Skills,
> 4) Health Promotion,
> 5) Practice Management and Informatics
> 6) Patient Care Assessment, Diagnosis and Treatment Planning.

These competencies apply to treatment or management of the child, adolescent, adult, geriatric, patient with special needs and medically compromised patient.

Definition of a General Dentist

"The general dentist is the primary oral health care provider, supported by dental specialists, allied dental professionals, and other health care providers. The general dentist will address health care issues beyond traditional oral health care and must be able to independently and collaboratively practice evidence-based comprehensive dentistry with the ultimate goal of improving the health of society. The general dentist must have a broad biomedical and clinical education and be able to demonstrate professional and ethical behavior as well as effective communication and interpersonal skills. In addition, he or she must have the ability to evaluate and utilize emerging technologies, continuing professional development opportunities, and problem-solving and critical thinking skills to effectively address current and future issues in health care." (ADEA Competencies for the New General Dentist, Journal of Dental Education ■ Volume 75, Number 7)

University of Colorado School of Dental Medicine Competency Statements

Critical Thinking
1. Evaluate and integrate emerging trends in health care
2. Utilize critical thinking to evaluate and integrate best research outcomes with clinical expertise and patient values for evidence-based practice.

Professionalism
3. Make professional decisions that satisfy legal, societal and ethical principles.
4. Use self-evaluative skills to assess individual knowledge and abilities, to practice within the scope of one's competence and make appropriate professional referrals, and to identify areas of deficiency to correct through lifelong learning.
5. Collaborate effectively with other health professionals to facilitate the provision of overall health care.

Communication and Interpersonal Skills
6. Apply appropriate interpersonal and communication skills to create a humanistic environment.
7. Communicate effectively with diverse patients and other health care providers to ensure appropriate, patient-centered patient treatment.

Health Promotion
8. Provide prevention, intervention and educational strategies.
9. Participate with dental team members and other health care professionals in the management and health promotion for all patients.
10. Recognize and appreciate the need to contribute to the improvement of oral health beyond those served in traditional practice settings.

Practice Management and Informatics
11. Evaluate and apply regulatory agency requirements for dental practices such as infection control, HIPAA and environmental and office safety programs
12. Apply principles of risk management including informed consent
13. Demonstrate effective business practices, financial management and human resource skills

Patient Care Assessment, Diagnosis and Treatment Planning
14. Perform an examination that collects biological, psychological, clinical, radiographic and other diagnostic/consultative information required to evaluate the health, oral conditions, needs, and expectations of patients of all ages.
15. Recognize, diagnose and interpret normal and abnormal conditions of the orofacial complex (to include oral cancer), occlusal and temporomandibular disease, craniofacial growth and development that require monitoring, treatment or management.
16. Develop, present and discuss individual sequenced treatment plans for patients of all ages consistent with patient's condition, interest, goals and capabilities.

Establishment and Maintenance of a Healthy Oral Environment Management of Emergency Situations

17. Anticipate, diagnose, and provide initial treatment and follow-up management for medical emergencies that may occur during dental treatment
18. Recognize and manage dental emergencies to include acute pain, hemorrhage, trauma, and infection of the orofacial complex

Control of Pain and Anxiety

19. Employ pharmacological agents and techniques to manage orofacial discomfort and psychological distress

Periodontal Therapy

20. Diagnose, treatment plan, comprehensively treat, and maintain patients with periodontal disease in the primary, mixed, and permanent dentitions

Endodontic Therapy

21. Diagnose and treat diseases of pulpal and periradicular origin in the primary, mixed, and permanent dentitions

Surgical and Non-Surgical Therapies

22. Diagnose and treat conditions requiring reparative surgical procedures and non-surgical therapies on the hard and oral soft tissues

Restorative/Prosthodontic Therapy

23. Provide single or multiple tooth restorations, with appropriate fixed or removable techniques, to restore anatomic form, function, and esthetics to patients of all ages.
24. Continually analyze the outcomes of patient treatment to improve patient care.

5.2   CUDT Team Structure

OVERVIEW

In 2012, the structure of the Comprehensive Care Program was reorganized into the CU Dental Teams to manage our increasing class size (80 DS students per year) and to enrich our International Student Program's (40 students per year) clinical experiences through further integration with the dental students.

The CUDT Team Structure consists of four "Teams", eight "Groups" and twenty-four "Practices" (three practices per group). Each practice has ten students and is run by one Comprehensive Care faculty member. There are eight Comprehensive Care Group Clinic Coordinators (staff members) each of which assist three practices (one Group) with patient management.

Ten dental students or international students enter a Practice at the start of their DS 2 / ISP 1 Spring Semester and stay with their Practice through graduation. This structure allows us to enhance communication with students and faculty through Team Meetings which occur twice in the Fall and Spring Semesters and once in the Summer Semester.

Also assigned to each Team are specialty faculty, periodontics residents, hygienists, and part-time faculty. This provides each student with a variety of disciplines to use as resources in the management of their patient pool and specific treatment plans.

TEAM LEADERS

One Practice Leader from each Team has been identified as the Team Leader. The Team Leader acts as the Comprehensive Patient Care Course Director and is responsible for the distribution of information regarding clinic rules and regulations to team members, assist with patient assignment in cooperation with the screening coordinator, submission of comprehensive care grades, monitoring the students' patient pools to assist in patient treatment needs, management of adverse treatment outcomes, team representation at Student Performance Committee meetings, assist in the development of remediation plans and is the overall evaluator of the student's attainment of clinical competency to be a general dentist.

PRACTICE LEADERS

A practice leader is the advocate for ten DS or ISP students. Dental students (DS) meet regularly with their assigned Practice Leader throughout their DS3 and DS4 years. International Student Program (ISP) students meet regularly with their assigned Practice Leader during their ISP1 and ISP2 years.

Based on the information provided, the Practice Leader and student will collaboratively determine the following:
- areas of strengths
- specific strategies to improve in a weakness area
- progression toward Domains of Competency Rubric

- how to address concerns, find solutions, discuss ways to increase confidence
- the appropriate and ethical management of the student's patient pool
- management of patient treatment status at all meetings

TEAM ASSIGNMENTS

Students are assigned to Teams alphabetically, and, once assigned, are not allowed to move out of their practice. If issues arise, the student, practice leader, and team leader will be responsible for resolving the problem without the notion of being able to move students from one practice, group, or team to another. If a situation cannot be resolved, the Team Leader should bring the issue to the Senior Associate Dean of Clinics and Professional Practice.

Faculty are assigned to Team and Practices based on need, and hiring contract identifying them as ISP or DS faculty.

Specialty Faculty are assigned by Division Chairs.

Graduate Periodontics Residents are assigned by the Program Director.

Hygienists are assigned by the Director of Undergraduate Periodontics.

Part-time faculty are assigned by the Senior Associate Dean of Clinics and Professional Practice.

EXAMPLE OF TEAM STRUCTURE

CU DENTAL TEAMS					
Spring 2015					
TEAM C					
Team Leader: Dr. James Woolum					
Endodontics: Dr. Ellie Carlson					
Prosthodontics: Dr. Alan Sutton					
Periodontics: Drs. Van Ginkle and Font					
Dental Hygienist: Trina Hoge					
Associates: Drs. Bloom, Brachvogel, and Hakala					
Periodontics Residents: Drs. Herman, and Datar					
Coordinator: Lyn Masche			Coordinator: Nancy Groswold		
Group 1			Group 2		
ISP 1 -	DS 3 - Dr. Elashvili	DS 4 - Dr. Baskaran	ISP 2 - Dr. Brown	DS 4 - Dr. Woolum	DS 3 - Dr. Doug Wilson
Student 1	Student 1	Student 1	Student 1	Student 1	Student 1
Student 2	Student 2	Student 2	Student 2	Student 2	Student 2
Student 3	Student 3	Student 3	Student 3	Student 3	Student 3
Student 4	Student 4	Student 4	Student 4	Student 4	Student 4
Student 5	Student 5	Student 5	Student 5	Student 5	Student 5
Student 6	Student 6	Student 6	Student 6	Student 6	Student 6
Student 7	Student 7	Student 7	Student 7	Student 7	Student 7
Student 8	Student 8	Student 8	Student 8	Student 8	Student 8
Student 9	Student 9	Student 9	Student 9	Student 9	Student 9
Student 10	Student 10	Student 10	Student 10	Student 10	Student 10

5.3   CUDT Clinic Schedule and Attendance

Dental students are scheduled into the patient care clinics jointly by the Offices of Academic Affairs (as published in the "academic course schedule") and Clinic Operations (as published in the "coverage" and "block" schedules). Clinic contact hours vary from term to term and even week to week throughout the student's four-year curriculum. Students have a combination of scheduled block rotations and general patient care clinical sessions to treat their assigned patients and other appointed patients.

ACADEMIC COURSE SCHEDULE:

Published by the Office of Academic Affairs and typically distributed to students one month prior to the start of each term. The schedule indicates when students are scheduled to be in a particular course or in the clinic. Students are encouraged to refer to the schedule online for any updates or changes in the academic schedule.

CLINIC COVERAGE SCHEDULE:

Published by Office of Clinical Operations and typically entered into axiUm one month prior to the start of each term. The schedule is developed to allow the students access to both Comprehensive Care and specialty faculty on a regular basis each week and throughout the term. The faculty coverage schedule ultimately establishes the clinic schedule.

- **Comprehensive Care vs. Specialty Availability** – Each session is staffed by a combination of Comprehensive Care and specialty faculty. Comprehensive Care faculty are available each session for multidisciplinary coverage. Specialty faculty from divisions are available throughout most weeks, and on a daily basis (unless educational programs remove them from clinic, i.e. endodontics lab).
- **Student:Faculty Ratio** – Most faculty have 6 openings each session that they are scheduled. There are exceptions to this (e.g., periodontal surgery is 1:2), and the number of students per faculty is indicated on the coverage page. Each faculty has a fixed number of students they may cover at any given time during the session. Exceptions in these coverage may only be authorized by the faculty themselves. To request additional coverage, students must follow the 7th Chair Request Protocol.
- **Schedule Changes** – Occasional changes in faculty coverage that occur throughout the term are noted on the master schedule in axiUm and communicated to students in this manner.

CLINIC BLOCK ROTATION SCHEDULES:

The schedules are published by the Office of Clinical Operations and are typically distributed to students one month prior to the start of each term. Block rotations are mandatory and students may not appoint or treat any patients in the general patient care clinic when they are scheduled on a block rotation, regardless of whether the student has been dismissed from the block rotation, except as noted. Covering general clinic faculty have the discretion to allow students, who have been released from a block rotation, to see their patients in the general clinic, if space is available, and there are extenuating circumstances that make it in the best interest of the patient to be seen at that time.

Rotation Trade Agreements

Students are not allowed to trade or switch their block assignments without prior approval and completion of the *Block Schedule Trade Agreement.* Students may only trade a rotation for the same rotation (i.e. Oral Surgery for Oral Surgery) and may not trade different rotations (i.e. On-Call for Oral Surgery). Trades must also be completed within the same semester, unless otherwise approved by the Director of Clinical Operations.

It is intended that each student has the same number of contact sessions for each block rotation. However, it is typical that there is a slight variance due to such issues as class size and holidays. Depending on the block, there may be a great deal of variation as to the timing of each student's participation in a block, but the ultimate session count will be relatively equal at the end of all rotations. Program Directors for each block rotation reserve the right to schedule additional time for students for a variety of reasons, most significantly to give the student opportunities to develop and demonstrate competency within the discipline.

CLINICAL ATTENDANCE:

Students are required to attend all scheduled clinical sessions, with exceptions as noted below. Clinic attendance is dictated by the Comprehensive Care Syllabus. Students should treat their own patients or co-assigned patients when a scheduled in the main clinic as an operator.

6. Attendance Monitoring - Clinic attendance is monitored through axiUm. Every patient encounter must be documented by the generation of an entry in axiUm, regardless of whether there is a fee associated with the patient visit. For those clinic experiences that do not involve direct patient care (e.g., clinical assisting), the student is responsible to sign in with their coordinator in order to get credit for the clinic session.

   If a patient cancels, fails an appointment, or a student does not have a patient scheduled, the student must check-in with the Clinic Coordinator and sign-in. This must be done for both clinic sessions.

7. Alternative Clinical Activities - In the event that the student is unable to schedule their patient, has an unanticipated open appointment, or if the scheduled patient cancels their appointment at the last minute or fails the appointment, the student will be required to responsible to sign in with their coordinator for assignments as indicated, with priority as determined by group coordinators and/or faculty:
   1. Treat patients scheduled by coordinators or front desk staff for an "On-Call" appointment (patients of record in need of "emergency" care).
   2. Emergency Clinic
   3. Oral Surgery Clinic
   4. Special Care Clinic
   5. Adolescent Dental Care Clinic
   6. Periodontal Surgery Assist
   7. Screening
   8. Heroes Clinic
   9. General Practice Residency

10. Dental Faculty Practice
11. Dental Assisting
12. Record Audit and Quality Case Review
13. Simulation Clinic Exercise

Students will be given clinical attendance credit only for the above listed areas. In the event that all of the above areas do not require student participation, the student may be directed to pursue other activities (i.e. lab work, chart or practice organization, study, etc.). However, students are expected to remain available via page throughout the session, unless otherwise directed by practice faculty or coordinator.

Excused Absences - In order to allow for personal leave, students will be allowed up to sixteen sessions (8 days) of excused absences per academic year which may be either pre-arranged or approved as noted above on the same day.

Per the Student Handbook
"**Personal leave -** Approved personal leave is defined as time allotted for externships, observance of religious holidays, interviewing for residency programs, and continuing education at approved professional meetings in conjunction with the educational objectives of the program (such as the RMDC, Specialty meetings, etc). Approval is based on merit relative to the student's professional development. Each student/resident is allowed 8 working days per year of approved personal leave. Approved personal leave must be scheduled in advance, should be considered in the context of conflicting with patient care responsibilities, and cannot accrue from one year to the next. Personal leave time cannot interfere with scheduled rotation assignments or scheduled examinations.

Vacation leave – Students and residents will have the following vacation days
> • Labor Day
> • Thanksgiving Day and Friday after
> • Christmas Eve
> • Christmas Day
> • New Year's Day
> • Martin Luther King Day
> • President's Day
> • Memorial Day
> • Independence Day
> • Clinic Closure Days – Specifically designated by Appropriate Clinic Administrator or Program Director.
> Note: On-call responsibilities will be assigned to specific residents and students to cover the patient care needs of the School of Dental Medicine's patients of records and urgent care patients

Attendance Requirements For Clinic
100% attendance to all assigned clinical sessions is expected. If no patient is scheduled or a patient fails an appointment you must check with patient care coordinators and be available to see emergency patients, walk-in patients, assist, or staff emergency clinic or oral surgery clinic.

Unexcused Absences - Failure to attend clinic will result in an "unexcused absence." Unexcused absences will negatively affect the student's patient care clinic grade, and may be grounds for loss of clinic privileges.

Coordination and Enforcement - The Office of Clinic Operations will coordinate and enforce this policy, with assistance of group coordinators and faculty.

💡 School of Dental Medicine
UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

BLOCK SCHEDULE TRADE AGREEMENT
For Clinic or Specialty Rotation

All trades must be within the same block rotation and must be within the same semester

The following students have agreed to trade (switch) scheduled Block Rotations:

_____ has agreed to take _____
        (Student 1)   (Student 2)

scheduled block rotation in _____ on _____
                             (Clinic/Rotation)   (Date)

_____ has agreed to take _____
        (Student 2)   (Student 1)

scheduled block rotation in _____ on _____
                             (Clinic/Rotation)   (Date)

Both students understand that if one of them does not fulfill (misses their agreed upon time & date trade) their part of this agreement, they will <u>**BOTH**</u> receive an unexcused absence for that AM/PM session and whatever procedure is done by both during that missed time will not count towards threshold requirements or as a competency (DCA of 0).

Signatures:
Student 1 (printed and signed)_____/_____
Student 2 (printed and signed)_____/_____

Approval by Faculty/Staff (for rotations, see below)_____

Student 1 coordinator (signature) _____
Student 2 coordinator (signature)_____

Trading Rotations:
- Two weeks prior notice is required
- Faculty/Staff approval is required for the following:
    - Special Care must be approved by Joann LeClaire
    - EM/EM Assist must be approved by Dr. Preston
    - OS/OS Assist must be approved by Annette Wand
    - Heroes Clinic must be approved by Heidi Tyrrell
    - ADC must be approved by Dr. Mediavilla
    - Screening and Limited Needs must be approved by Pam Moore
    - Endo On-Call must be approved by Dr. Thomason

5.4   CUDT Clinical Rotations

OVERVIEW

As part of the clinical education experience, students are assigned to various rotations starting in the summer semester (DS 2 / ISP 1) and continue until graduation. Rotations will be assigned through CalendarLab, a computer software designed specifically for dental school rotation schedules.

The CUDT Scheduler will be responsible for ensuring that students are assigned to relatively the same number of applicable rotations each semester. As a student progresses in his/her clinical education, additional rotations will be added. New rotations can be added at any time depending on student needs, patient needs, changes in clinical protocols, and funding sources, among other reasons.

ROTATIONS

Screening – The CU School of Dental Medicine has a school-wide screening clinic staffed by DS and ISP students beginning in the summer semester DS 2 and ISP 1 years through graduation. The purpose of the Screening clinic is to ensure an adequate number of new patients are being accepted into the School. If patients are deemed too complex for the pre-doctoral students, patients may be referred to the GPR program.

- Report to: Pam Moore
- Location: Third Floor Futures Clinic
- Days: Monday – Thursday
- Time: AM Session: 9:00 – 12:00
                 PM Session: 2:00 – 5:00

Screening/Radiology – The Screening/Radiology rotation's purpose is to allow students more experience in radiology earlier in the clinical education. DS 2 and ISP 1 students will be assigned to a Screening/Radiology rotation in conjuncture with Screening Clinic during the summer semester and fall semesters (DS 3/ISP1).

- Report to: Abby Jaquez, Lana Shulgina, or Dana Phillips
- Location: Third Floor Futures Clinic
- Days: Monday – Thursday
- Time: AM Session: 9:00 – 12:00
                 PM Session: 2:00 – 5:00

EM/OS Assist (Emergency/Oral Surgery Assist) – Each student must complete two EM/OS Assist rotations prior to be assigned as an operator in these two clinics, as well as the Oral Surgery Practicum. Rotations begin in the summer semester DS 2/ISP 1 year, and will continue into the fall semester until all students complete two sessions.

- Report to: Annette Wand
- Location: First Floor Specialties Clinic
- Days: Monday – Friday
- Time: AM Session: 9:00 – 12:00
                 PM Session: 2:00 – 5:00

Assist – As part of the initial clinical learning experience, students will be assigned assist sessions when they enter the clinic in the DS 2 and ISP summer semester. In this role, the student assigned to "assist" show first work with the partner they have had through their pre-clinical curriculum. If that student is unavailable, the assistant should then try to work with a group member, team member, or an upper classman. Assist sessions will be scheduled in the DS 3/ISP 1 fall semester and DS 3/ISP 2 spring semester as necessary. As per the 7 Day Rule, the assist non-clinic time will be removed 7 days prior to that clinic session in order for students to request operator sessions. However, if a chair is not approved, the session reverts back to being an assist session.

- Report to: Clinic
- Location: Second or Fourth Floor (depending on partners assigned chair)
- Days: Varies depending on clinic schedule
- Time: AM Session: 9:00 – 12:00
                 PM Session: 2:00 – 5:00

EM (Emergency) – Beginning in the fall semester of their DS 3 / ISP 1 year, students will be assigned as operators in the Emergency Clinic after completion of two sessions EM/OS Assist sessions and will be assigned each semester until graduation. The Emergency Clinic provides dental services to individuals in the community who may otherwise not have access to care. Patients of records should seek emergency services through our On-Call rotation.

- Report to: Gina Sanchez
- Location: First Floor Specialties Clinic
- Days: Monday – Friday
- Time: AM Session: 9:00 – 12:00
                 PM Session 2:00 – 5:00

OS (Oral Surgery) – Beginning in the fall semester of their DS 3 / ISP 1 year, students will be assigned as operators in the Oral Surgery Clinic once they have completed two sessions of EM/OS Assist and passed their OS Practicum. Students will be assigned to this clinic each semester until graduation.

- Report to: Annette Wand
- Location: First Floor Advanced Care Specialties Clinic
- Days: Monday – Friday
- Time: AM Session: 9:00 – 12:00
                 PM Session 2:00 – 5:00

On-Call – patients of record are provided emergency services through the On-Call rotation. During these sessions, students will be treating other student's patients for emergency procedures and should not consider this rotation as an opportunity to bring their own patients in for regular treatment procedures. On-Call rotations begin in the fall semester of the student's DS 3/ISP 1 year and assignments continue each semester until graduation.

- Report to: CUDT Clinic Coordinators/Covering Faculty
- Location: Second Floor CUDT East Clinic
- Days: Monday – Friday (depending on didactic schedule)
- Time: AM Session: 9:00 – 12:00
                 PM Session 2:00 – 5:00

Perio Assist – To provide experience with periodontics surgeries, students are assigned to the Graduate Periodontics Clinic to assist with periodontal surgeries being performed by the residents. This rotation begins in the fall semester of the student's DS 3/ISP 1 year and ends in the summer semester DS 3/ISP 2 year.

- Report to: Dorothy Carpenter
- Location: First Floor Advanced Care Specialties Clinic
- Days: Varies (see clinic schedule for assignments)
- Time: AM Session 9:00 – 12:00
                 PM Session 1:00 – 5:00

Healthy Smiles – As an important part of the dental curriculum, pediatric dentistry experience is gained through assignment to the Healthy Smiles Clinic housed at Children's Hospital Colorado. DS 3 students are assigned to the Healthy Smiles rotation for a three-week period in the fall and spring semesters until all students have completed one, three-week rotation. ISP 2 students are assigned to Healthy Smiles starting at the end of the spring semester through the summer semester. Students will be contacted by Angela Villarosa prior to the start of the rotation to schedule badging and drug testing appointments.

- Report to: Angela Villarosa
- Location: Children's Hospital Colorado, Healthy Smiles Clinic
- Days: Monday – Friday (depending on didactic schedule)
- Time: AM Session: 8:00 – 12:00
                 PM Session 1:00 – 5:00

Endo On-Call – To ensure the availability of endodontic treatment for patients being seen in the Emergency Clinic, and to provide students with opportunities to being/complete endodontic procedures, one student per session is assigned to the Endo On-Call rotation starting in the fall semester DS 3/ISP 1 through the summer semester DS 3/ ISP 2.

- Report to: Covering Faculty
- Location: Second Floor CUDT West Clinic
- Days: Monday – Friday (assignments depend on didactic schedule)
- Time: AM Session: 9:00 – 12:00
                 PM Session 2:00 – 5:00

Special Care Clinic – It is imperative that student gain experience in treating patients with special needs. During the DS 3 and ISP 2 spring and summer semesters, and the DS 4 and ISP 2 fall semester, students will be assigned to the Special Care Clinic.

- Report to: Ms. JoAnn LeClaire
- Location: First Floor Advanced Care Specialties Clinic
- Days: Monday afternoons, Friday afternoons
- Time: AM Session: 9:00 – 12:00
                 PM Session 2:00 – 5:00

Ortho Assist – as part of the Ortho 3 course requirement, students are assigned to three Ortho Assist rotations in their DS 3 spring semester.

- Report to: Dr. Craig Shellhart/Ms. Hope Hart
- Location: Third Floor Orthodontics Clinic
- Days: Monday – Friday (depending on ortho didactic schedule)
- Time: AM Session: 8:30 – 12:00
                 PM Session 1:30 – 5:00

Adolescent Dental Care (ADC) – To address the gap of access to care between pediatric dentistry and general dentistry for adults, the Adolescent Dental Clinic was established provide dental care for adolescents.

- Report to: Dr. Rick Mediavilla
- Location: Third Floor Futures Clinic
- Days: Varies per semester
- Time: AM Session: 9:00 – 12:00
                 PM Session 2:00 – 5:00

Heroes Clinic – To better serve unique populations, the School of Dental Medicine established the Heroes Clinic to provide dental care to military veterans enrolled at the CU Downtown or Anschutz Medical Campus. DS 4 and ISP 2 students will be assigned to the Heroes rotation.

- Report to: Ms. Heidi Tyrrell
- Location: Third Floor Futures Clinic
- Days: Monday, Thursday AM, Friday
- Time: AM Session: 9:00 – 12:00
                PM Session 2:00 – 5:00

ACTS – The Advanced Clinical Training and Service rotation provides students with clinical experiences in underserved areas through service at Community Health Centers throughout Colorado. Starting in the summer semester of the DS 3 year, students who have been approved by the Competency Review Board will spend approximately 50% of the next three semesters assigned to off-site locations supervised by volunteer faculty (preceptors).   Clinical assignments are made by Dr. Rob Berg. Dr. Berg reserves the right to remove any student from ACTS if feedback from preceptors indicate the student's skills, abilities, and/or professional behavior are not acceptable.

IPE – as part of the inter-professional education curriculum, students are assigned to an IPE rotation as a DS 3 and ISP 1 student. Information regarding this rotation will come from Ms. Diane Brunson.

CAPE – as part of the community dentistry education curriculum, students are assigned to rotations in the CAPE simulation clinic. Information regarding this rotation will come from Dr. Rob Berg.

5.5   CUDT Appointment Protocols

Appointment Requests

Appointment requests can be made several ways within axiUm: using the "Personal Planner" module, within the "Scheduler" module, or directly from a planned treatment in the patient's chart. The process for making a new treatment appointment request is described below. CUDT Administrative Staff will fill requests from within the "Scheduler" module of axiUm.

Appointment Request Guidelines

1. Patient appointment requests will be honored based on availability of chairs and faculty coverage.
2. For multiple-appointment procedures, patients should be scheduled with previous covering faculty if possible, to allow for continuity of care.
3. From time to time, administrative staff may need to move the student's patient appointment to alternate faculty coverage. If a particular faculty member is needed, this should be made clear in the request.
4. Specific chairs will be assigned when the administrative staff fills the appointment request. Students need to confirm that the request is filled as needed before confirming the appointment with the patient.

Student Responsibility:

1. Students must coordinate the timely scheduling of their assigned patient practice consistent with the patient's needs, availability, and with the phase and sequence of the treatment plan.
2. Students should make the next appointment request while their patients are still in the chair, at the end of each session of treatment. Patients should not leave the School without their next appointment requested.
3. Students must be available to treat patients and to check with their Clinic Care Coordinator any time they are scheduled in patient care clinic, regardless of whether they have open or scheduled time. Students are required to sign in with their coordinator per the following protocol attached.
4. Students with open appointment times may have patients appointed for them by the staff at any time. (See Section 2.7: Student Responsibility, Comprehensive Care Group Patients.)

Steps for Appointment Requests in axiUm:

1. Open the "Personal Planner" module (icon: green book, left of screen) and select the "Appointments" tab.
2. Click "Add New Record" button (icon: folder with green "+").
3. Select a patient from the list in the right-hand column, or type the patient's name in the search box at the top of the window. The patient's name will appear in the list at the right. Double-click the patient's name to open the "New Appointment Request" window.

4. In the "New Appointment Request" window, provide the information requested, including date, session, time, location, specific faculty member (if appropriate), length of appointment, discipline of covering faculty member.
5. From the "Treatment Plan" tab, select from the list of approved procedures (in the left-hand pane) the procedure(s) to be done at the appointment. WITHOUT THIS INFORMATION, appointment requests will not be honored. Double-click or use the arrow to move the selected procedure(s) to the right-hand pane.
6. Once all procedures have been selected, close the window. The procedures will appear in the start-check window when your patient is seated.
7. From the "New Appointment Request" window, accept the appointment. The request will be available to the Patient Care Coordinator, and will be filled in the order received.

Deleting an Appointment Request in axiUm:

1. If a patient is unable to keep a scheduled appointment, and the student is unable to fill that appointment with another patient appropriate to the coverage, the student will request for their coordinator to delete or cancel the appointment.
2. The student should contact the clinic care coordinator in person or by email and provide the following information:
   a. Name of the patient
   b. Date and time of the appointment
   c. Reason for appointment cancellation (see Cancelled Appointment Reasons document)

The following table is intended as a general guide to help students and staff schedule patients under the most appropriate faculty coverage. It is NOT intended to dictate to faculty the scope of coverage that they may or may not choose to provide. Many faculty members are qualified and willing to cover students in procedures that are not indicated in this template (e.g., a "restorative" faculty member may choose to cover a student for perio prophy, emergency endodontic access and/or diagnosis). On occasion, faculty members, although qualified to perform a procedure themselves, may not choose to do so.

5.6   Protocol for Requesting a 7th Chair in Special Circumstances

Protocol for Requesting a 7th Chair in Special Circumstances

Faculty are limited to covering 6 chairs in order to ensure each student has adequate attention during the clinic session; in cases of a patient urgencies only, students may request for a faculty to cover a 7th chair.

Patient urgencies are defined as:
- The patient has discomfort, pain
- There will be a significant delay or complication of care if the patient is not seen in a timely manner (and the student has no other appointment options)
- Appointment that has an urgency (i.e. denture recently delivered has broken)

Urgencies are not defined as:
- No chair is available for routine care
- Student needs to do a competency

The following is the protocol for requesting faculty coverage of a 7th chair:

1. Email the faculty to request coverage of a 7th chair
2. Once the student has received an approval from the faculty via email, they should forward the approval email to the SDM scheduler at krista.larsen@ucdenver.edu with the following information:
   a. Name and DOB of the patient
   b. Date and time of the appointment
   c. Procedure code
   d. Clinic where the faculty is covering
3. The request will be processed based on:
   a. The student's availability as an operator
   b. The chair availability
4. The student should not count on having the chair until they receive a response from Krista Larsen.

Coordinators no longer add 7th chairs for students, and the 7th day assisting rules do apply to this process.

5.7   7 Day Assist Rule and On-Call Chairs

Protocol for Scheduling when Assigned to be Assistant "7 Day Assist Rule" or On-Call

In the past there has been a lot of confusion surrounding the appropriate timeframe to schedule a patient when you are assigned to "assist" or "on---call" for a clinic session, so the following is clarification:

Assist
- If you are scheduled to be an assistant for a clinic session, you are allowed to request a chair seven days (not business days) in advance of your assist session. Your Non-Clinic Time "Assist" will be removed at 6:00 am seven days prior to the assist session. At this time, students will be able to request chairs through the appointment request process.

On-Call
- If you are scheduled to be on-call, you may NOT schedule a patient. These chairs are to remain available for patients who need to come in for urgent dental care.
- There are rare occasions where we need to use on-call chairs to accommodate a patient with certain issues/needs, but these cases are few and far between and must be approved by Emily Reddick or Dr. Johnson.

VI. Finance

6.1   Payment Policy and Insurance Guidelines

SUBJECT: Payment Policy and Insurance Guidelines

PURPOSE: To provide students, residents, faculty and staff with an outline of the CU School of Dental Medicine's payment policies to facilitate financial discussions with patients prior to the start of treatment.

OVERVIEW:

The Patient Accounting Office provides patient accounting services for the clinics in the School of Dental Medicine. This includes taking payments and providing a receipt of the payment to the patient, verifying charges and posting payments and adjustments to patient accounts. Billing of insurance and other third parties payors. Answering any questions that may arise with individual patient accounts and the School's payment policies.

Students, residents, and faculty **must walk** their patient to the window and wait with the patient until the transaction is complete in case the patient or finance people have any questions.

PAYMENT POLICY:

The policy of the School of Dental Medicine is "Payment is due when services are rendered."
The patient is responsible for paying for all dental treatment rendered regardless of insurance coverage. The Payment Office gladly accepts Cash, Checks, Visa, MasterCard, Discover and American Express.

Please note also that per the rules and regulations of the University, we cannot cash or give change back on checks.

Collection of personal data from customers (patients) of the University (School of Dental Medicine).
Required personal data includes:
1. Individual's legal name
2. Social Security Number
3. Permanent address
4. Date of birth

A patient may request an exemption from providing his/her Social Security Number by paying for the requested services **in full** prior to receiving any part of the service.

Fixed and Removable Prosthodontics – The policy for fixed and removable procedures is as follows: the first half of the total charge is **due prior** to the start of a procedure and the second half or remainder is **due prior** to patient being seated for the completion of the procedure. Upon receipt of the first half payment, this office will distribute a gold or pink card which allows the dispensing of gold or teeth respectively from the lab.

Discounts, Board Exams and Allowances

All of the discounts or allowances with the exception of the student discount must be approved by designated faculty member group only and shall follow the appropriate guidelines illustrated below. Research costs for supplies and services will be covered in the clinical overhead rate and expensed to the appropriate grant as direct charges.

Student Discount

A. For all services to students, preventative services will be provided at "no charge" all other services the charge will be sufficient to cover overhead expenses as determined by supervising faculty, not to exceed 50% of the current UCSDM fee.
B. Orthodontics services are provided to the SDM student at a 50% discount from commencement of service until end of the treatment plan.
C. Friends and relatives of School of Dental Medicine staff, faculty, and students should not be provided care at discounted rates. This is not allowed per State and University policy.

Board Exams

Perio Mock Boards or "Regional Boards" are limited to specific examination dates. The division which is conducting the clinical examination has the discretion to implement clinical examination discounts within the limits set forth in this policy. The division must inform the Senior Associate Dean for Clinics and Professional Practice and the Dean of Financial Affairs by written memorandum as to the amount and type of clinical examination discount to be considered.

Quality/Risk Management Discounts

On occasion, there is a need to modify a treatment fee related to the School's Quality or Risk Management Plans (i.e., remake a crown or resolve a patient conflict). All discounts and waivers recommended by covering faculty in all UCSDM Clinical Programs must be presented to the designated faculty members of the School of Dental Medicine. Currently these Faculty members are Dr. Johnson, Dr. Wilson, Dr. Towne, Dr. Powell and Dr. Skoretz. Fee adjustments in the Faculty Practice should be presented to and approved by the appropriate Director.

All fee adjustment forms can be found in axiUm and routed to the approving faculty and once approved will automatically be routed to patient accounting for processing.

COLLECTIONS AND LOCKED CHARTS:

Financial holds will be placed on patient accounts when services rendered are not paid on date of service and no 3rd party billing is to be done.

At 120 days of non-payment, an account is considered very delinquent and will be sent to the state collection agency. Typically, patients who reach this point will not be reinstated for additional care at UCSDM, regardless of whether or not they pay their amount due. A letter will be sent to the patient stating that the account will be turned over to our collection agency unless it is paid in full within the

first 20 days of the month and that they have been referred out of our program.   The chart will be locked in axiUm for all patients that are in a collection status. All patient charts are automatically locked by the clinic computer system when the account balance reaches 120-days delinquent. Any further dental care should not be rendered until the account balance is paid. When a chart is locked, a student is unable to access the patient in the computer system.

INSURANCE:

The School of Dental Medicine accepts most dental insurance carriers except Medicare and HMO/DMO plans unless the School of Dental Medicine is specifically stated as a provider of those plans. We do not participate in many DMO or HMO plans, so please verify with your patients because benefits will not be available to them if they receive treatment at the School.
PLEASE NOTE: The patient is responsible for full payment of all services rendered regardless of insurance coverage.

Insurance Forms

If your patient has dental insurance, they are responsible to present their insurance card and insurance billing information. The payment office will give the patient a "Patient Insurance Information Sheet" to fill out so we can properly enter the insurance information accurately into the clinic computer system. Until the patient accounting office has received your patient's insurance information, the patient shall be considered as self-pay for all procedures and no insurance will be submitted. Forms are generated through the computer system, axiUm.

It is highly recommended that comprehensive treatment plans be presented to the patient accounting office staff for preauthorization of benefits from their insurance carrier.

Preauthorization

Some insurance plans require preauthorization for treatment that totals $200.00 or greater. A preauthorization will be sent from the Insurance Company to the patient and the School of Dental Medicine detailing the benefits or non-benefit of the patient's coverage. Students should check with the Patient Accounting Office to determine if procedures like radiographs and preventive services can be performed prior to the return of the preauthorization. Once the payment office has received preauthorization's back from insurance carriers, a pop up note will be added to the patient's record to inform you of the dental benefits.

MEDICAID:

The School of Dental Medicine accept Medicaid patients. Medicaid eligibility must be verified prior to any care being rendered. This is per state and federal regulations of the Medicaid program. There are various Medicaid programs that have specific eligibility requirements. Please work with the patient accounting office staff on any patient that may have Medicaid.   The student must verify at each appointment that the patient's Medicaid eligibility is current. **Certain procedures must be preauthorized prior to rendering treatment** while other procedures do not need authorization. Since

these are too numerous to list, students should contact the Patient Accounting Office if they have a Medicaid patient to determine the need for preauthorization.

NOTE: The Affordable Care Act includes a dental benefit for adults. Please check with the Patient Accounting Office for the most up-to-date information regarding this benefit within the Medicaid program.

NOTE: Preauthorizations are required for many Medicaid covered benefits. Preauthorizations must be acquired prior to starting any treatment. Students and residents who being treatment on patients without preauthorizations could be brought before the Student Performance Committee.

GOLD/DENTURE CARDS FOR LABWORK:

A gold or pink card is required prior to obtaining the required lab work. As previously stated, any fixed or removable procedure requires half payment to start the procedure and the second half payment upon completion. In order to obtain a gold or pink card any outstanding balance for services rendered in addition to the first half of the specific fixed or removable procedure will need to be paid. The Patient Accounting Office will issue either a gold or pink card which allows students and lab staff to proceed with sending the case to the lab for fabrication.

The gold or pink card needs to be given to the dental lab personnel. If you have any questions, please talk with the staff in the Patient Accounting Office.

PATIENT INSURANCE INFORMATION:

The University of Colorado School of Dental Medicine wishes to work with our patients to maximally utilize their dental insurance benefits. Dental insurance is a benefit for the patient provided by a third party, not the School. Although the School will assist the patient by providing information, **it is the patient's responsibility to know their insurance coverage and resolve any conflicts.** The following information is provided to our patients to assist them in identifying potential roadblocks and pitfalls in utilizing their insurance.

I. KNOW YOUR INSURANCE COVERAGE: It is the patient's responsibility to comply with the requirements of their insurance coverage. The School is willing to provide guidance as to general coverage issues when requested, but **accepts no liability for information provided by its students, faculty or employees regarding insurance. The patient is solely responsible to determine the specific requirements of their plan by consulting with the insurance carrier, employer or other parties.** Some typical considerations include, but are not limited to:

A. Preferred Providers: If your plan requires that you go to specific dental providers (i.e., "preferred providers," "PPO," "DMO," etc.), you must check with your insurance company directly to confirm if the School of Dental Medicine is an approved provider. Currently, the School is **not** A PREFERRED PROVIDER FOR MOST INSURANCE PROGRAMS. **The School does not take responsibility to make this determination.**

B. Prior Authorization or pre-determination of Benefits: Some Insurance Plans require that patients notify the insurance carrier prior to the start of treatment, or risk losing benefits that would

otherwise have been provided ("Prior Authorization"). Additionally, it is highly recommended that the patient confirm coverage in writing from the insurance carrier ("pre-determination"), especially if the patient decides to have treatment primarily based on coverage by their insurance. **The School does not take responsibility to submit these documents to the insurance carrier.**

C. Date of Coverage: The School of Dental Medicine submits treatment to the insurance carrier with the date when the treatment is completed. Other issues related to timing of treatment include annual deductibles; maximum annual benefit amounts; and new, discontinued or changed insurance plans. **It is the patient's responsibility to determine how their plan determines these and other issues related to how and when coverage applies.**
Please note that the School will work with the patient to maximize their benefits by coordinating timing of treatment. However, due to the sometimes unpredictable nature of dental treatment and the unique nature of the educational program, the School cannot assure the patient that treatment will either start or be completed by a specific date.

II. **INSURANCE FORMS:** The School will assist the patient by providing information necessary to file for benefits, pre-determination and/or prior authorization benefits. The School will also send the insurance forms in for the patient at the request of the patient. However, **it is the patient's responsibility to follow up if the insurance company fails to process the form in a timely manner or loses the form.**

6.2   Clinic Fees Policy

Title: Clinic Fee Policy
Source: SDM Office of Finance Affairs
Effective Date: January 1, 2008, Revised November 20, 2014

OVERVIEW:

As part of the University of Colorado, the School of Dental Medicine must adhere to University, State and Federal financial policies. As a clinical enterprise within the University, the School of Dental Medicine must ensure that clinic revenues are at a level that supports its mission and vision, along with its educational and financial goals.

Annually, the School's clinic fees are reviewed by a subcommittee of the School of Dental Medicine's Finance Committee and any recommendations for change are brought to the Associate Dean of Finance and Budget, the Sr. Associate Dean for Clinics and Professional Practice, and the Dean for approval.

PURPOSE:

To provide faculty, students/residents, and staff with an understanding of the School's financial policies and fee adjustments.

POLICY:

The School of Dental Medicine student and resident clinics are fee-for-service clinics; offering quality dentistry at lower than private practice fees. The Faculty Practice fees are competitive for state-of-the-art care provided by faculty members of the School.

It is the policy of the School of Dental Medicine to adhere to its fee schedule in all clinics of the School of Dental Medicine, and discounts will not be offered to University of Colorado employees, family members and friends. Fee adjustments cannot be used as an alternative mechanism to achieve an employee discount. Fee adjustments are intended to address legitimate patient complaints or quality of care issues and are not intended to be used as an alternative mechanism to achieve an employee or professional discount.

All services and procedures must be recorded accurately in the School's information systems and in no instance will a procedure/service be mischaracterized for the purpose of billing a lower cost procedure/service than what was actually provided.   If billings do not match progress notes for treatment, disciplinary action will be considered.

Fee Change Requests: all requests to change specific fees within a program (i.e. raise crowns $75 in GPR; lower endo $50 in DS/IPS) must go through the Finance Committee, with final approval by the Dean and Associate Dean of Finance and Budget.

6.3 Patient Financial Information and Responsibility Brochure

Patient Financial Information and Responsibility Brochures are located at the Front Desk of each clinical area and at the Information Desk on the first Floor. Faculty, students, and staff should ensure that all patients are aware of their financial responsibilities. The School of Dental Medicine is a fee-for-service clinical institution. For additional financial policies, please refer to Sections 6.1 and 6.2 of this manual.

Insurance

The University of Colorado School of Dental Medicine is a Delta Dental of Colorado in-network provider. We do accept other forms of dental insurance as an out-of-network provider. We do accept medical insurance (different from dental insurance) in rare cases. Please check with our staff for more information.

We are Medicaid dental providers. However we are not Medicare providers.

If you have any questions regarding insurance, we encourage you to go to one of our many cashier windows and speak with one of our staff.

PAYMENT
We accept cash, checks (with ID), debit cards and credit cards. We currently do not accept "Citi Health Care Citi Cards" or "CareCredit" cards.

School of Dental Medicine Dental Clinics

Floor 1
Advanced Dental Clinic
- General Practice Residency
- Graduate Periodontics Clinic
- Radiology
- Surgery
Special Care Clinic
Urgent Care

Floor 1 – North End
Faculty Practice

Floor 2
Dental Team Care (Student Clinic)

Floor 3
Futures/Adolescent Clinic
Orthodontics Clinic

Floor 4
Dental Team Care (Student Clinic)

Off-Site
Children's Hospital Colorado's Healthy Smiles Clinic

Hours of Operation and Contact
Monday – Friday | 8am – 5pm
(303) 724-6900
www.cudental.com

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Patient Financial Information and Responsibility Brochure

13065 E. 17th Avenue
Aurora, CO 80045
(303) 724-6900
www.cudental.com

CU School of Dental Medicine

UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**
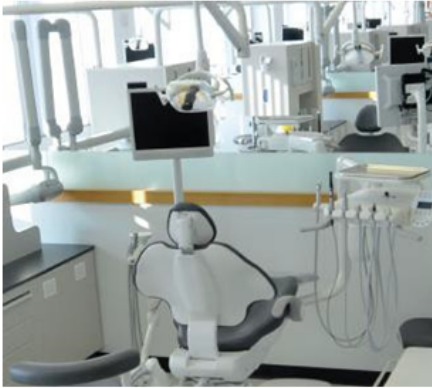
"We have a financial responsibility to our patients. It's imperative we give our patients treatment as well as financial information so that they can make informed decisions about their dental care."

- B. Davis, Associate Dean

Patient Financial Information

Payment…

- Payment in full is expected on the day of treatment, unless otherwise noted. Please be prepared to pay when you arrive.
- The school does not provide payment plans except for Orthodontic care.
- Outstanding balances must be paid before further treatment can be scheduled.

Insurance…

- Please know your dental insurance benefits. Insurance is billed as a courtesy to the patient.
- We recommend requesting a pre-determination for treatment above $200.
- All disputes of insurance coverage are between the patient and their insurer. The school does not intervene in disputes between patients and their insurers.

Medicaid…

Medicaid patients need to present their Medicaid identification card at each visit in order meet Colorado eligibility verification requirements. This must be done prior to the appointment.

Social Security Number…

Some services, such as dentures, root canals, and crowns, require treatment over multiple visits. It is required that the patient pay 50% at the first or initial appointment and the remaining 50% at the final appointment. If the patient does not provide their social security number (SSN), the school cannot extend credit and the full amount is required before treatment begins.

Checkout after Appointment…

All patients are required to go to the cashier's window following their appointment in order to checkout for that appointment day. If the patient is seen in the student clinic, the student will accompany the patient to the window.

Our staff is here to help….

Don't be shy. Please come to our cashier windows with any and all questions. If we don't have the answer, we will find someone who does!

FAQ's

-Wait, I thought the CU School of Dental Medicine provided care for free.
The school provides low-cost high-quality dental care to the community and region. While our fees are low, they are a necessary part of our financial model in order to continue providing dental services now and into the future.

-How can I pay my bill?
We accept cash, check (with ID), debit cards and credit cards. Debit and credit cards require the cardholder to be present at the cashier's window for an original signature. We do not accept payment over the phone.

-What if I don't have a social security number?
Since the university is a state agency, we must follow state rules. If you do not have a SSN we cannot extend credit and therefore require payment in full before services are rendered.

-I have Medicaid, why do I have to pay today?
Medicaid only covers certain procedures. If you opt for treatment not covered by Medicaid, you will be required to pay for those services.

-Will you bill Medicare or my medical insurance?
No, the school is not a Medicare provider and we do not bill medical insurance.

VII. Clinic, Lab, Equipment and Instrument Management

7.1   Support Services

Location: L26-011 (Garden Level - Basement)
Fax: 303-724-7144
Hours of Operation: Monday – Friday, 7:30 am - 5:00 pm

OVERVIEW:
The purpose of the Support Services Department is to provide support of dental material, instruments, equipment and office supplies in support of clinical and academic requirements and operations. Coordinate through vendors to ensure products are correct and received in a timely manner. In addition, maintain quality materials management, accurate inventory, receipt and issue of dental material and instruments in support clinical and educational requirements. Conduct the purchasing of dental materials, instrumentation, equipment and office supplies in support of clinical and academic requirements. Reconcile expense reports to ensure proper allocation of funds. Materials management include receiving and unpacking shipments, verifying corrections of contents against orders, inspecting materials for damages, stock items in appropriate locations, manage inventory database and ensure proper stock rotation, deliver materials to the work units, process orders and receiving reports, contact vendors regarding returns and back ordered items, and reconcile delivery problems. Maintain the operation of the materials management and storeroom functions of the School. Staff the storeroom window, and disperse materials, instruments, equipment, and keys, to students, staff and faculty. Oversee the management and operation of the inventory database.

PERSONNEL:

Todd Hinshaw, Facilities Manager
Direct: 303-724-7150 / Cell: 720-656-8278

David West, Material Handler – Supervisor
Direct: 303-724-7916

Joshua Lovas, Material Handler
Direct: 303-724-9908

Savannah Garcia, Administrative Assistant
Direct: 303-724-7121

7.2   Dental Equipment Operation and Maintenance

Location: L26-019 (Dental Equipment Repair - Basement)
Fax: 303-724-7326
Hours of Operation: Monday – Friday, 8:00 am - 5:00 pm

OVERVIEW:
The purpose of the Dental Equipment Repair Department is to facilitate prompt repair of all dental equipment, maintain parts and inventory needed for equipment repairs, and instruct students and faculty in the safety guidelines and proper use and care of dental equipment. Ensure the continued and uninterrupted function of the dental clinics at their highest efficiency so as to maintain adequate teaching facilities and state-of-the-art patient care. Researches, purchases, installs, repairs, assembles, calibrates, and maintains equipment for clinics within the School of Dental Medicine as well as Mobile Dental Clinic. They will maintain a preventive maintenance program for all dental equipment. Recommend and evaluate new equipment and provide training as necessary.

PERSONNEL:

Todd Hinshaw, Facilities Manager
Direct: 303-724-7150 / Cell: 720-656-8278
sdmdr@ucdenver.edu / sdmfac@ucdenver.edu

Andrew Quill, Assistant Facilities Manager
Direct: 303-724-3043 / Cell: 720-601-2015
sdmdr@ucdenver.edu / sdmfac@ucdenver.edu

Raymond Ware, Dental Repair Technician
Direct: 303-724-7152 / Cell: 720-656-8286
sdmdr@ucdenver.edu

Armando Gonzalez, Dental Repair Technician
Direct: 303-724-8747 / Cell: 720-656-8280
sdmdr@ucdenver.edu

Utilize the links above to report all broken /malfunctioning equipment including but not limited to: floor and operatory, equipment involved, what the problem is and time frame of assistance needed.

EQUIPMENT OPERATION AND MAINTENANCE:

Adec 1040 Cascade dental chair

Adec Cascade over-the-patient delivery system

Adec 6300 dental light

Adec 511 Dental Chair

Adec 532 Delivery System

Progeny Preva Xray

Instrumentarium Focus Xray

Planmeca Intra X-ray

Gendex 770 Xray

Instrumentarium Scanora 3D Xray

Instrumentarium OP 100, OP 200 and OP 300 Xray

Planmeca Promax Xray

Airbex Nomad Xray

Instrumentarium Soredex Xray Scanners

Boyd 500 Dental Chair

Boyd 505 Delivery System

Boyd Dental Lights

Adec Dental Simulators

Stersil Water Treatment System

Getinge 9100 Cart Washer and Disinfector

Getinge 2460 UC Ultrasonic Washer

Getinge 8668 Instrument Washer /Disinfector

Getinge 733HC Vacuum Gravity Sterilizer

Getinge 533HC Vacuum Gravity Sterilizer

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

7.3   Clinic Dispensary: Instrument Management and Supplies

Location:
>   L26-123 (1ˢᵗ Floor)
>   L26-222 (2ⁿᵈ Floor)
>   L26-330D (3rd Floor Futures)
>   L26-420D (4ᵗʰ Floor)

Phone:
>   1ˢᵗ Floor: 303-724-8195
>   2ⁿᵈ Floor: 303-724-6929
>   3ʳᵈ Floor Futures: 303-724-8266
>   4ᵗʰ Floor: 303-724-6962

Hours of Operation: Monday – Friday, 7:30 am - 5:30 pm

OVERVIEW:

A. The clinic dispensaries are responsible to support students in the following patient treatment requirements:

1. Maintenance and issue of materials and equipment.
2. Maintenance of dispensary issue instrumentation.
3. Accountability of all instruments, equipment and materials.

B. The clinic dispensaries items are **NOT** for use in technique lab or simulation clinic. All dispensary items are for clinic use only. Lab requirements are issued from Support Services by the appropriate lab technician.

PERSONNEL:

Supervisors:
1ˢᵗ floor – Christine Forrester
2ⁿᵈ floor – Meana Sturdivant
3ʳᵈ floor (Futures) – Addis Dessalegn
4ᵗʰ floor – Sandra Walker
Dental Faculty Practice – Michelle Person

Dental Care Staff:
1ˢᵗ floor – Tinbit Likke
2nd floor – Daniel Almaraz, Emma Chibli Arellano, Odalys Vasquez Lopez, Danna Cervantes, Carlos Rios Robledo, Brizeida Garcia
3rd floor (Futures) – Karla Navarro Cervantes
4th Floor – Erayna Johnson

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

DESCRIPTION:

The dispensary area stores and distributes dental instruments and materials for use in all aspects of patient care in both the undergraduate and specialty clinics. The dental instruments are primarily in cassettes for use. The Dental Care staff manages the instrumentation through a tracking system, which allows the instruments to be traced to the exact point of use. The duties of the Dental Care staff include but are not limited to: ordering and stocking the clinic supplies, maintaining the general cleanliness of all the dental operatories, collecting and reprocessing of reusable patient care equipment and the decontaminating, disinfecting and packaging of instrumentation for the transportation to Central sterilization to be sterilized. In addition, keep track of individual instrumentation and equipment ensuring that they are returned after each clinic session so that they can be prepared and available for the next clinic session. Monitoring and maintaining sharps, chemical waste containers and biohazard (infectious waste) bins. Conduct spore testing and maintaining of sterilization logs as it related to the sterilizers located in the dispensary area. Manages chemical supplies used in the clinical areas to ensure materials are not expired and are stored properly. Maintains drug cupboard for faculty use in situations where the patient required pre-medication or emergency medication.

The clinic schedule showing chair assignments for the students is located in the clinic hallways on each floor. The students are assigned a chair on a particular clinic floor based on the procedure and also the attending faculty. Students can enter the clinic area at 7:30 am to set up the assigned operatory in anticipation for patient treatment. Instrumentation will not be available for pick up until approximately 7:45 am for morning sessions and 12:30 pm for afternoon sessions. Instruments are provided based on the appointment scheduled in AxiUm. For appointments made prior to 3 pm the previous day, students will be able to collect the instruments at the satellite dispensing area located within both east and west clinics on the 2nd floor. The other clinic floors (1st, 3rd and 4th) instruments are to be picked up at the main dispensary window on each floor.   The satellite dispensing area for the East Clinic is located within the East Clinic at south end of the clinic. The dispensing area for the West Clinic is directly in front of chair # 41 in the West Clinic area. If an appointment was made or changed on the day of the appointment or when a student receives an emergency patient, the student will receive instrumentation from the main dispensary. Each main dispensary maintains an instrument surplus, which is available for dispensing at all times.

Hours of dispensary are strictly enforced. Clinic hours are posted and instruments need to be returned once patient care is completed. This is to ensure that instruments are properly sterilized and maintained for use in the next clinic session. The instrument pickup times varies between clinics. For the undergraduate clinic it is 7:45 am to 12:15 pm for the morning session and 12:30 pm to 4:30 pm for the afternoon session. For the graduate and specialty clinic the dispensing hours are 8:00 am to 12:30 pm for the morning session and 1:00 pm to 5:30 pm for the afternoon session.

Dental assistants are available to students to assist with procedures, impressions, suction, etc. Each operatory area is assigned 1 dental assistant. There may be times where the dental assistant assigned within the student area is assisting another student. In this case, the student should report to the main dispensary window where an assistant there will make the necessary arrangements for to assist students.

In the event that student needs are not being met in a timely manner, contact the Dental Assistant Supervisor or Dispensary Manager

Dental Care Staff Supervisor, works primarily through the Dispensary. The supervisor ensures that all responsibilities of the dental care staff are performed in a timely and efficient manner as well as providing leadership and training to the group. It is the responsibility of the supervisor to ensure that all supplies needed for patient care are available in sufficient quantity. Cleanliness of the dental operatories and the general clinic areas are maintained to ensure that the safety of the patient, student and faculty. The supervisor is also responsible for ensuring that the instruments processed in the dispensary are in accordance with established policies and procedures. All pertinent logs sterilization; eyewash, chemical waste, equipment cleaning and testing are maintained in accordance with established procedures. The Dental Care Staff are a valuable part of the Dental team in any clinical setting.

Dirty and Clean Windows:

1. **Clean Dispensary** - This window is for dispensing of instrument/supplies that have not been requested through AxiUm. The window will open at 7:45 am. The students will pick up instrumentation that was not previously requested or items requested after the schedule was printed.
   a. Students will pick up additional items required for patient treatment from the clean dispensary window.
   b. Every student is required to swipe his or her badge before instruments are issued. Once the badge is swiped the instruments are check out to the students AxiUm account. When returned they will be removed from the account. A student will never be allowed to pick up instruments for a fellow student.
   c. Students are charged for missing instruments. Worn or defective instruments once replaced will be shown on the students account but no charges are assigned. The dental care and sterilization staff conducts this.
   d. All dispensaries are stocked with extra instrumentation, which is readily available for use.
   e. If a student receives an instrument kit that is not complete they should return the kit immediately to the dirty dispensary window and collect a new kit from the clean window.

2. **Dirty Dispensary** - This window is for the return of the dispensary items not picked up by the stainless steel case carts. The window will close promptly at 5:00 pm each day. Dispensary items in the possession of the student after 5:00 pm will need to be put into a stainless steel case cart.
   a. At the end of each clinic session all instrument cassettes with the exception of the hand pieces and Piezo kits must be returned to the stainless steel case cart at the satellite locations on the clinic floor.
   b. Instruments and equipment are also picked up at the chair side by the dispensing staff.
   c. Students are required to remove all debris and cements from instruments prior to returning the instruments. The dental care or sterilization staff will check the kit in AxiUm and check the kit for completeness and integrity of the instrumentation. If an instrument is missing the staff will set the kit aside and try to locate the student to retrieve the instruments. If the missing

instruments can't be located, then the student will be charged. If a student returned a kit and forgot to include all the contents, the student should get a sterilization pouch from dispensary, write his or her name on the pouch, put the instrument(s) in the pouch and seal it. At that point give the pouch to the dirty dispensary window.

    d. The dispensary staff will process the bur kits, Piezo's and hand pieces in the dirty dispensary and be transferred to central sterilization for further processing.

3. **All Metal Impression Trays**. The dispensary has a variety of metal impression trays available for check out. Trays must be cleaned before they are returned. To avoid charges, students should return these items in a timely manner to ensure items are removed from their account.

ANTIBIOTICS AVAILABLE FOR PRE-MEDICATION:

Antibiotics can be dispensed from the Pixis machine in the Oral Surgery clinic on an emergency basis. There must be a prescription in AxiUm for the prescribed medication that is approved by a faculty member. All other medications may be prescribed to be filled at a local pharmacy through AxiUm and the appropriate faculty approval.. In all cases, medications dispensed to the patient will be entered into axiUm with approval of faculty.

BROKEN OR LOST STUDENT INSTRUMENTS:

1. Students are not charged for broken instruments unless in the case of negligence.
2. If a student returned a kit and later found the missing item from the kit, the student should get a sterilization pouch from dispensary, write his or her name on the pouch, put the instrument(s) in the pouch and seal it. At that point give the pouch to the dirty dispensary window and it is then sent to central sterilization. If the student account was charged it will then be removed from their account.
3. If a student receives a kit and when opened an item is found missing or broken, the student should immediately return the kit to the dirty dispensary and inform the dispensary staff of the situation. The student will be checked out a new kit and a note made in the returned kit. If the student waits until the end of the clinic session to return the kit they will be charged for any broken or missing item.

GLOVE OPTIONS:

Non-Sterile

Powder less nitrile gloves

Sterile

Sterile Oral Surgery gloves – For surgical procedures

PATIENT HYGIENE AIDS:

The dispensaries have numerous hygiene aids available for patients. They are located in cabinets and carts outside each dispensary.

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Disposable Item Dispensing Locations

Supply Carts	Anesthetics
	Needles
	Cavity Bases/Liners
	Indicators
	Etchants
	Restorative Material
	Occlusal Adjustment/Bite Registration
	Fluoride
	Cements
	Sealants
	Waxes
	Floss
	Blades
	Finishing Strips and Discs
	Matrix Bands
	Peridex
	Vaseline/Surgilube
	20% Isopropyl Rubbing Alcohol
	All Disposables
	Disposable Gowns

Endo Cabinet	Cotton Pellets
	Cotton Rolls
	Gauze
	Tongue Blades
	Rubber Dam
	Calcijet
	Files
	Rotary Files
	Eugenol
Endo Cabinet (cont'd)	Cavit
	Irrigating Syringes/Solution
	Endo Needles
	Paperpoints
	Gutta Percha Points
	RC Prep
	Root Canal Cement

Dispensary	Adhesive
	Bite Registration (Exabite)
	Bleaching
	Tissue Conditioner
	Cements
	Desensitizers
	Etchants
	Impression Materials
	Occlude Indicator
	Orthodontic Supplies
	Medicaments
	Pin/Post System
	Restorative Material
	Polishers
	Restoration and PFM Repair Kit
	Snap Acrylic/Monomer
	Temporary Restorative Material

Each Chair	Kleenex
	Sharps Container
	Alcohol Gauze
	Disinfecting Solution
	Face Masks
	Gloves
	Bibs
	BP Cuff
	Hand Mirror
	Lamp Handle Covers
	Stethoscope
	Dental Floss
	Disposable bib chains
	Gauze 2x2 and 4x4
	Saliva injector
	HVE tips

Cabinet	Barrier Film
	Tube Sock

Sinks	Hand Soap
	Caviwipes
	Purell Hand Disinfectant

7.4   Clinic, Simulation Clinic and Technique Lab Upkeep and Maintenance

Location: Simulation Clinic - L26-211 (2nd Floor)
Technique Lab - L26-200A (2nd Floor)

Phone: Simulation Clinic - 303-724-7092
Technique Lab - 303-724-1974

Hours of Operation: Simulation Clinic - 6:00 am - 12:00 am (Sunday - Saturday)
Technique Lab - 6:00 am - 12:00 am (Sunday - Saturday)

PERSONNEL:

Oksana Korsunskaya
Evelin Marroquin Diaz
Sybil Hill

OVERVIEW:
The School of Dental Medicine's clinics, simulation clinic and technique labs are available to students and residents as part of their educational experiences. Patient care clinics and labs will be used for pre-clinical and clinical courses. The Simulation Clinic and Technique Labs will be available to students/residents during off-school hours. The upkeep and maintenance of all clinic and clinic support areas throughout the school is the joint responsibility of students/residents, faculty, SDM staff and UCD Environmental Services.

I.   ENVIRONMENTAL SERVICES RESPONSIBILITIES:
The specific details and full ranges of services provided by Environmental Services are available through Mark Osvirk in Support Services. Environmental Services retains the following primary responsibilities in all areas:
1. Floors: Vacuum and mop all clinical and clinical support areas daily
2. Trash pick-up and removal will occur daily between clinic sessions and at the end of the day in all clinics, labs and clinic support areas.
3. Countertops and windows are wiped down 2 times a week in all clinics and clinical support areas.
4. Stock paper towel and soap dispensers daily as needed.
1. Restrooms are monitored throughout the day and cleaned as necessary

Please note that Environmental Services throw out any papers or other trash/debris left out. In addition, we are in the process of writing an amendment to the current Environmental Services Contract to include more responsibilities in the cleaning of the dental clinics.

II.   SCHOOL OF DENTAL MEDICINE STAFF RESPONSIBILITIES:

B. Clinics
The dispensary dental assisting staff will have the responsibility of maintaining the clinic on all floors with the exception of the first floor, which is the responsibility of the dental assistants of the related programs that work on the floor. The following exceptions will apply:
1. Dispensary staff with the exception of the first floor, which will be done by the floor dental assistants, will empty infectious waste containers.
2. The Dispensary staff will have the following responsibility for all clinics:
    - Emptying and filling the disinfection bottles and tubs.
    - Maintaining the required stock level of disposable items that will be used to stock the clinics. The first floor will have the assistance of the floor dental assistants.
    - Performs a walk through each morning to annotate any units that are left in poor condition by students.
    - A list of the units will be given to the Dispensary Manager clinic for disposition to the Facility Director
    - Stock operatories and wipe countertops and dental chairs
    - Stock operatories with disposable supplies
    - Complete autoclave B&D test and 1st load
    - Complete Ultrasonic Sonocheck
    - Prepare dispensing carts for instrument distribution

The following are the areas of responsibility for both Dental Repair and dispensary staff within the assigned clinics.
Weekly
1. A complete cleaning of each dental unit.
2. Clean/Exchange traps, if necessary.
3. Clean walls, blinds and window curtains when visibly soiled or dusty.

Daily
1. A general upkeep of the dental units, (examples: magazines, organize dispensing items).
2. Flush suction lines with cleaner
3. Water line maintenance: Discharge water and air from a minimum of 30 seconds after each patient from any device connected to the dental water system that enters the patients mouth.
4. Check sharps containers
5. Clinic Stocking:
    - Gloves
    - Masks
    - Hand Soap
    - Barriers
    - Gowns
6. Cabinet/Cart Stocking

C. **Simulation Clinic and Technique Lab**
The Support Services Lab staff with the assistance of student workers will be responsible for stocking the materials and supplies necessary to run courses and practice sessions for students in these areas.

III.   STUDENT RESPONSIBILITIES:

A. Clinic
Students are responsible for set-up and breakdown of their chair for each session. **This includes** strict adherence to University of Colorado School of Dental Medicine Infection Control Policies and Exposure Control Plan to include the following:

SET UP/ START OF SESSION
Personal items are removed and stored separately from treatment area or confined using a plastic cover/barrier
Wash hands with soap and water for 15 sec
Cubicle is neat and orderly. Barriers are present and checked
Attach water/tip, evacuation tips and handpieces. Sterile bur in handpiece runs for 30 sec.
Attire-Hair is confined appropriately or off face .No Jewelry on wrists, fingers and arms (except for Flat rings, wedding bands) Solid closed toe shoes. No Artificial nails. Natural nails clean , length less quarter of an inch, no chipped polish
Student checked chemical indicator upon opening cassette
Cassette checked before providing care to ensure all necessary instruments are available and in order
Water ortho clinic only – bottles need to be removed, disinfected and dried on a daily basis
DURING SESSION
Handwashing- at least 15 sec rubbing and enough drying before gloves are worn Alcohol rub may be used between patients if hands are not soiled
Gown worn and donned properly
Mask correctly worn covers nose and mouth, stays in place. Mask changed for each pt or changed every 60 minutes
Eyewear worn correctly
Gloves- cuff is worn over lab coat cuff. Gloves replaced if torn or compromised (handwash with soap and water)
Surfaces without barriers are not touched with gloved hands
PPE changed as necessary and if soiled
Protect card on needle cap is present
Single scoop-one hand recapping technique is used
Handpieces with projected burs face towards delivery system
END OF SESSION
Sharps removed from cassette and disposed in sharps container
Sharps container not full
Appropriate PPE for cleaning- gloves, gown, mask, eyewear
Cassette checks for instrument damage, dispose single use items
If present debris is removed with damp gauze on tray not finger tips
Unused disposable supplies removed (gauze/cotton rolls). Unused clean barriers removed
Contaminated barriers and supplies removed. Equipment and supplies returned to the dispensary
All surfaces are cleaned using 2 step disinfectant with 10 mt contact time if visibly soiled or barrier wipe method if not visibly soiled
Barriers changed in between patients and surfaces must be wiped in between
Equipment used for vital signs wiped and cleaned between pts
Clinic gown disposed properly (not left in the cubicle)
No Visible Dust dirt on equipment, cubicle. Sink and surrounding counter not left with wax, alginate and/or stone
Patient chair was raised to an upright position (enough to clear cords from the floor). [DO NOT raise the chair to the highest position]
No food and drink present in cubicle
Multi dose vials appropriately used
Wash hands end of Session.

B. The Simulation Clinic

The Sim Clinic will be open for student use Sunday through Saturday from 6:00 am to 12:00 am. During this time, students are welcome to use this facility for additional practice and enhancement sessions. The facility will be unsupervised and is to be used subject to the following conditions:

1. This is a clinic environment and not to be used as a laboratory area.
2. All rules and regulations as posted or otherwise described must be followed.
3. The facility must be maintained and kept clean.
   a. Remove all items from and clean the surface of the simulator.
   b. Stow tubing arms of the simulator in their proper position
   c. Make sure that simulator is off with stabilizing legs raised.
   d. Place the simulator completely under the counter in the left rear area of the knee space.
   e. Place the foot control on the cradle underneath the simulator.
   f. Completely lower the operator's stool then place it completely underneath the counter to the right of the simulator
   g. Turn off the operator's light and return to the stowed position.
   h. Return all unused dental supplies to the proper storage location.
   i. Place all debris and used disposable items in the trash.
   j. Remove all items from and clean the surface of the counter top with the cleaning solution provided.
   k. Turn off any equipment used except the monitor.
4. Individual course directors have the right to limit the types of procedures you may perform in this facility outside of normal course hours.

Technique Lab/Wet Labs

The Technique Lab and associated wet labs will be open to student use Sunday through Saturday from 6:00 am to 12:00 am. Students are responsible for the following:

1. Place brown paper over work area to protect benches.
2. Throw excess stone in trash cans; Do NOT rinse excess stone down drain to prevent clogging and abuse of plaster traps.
3. When using model trimmers, rinse them down with spray hose to prevent build-up and DO NOT USE WITH WAX ON MODELS [wheel will be ruined].
4. DO NOT leave burners on under the task lamps, lights will easily burn and melt.
5. When using burs in handpieces, make sure the bur is completely seated to avoid ruining the bur.
6. Remove all debris and dispose in trash.
7. Scrape to remove adherent debris (wax, stone, acrylic, etc.)
8. Wash surface with cleaner and wet rag or sponge as provided.
9. Clean shield of dust collector under running water.
10. Match chair number to unit, wipe clean, and push under bench.
11. Replace handpiece and air syringe to holders, task light to proper position.
12. Report any equipment problems to Todd Hinshaw, stocking and facility issues to Mark Osvirk at sdmdr@ucdenver.edu or sdmfac@ucdenver.edu

IV.   FACULTY RESPONSIBILITIES:

Faculty will continue to be responsible to oversee that students are following the University of Colorado School of Dental Medicine Exposure Control Plan. Violations in infection control protocol and techniques may be reflected in individual procedure grades and/or through patient management as monitored by the Office of Clinic Operations. Faculty will also ensure that the students prior to the end of a clinic session clean the clinic and laboratory areas after pre-clinical class. Faculty who note clinic up-keep issues should notify the Office of Clinic Support Operations by contacting Todd Hinshaw or Mark Osvirk at sdmdr@ucdenver.edu or sdmfac@ucdenver.edu

Clinic up-keep is the responsibility of every member in the Dental School. All in our program have a role to make sure that the clinics, simulation clinic and technique labs remain clean, efficient and safe.

7.5   Dental Production Support Lab

Location: L26-128 (1st Floor)
Phone: 303-724-6967 / 303-724-6968
Hours of Operation: Monday – Friday**,** 8:00 am - 5:00 pm

PERSONNEL:

Dalen Wyatt
Cecilia Zuniga

The following dental laboratory/clinical protocol has been developed to optimize the quality of prostheses that are provided for patients at the University of Colorado School of Dental Medicine.

Treatment Planning/Mounting of Casts:

1) Diagnostically mounted casts are required for all patients having fixed restorations placed. This includes all implant supported restorations. If the teeth to be restored do not have ideal anatomical form, this must be corrected with diagnostic waxing or reshaping as needed.
2) Diagnostically mounted casts are required for all patients having partial removable dental prostheses (PRDP) fabricated.
3) Diagnostically mounted casts are required when planning complete removable dental prostheses (CRDP) for patients when significant occlusal plane discrepancies are noted and/or when limited vertical space is available for replacement teeth. This includes patients that present with downward migration of the maxillary tuberosity and insufficient space for replacement teeth.
4) Articulators must be cleaned prior to mounting and prior to submission to the lab. This insures that the mountings are accurate so that the casts may be sent to outside labs without your articulator.
5) Faculty will not approve cases to be sent to outside labs if the articulator is not free of stone and debris. Mountings determined to be inaccurate due to excessive stone and debris on the articulator will be corrected prior to laboratory submission.
6) All diagnostic casts will be mounted with a face-bow. Arbitrary mounting of casts is not acceptable.
7) All diagnostic casts, as well as working casts should be clearly labeled with the patient's name and date of impression.
8) Fixed dental prostheses (FDP) opposing edentulous areas require a record base in the edentulous arch with diagnostic wax-up or denture tooth set-up to determine the plane of occlusion, appropriate occlusal reduction, and the cusp angle for the FDP.
9) PRDPs with posterior edentulous spaces that oppose edentulous areas must have record bases placed in the edentulous areas to define the desired plane of occlusion. Opposing anterior edentulous areas may require record bases with denture teeth set to properly arrange the PRDP teeth.

10) Denture teeth can be obtained from the production lab. Specify cusp inclination of posterior diagnostic denture teeth to be used when obtaining denture teeth from the laboratory.

11) Comprehensive periodontal examination and determination of prognosis must precede definitive treatment planning for fixed restorations and PRDPs.

12) Current (within one year) radiographs are required for all PRDP abutments and teeth being prepared for single fixed restorations or FDPs abutments.

13) Careful examination of existing restorations in potential PRDP abutments must be accomplished as part of the design process. Restorations in teeth to have occlusal rests must be determined to be sound and have good long term prognosis. Failure of existing restorations supporting rests can result in premature compromised function of the prosthesis.

Infection Control:

The dental laboratory is a "clean" environment. All cases submitted must be disinfected following clinic protocol prior to submission. This includes impressions, record bases, jaw relation records, articulators, casts used in clinic, any prosthesis that has been placed in the patient's mouth, etc.

Quality Control/Feedback:

Students are strongly encouraged to complete quality control forms for definitive prostheses received from the lab. Upon completion of the form, it should be initialed by the covering faculty. Constructive criticism for the dental laboratory is essential in maintaining quality of work received.

1) Quality control forms will be reviewed by the restorative dentistry faculty periodically and a summary of the findings reviewed with representatives of outside dental laboratories.

2) Review of cases received from the lab one day prior to the patient appointment date is strongly recommended. Prostheses should be carefully examined to ensure acceptable quality. Deficiencies should be corrected prior to the patient's appointment when possible, or cases should be sent back to the originating lab to be remade and the appointment changed.

Fixed Prosthodontics:

1) Accuracy of mountings must be verified with shim stock or articulating paper before submission to lab.

2) Properly fabricated die systems must allow access to the end of the die pins. Blocking this area out prior to mounting the cast will facilitate this. Play-Doh modeling compound works well for this purpose.

3) Die trimming: Gross trimming of dies to within 2 mm of the margins can be facilitated with a laboratory acrylic resin bur with high speed evacuation or using an arbor band on a lathe.
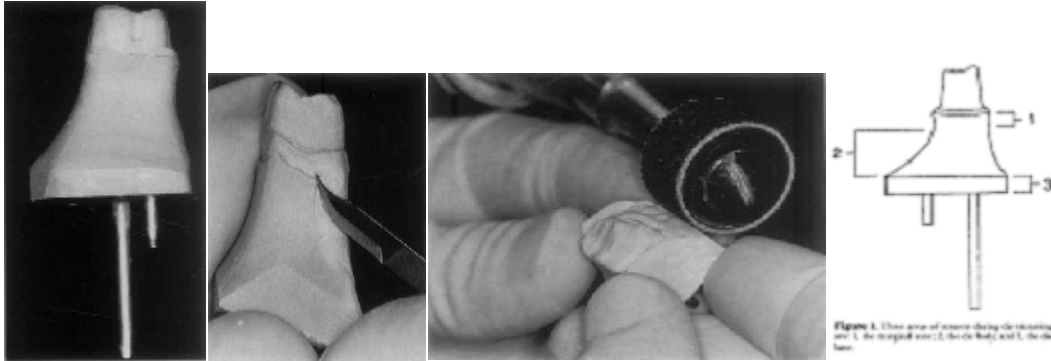
Trimming a dry die prevents clogging of the bur or band. Die shaping can be accomplished with a sharp surgical blade. Trimming of the marginal area of the die must be accomplished using magnification or a microscope and adequate lighting. The apical area of dies should mimic the root form of the tooth. Over trimming or "ditching" of the die is to be avoided as it produces a fragile marginal area which is prone to chipping and can lead to overcontoured restorations. Proper trimming of the die results in an unambiguous margin. The preparation margin should be clearly marked with a single continuous fine red line. (J Pros, Manseuto 1994, pp 251-55)

4) Dual arch impressions can only be used by students that have completed the single unit fixed competency. Students wishing to use a dual arch impression technique must have approval from faculty prior to the appointment.

5) Dual arch impressions may only be used for fabrication of single posterior teeth bordered by adjacent teeth. It is only appropriate for patients with anterior disclusion. Dual arch impressions cannot be made for terminal teeth in an arch and may not be used for survey crowns or fixed dental prostheses.

6) As stated previously, fixed dental prostheses (FDP) opposing edentulous areas require a record base in the edentulous arch with diagnostic wax-up or denture tooth set-up to define the plane of occlusion, evaluate appropriate occlusal reduction, and the cusp angle for the FDP.

7) A die system and a second solid cast must be submitted for all fixed prostheses. The solid cast must be trimmed by the receiving lab to allow seating of prostheses without interference from gingival tissues represented on the cast. The dental laboratory should use this cast to adjust proximal contacts and to evaluate marginal adaptation. This cast must be used in fitting FDP metal frameworks.

8) Use of custom trays increases the probability of obtaining an acceptable impression and reduces the amount of costly impression material needed. Two custom trays will be fabricated prior to appointments when fixed impressions are to be made.

9) Esthetic guidance must be provided to the laboratory for the fabrication of multiple anterior restorations. If the shape and arch location of the teeth prior to preparation are adequate, diagnostic casts can be used for this purpose. If the shape or location of teeth in the arch is to be changed in the definitive prosthesis, diagnostic wax-ups, or casts of provisional restorations may be needed.

10) When the teeth being prepared affect anterior disclusion and insufficient unprepared teeth remain to determine anterior disclusion, a custom incisal guide table must be provided to aid the lab in creating the desired disclusion.

11) FDPs substructures must be evaluated for fit clinically prior to porcelain application. Radiographs to verify marginal fit are strongly encouraged.

Partial Removable Prosthodontics:

In an effort to facilitate treatment progress, you are limited to working with no more than two instructors on any one PRDP patient. If one of the instructors you are working with is a part-time faculty member, it is strongly advised that the second be a full-time faculty member. The instructor and student will collaborate on the design utilizing a surveyor to produce a detailed design that clearly delineates all components. To make the most efficient use of clinic time, this should be accomplished prior to the tooth preparation appointment.

1) Diagnostically mounted casts are required for all patients having partial removable dental prostheses (PRDP) fabricated. Depending on the extent of edentulous areas, record bases may be required in order to accurately mount casts. Record bases may also be needed to define the planned occlusal plane.

2) Prior to preparing teeth for survey crowns, a diagnostic cast with a detailed design must be approved by a faculty member. Students will not be permitted to prepare teeth for survey crowns unless a design has been approved.

3) Impressions for survey crowns must capture the entire arch and all anatomical features to be included in the prosthesis design. The retromolar pad must be included in impressions for Kennedy Class I and II designs. The pterygomaxillary notch must be included in Kennedy Class I and II designs.

4) Rest seats and guide planes on other abutment teeth should be prepared prior to tooth preparation for survey crowns. This establishes the planned path of insertion and the master cast for the fixed restoration will allow more careful evaluation of the prepared rest seats and guide planes prior to making the final impression.

5) Altered cast impressions must be made for ALL mandibular Kennedy class I and II posterior edentulous areas. This is a mandatory procedure and not done only at the discretion of covering faculty. Altered cast impressions will be made in the maxilla at the discretion of the covering faculty.

6) Mandibular altered cast impressions (and master casts) must include the retromolar pad.

7) Final impressions (and master casts) for maxillary Kennedy class I and II PRDPs must include the pterygomaxillary notch.

8) Students are encouraged to apply alginate adhesive to all trays (including perforated trays) being used to make alginate impressions.   For PRDP master cast impressions, this will increase the likelihood of acceptable framework fit.

9) ALL Removable Prostheses require a 24 – 72 hour and one-week post-placement follow-up appointment. A 24-hour post-placement appointment is preferred. However, if for some reason the patient is unable to make a 24-hour post-placement appointment, they must be seen within the first 72 hours. These follow-up appointments should be scheduled when the placement appointment is scheduled. The student will not be permitted to place the prosthesis if time constraints due to holidays, vacation breaks, or the end of the semester will not allow both follow-up appointments. Therefore, the last day to place a removable prosthesis is one week prior to the commencement of a break or the end of the semester.

Complete Removable Prosthodontics

1) As stated previously, diagnostically mounted casts are required when planning complete removable dental prostheses (CRDP) for patients when significant occlusal plane discrepancies are noted and/or when limited vertical space is available for replacement teeth. This includes patients that present with downward migration of the maxillary tuberosity and insufficient space for replacement teeth. The need for mounted diagnostic casts is at the discretion of the covering faculty.

2) Accurate diagnostic casts are to be used to fabricate custom trays which allow adequate space for border molding with impression compound for the final impression. Care must be taken to ensure that the palatal aspect of the maxillary custom tray is intimately adapted to the palatal vault. Excessive space between the tray and the tissue to be impressed can lead to voids in the final impression.

3) Mandibular custom trays should have three handles or finger rests. The anterior handle should extend vertically from the tray in a position that approximates the position of the teeth on the completed denture. Anterior handles that extend horizontally can interfere with lip movement and border molding.

4) Maxillary custom trays should have a single anterior handle that also extends vertically from the tray and approximates tooth position.

5) Elastomeric impressions made with impression compound [polysulfide and polyvinylsiloxane (PVS)] should be poured within one hour of when the impression was made. Although PVS impression material is dimensionally stable for an extended period of time, the impression compound is not.

6) Determining the posterior extension of the maxillary denture is a clinical procedure. The posterior extent and the posterior palatal seal must be determined and developed in the master cast with the patient present. A faculty member must evaluate this step before processing of the denture will be approved.

7) Prostheses that have had reline impressions made in them must be boxed and poured by the student, but the laboratory will separate the prosthesis from the cast. The dental laboratory will place the post palatal seal in maxillary CRDPs that are relined.

8) Accuracy of cast mountings must be verified at the trial placement (wax try-in) appointment. This is done by making an intraoral centric relation record and verification in the articulator. Articulator centric détentes or latches must be released when evaluating the intraoral record in the articulator. Accuracy of the mounting must be verified by a faculty member prior to submission to the laboratory.

9) A clinical remount procedure must be accomplished to refine occlusion when complete dentures are initially placed. This includes single arch restorations. This is a mandatory procedure and is not to be done only at the discretion of covering faculty.

10) Clinical remounts for immediate prostheses are best accomplished after adequate healing has occurred. This is typically 10 days to two weeks after extractions. This is a mandatory procedure.

Immediate Complete Removable Prosthodontics

1) Patients should be encouraged to have CRDPs fabricated following extraction of all remaining teeth and adequate healing. This generally provides superior results as compared to the immediate prosthesis. The immediate CRDP should only be offered to patients that cannot accept complete edentulism for social or psychological reasons. The limitations of this procedure must be fully understood by patients.

2) Patients should also understand that a second prosthesis may have to be fabricated following fabrication of the immediate prosthesis. This will result in additional costs for the patient.

3) Immediate prostheses cannot be scheduled on Friday as a 24-hour post placement appointment is mandatory.

4) Students must schedule a chair in comprehensive care to place the prostheses following extractions. The covering faculty must be informed that this procedure is being done prior to or at the beginning of the appointment.

5) Failure to make such arrangements will result in an unsatisfactory clinic grade and loss of credit for the procedure.

6) Accuracy of cast articulation must be verified at the trial placement (wax try-in) appointment. This is done by making an intraoral record and verification in the articulator. Articulator centric détentes or latches must be released when evaluating the intraoral record in the articulator. Accuracy of the mounting must be verified by a faculty member prior to submission to the laboratory. Accomplishing this critical step is problematic if posterior teeth are remaining. For this reason, immediate CRDPs cannot be made with posterior teeth remaining. Retention of first bicuspids to maintain occlusal vertical dimension is a possible exception.

7) Clinical remounts for immediate prostheses are best accomplished after adequate healing has occurred. This is typically 10 days to two weeks after extractions. This is a mandatory procedure.
8) If a split-cast trial placement (wax try-in) technique is utilized, students are strongly encouraged to make a laboratory silicone index of the incisal edges of the maxillary anterior teeth prior to submission to the laboratory. This will ensure proper placement of denture teeth following removal of remaining teeth from the master cast by the laboratory.

Occlusal Appliances:

1) Master casts for occlusal splints should be poured in MICROSTONE.
2) Students will block out undercuts on casts with plaster prior to waxing occlusal splints. A faculty member should check this step.
3) Palatal relief should be scribed in the palate with a No. 4 round bur denoting the palatal extension of the splint.
4) Mounted master casts must be checked by a restorative faculty member that is involved in the occlusion course before waxing the splint.
5) Separating medium must be applied between working cast and articulator mounting to allow clean separation for processing.
6) Cast will not be duplicated prior to waxing occlusal splints.
7) Once the occlusal splint has been approved by your instructor, the case will be sent to an outside lab for processing.

Dental Laboratory Prescriptions:

In an effort to help clarify the writing of laboratory prescriptions, examples of laboratory prescriptions for both fixed and removable prostheses are listed below:

Fixed:

Please fabricate complete veneer PFM crown on tooth No. X Facial porcelain butt margin, 1 mm lingual metal collar. No eccentric occlusal contact.

Vita Shade Y

Faculty Signature

Please make die system. Tooth no. X will be restored with a PFM/FGC. Return for mounting and die trimming.

Faculty Signature

Please fabricate complete gold crown on tooth no. X. Chamfer finish lines as marked. No eccentric occlusal contact.

Faculty Signature

Please fabricate complete porcelain veneer PFM crown on tooth No. X. Porcelain occlusal surface (see Porcelain Design form). Make PFM with a facial porcelain butt margin from mid-proximal to mid-proximal. Anterior disclusion. Please use enclosed custom incisal guide table.

 Vita Shade Y

Faculty Signature

Please fabricate PFM surveyed crown on tooth No. X with metal occlusal and porcelain veneer. See Porcelain Design form # 9. ½ mm metal collar facial termination. MO rest, mesial guide plane (2 mm X 2 mm) in metal, and 0.01" DB undercut. Use tripod marks to determine path of insertion and guide plane orientation. See enclosed diagnostic design cast for detailed PRDP design.

Vita Shade Y

Faculty Signature

Please apply porcelain to metal substructure for fixed dental prosthesis (FDP) no. X-Y. Porcelain butt facial termination. See pontic design form for bullet pontic design. Use Vita Shade Y, match shade guide tab.

Anterior disclusion.

Faculty Signature

Please post-solder connector between FDP abutment no. X and pontic no.Y using 650 fine solder.

Return for verification of fit.

Faculty Signature

Please make PFM FDP. Facial finish lines are beveled shoulders; palatal with chamfer finish line. Make ½ mm facial collars. Modified ridge lap pontic (see pontic design form). No eccentric occlusal contact. Return metal substructure for try-in.

Faculty Signature

Removable:

Please set max/man complete dentures in lingualized occlusion. Use BlueLine teeth, shade A2, max anterior mold A56, man anterior mold A7, Ortholingual posterior teeth, max mold LU6, man mold LL6. Return for trial delivery in wax.

Faculty Signature

Please process occlusal splint in heat processed clear acrylic resin.

Return on cast for adjustment.

Faculty Signature

Please set max/man immediate dentures for split cast try-in.   Bilaterally balanced occlusion. Use BlueLine teeth, Shade A1, max anterior mold A22, man anterior mold A3, max posterior mold N5, man posterior mold N5. Return for trial delivery in wax.

Faculty Signature

Please flask and process maxillary and mandibular complete dentures. Use Lucitone 199, shade "original." Remount and correct for processing error. Borders of master cast are 5-6 mm wide, do not over-polish borders.

Faculty Signature

Please flask and process maxillary immediate denture. Use Lucitone 199 shade light red pink.

Make thermoplastic surgical stent. Remount and correct for processing error. Borders of master cast are 5-6 mm wide, do not over-polish borders.

Faculty Signature

Please fabricate interim max. PRDP replacing teeth #3, #4, #7-10. Denture tooth Shade B2, anterior mold P6, posterior mold N5. Blockout soft tissue undercuts on master cast prior to processing.

W.W. clasp #2, DB 0.02", #5, MB 0.02" undercuts.

Ball clasp between #12 &#13. Flask & Process in Lucitone 199.

Return finished & polished for delivery.

Faculty Signature

Please fabricate Maxillary PRPD framework.

Major Connector: Complete Palate

Rests: MO#4, DO#12, MO#13 MO#2

Retainers:

    Reverse circlet #4, DB 0.010"

    Simple circlet #2, DB 0.010"

    Embrasure clasp #12-13, MB#12 0.010", DB#13 0.010"

Acrylic Retention: Open retention (latticework)

Return for try-in with duplicate cast.

Faculty Signature

Laboratory Submission Forms:

1) Cases will be accompanied by laboratory prescription form, appropriate laboratory checklist (pink or yellow), and patient payment form. Faculty signatures must be present on all three forms.

2) You will need to submit the following for each of the procedures listed in order for the laboratory technicians to provide you with a quality prosthesis. Please note: the laboratory technician will apply the cyanoacrylate and die spacer; DS is responsible for die trimming throughout your clinical experiences.

Rx sample submissions with items necessary for submission:

Rx: Make **Die System** Submit: 2 vacuum mixed, die stone pours of the impression. Include the impression as well. MARK the 1st pour and 2nd pour.

Rx: **FGC or PFM crown** Submit: Accurately mounted die system cast with current and accurate opposing cast. A custom incisal guide table is required for anterior restorations which affect anterior disclusion. 2nd pour solid cast.

Rx: **All Ceramic Crowns** Submit: Dies trimmed, but margins not marked. Do not place die spacer or die hardener. 2nd pour solid cast. Accurately mounted die system cast with current and accurate opposing cast. A custom incisal guide table is required for anterior restorations which affect anterior disclusion.

Rx: **Survey Crown** Submit: Accurately mounted die system cast with current and accurate opposing cast. 2nd pour solid cast. Diagnostic cast with detailed PRDP design approved by faculty member. Tripod marks must be evident on the die system cast and should be used to determine desired path of insertion and guide plane orientation.

Rx: **Solder Joint** Submit: Stable, accurate intraoral index on fixed dental prosthesis in GC Pattern Resin.

Rx: **Occlusal Appliance** Submit: Blocked out cast mounted in CR for approval; submit waxed splint for approval prior to sending to outside lab.

Rx: **PRDP Framework** Submit: Master Cast (vacuum mixed pour of the impression; Diestone), Survey & design cast, detailed lab prescription, opposing Cast.

Rx: **Process complete removable dental prostheses** Submit: Accurately mounted master casts with record bases having denture teeth set in desired location. Post palatal seal placed in maxillary cast.

Rx: **Trial Denture Tooth Set-Up** (Wax-up) Submit: Mounted casts, stable record bases indicating desired placement of teeth. Mandibular posterior teeth should be set over the alveolar ridge; the occlusal plane should be at the level of 2/3 the height of the retromolar pad.

Rx: **Removable Prosthesis Reline** Submit: Boxed and poured prosthesis impression.

DO NOT SEPARATE PROSTHESIS from cast. Coordinate with dental laboratory technician.

Rx: **Removable Prosthesis Repair** Submit: Separated pieces of dental prosthesis must be accompanied by an index to accurately relate them. Accurate, current opposing prosthesis. Detailed description on Rx. Coordinate with dental laboratory technician.

7.6   Sterilization Processing

Location: L26-020 (Garden Level)
Phone: 303-724-7155
Hours of Operation: Monday – Friday, 6:00 am – 8:00 pm

PERSONNEL:

> Leslie Gerbracht, Supervisor
> Marisela Vasquez, Morning Lead
> Jordan Ocana, Evening Lead
> Pamela Chacon
> Crystal May
> Christine Weickum
> Daena Castillo Hermosillo
> Leonor Castillo Hermosillo – temp to hire
> Fanosie Urgessa
> Diana Quevedo
> Adane Demug – temp to hire
> Gabriela Calvillo – temp to hire

OVERVIEW: The School of Dental Medicine has a centralized steam sterilization process that includes the decontamination, assembly, packaging, sterilizing, storage and distribution of dental instrumentation in support of patient care. This process meets all standards in accordance with AAMI, CDC and ADA guidelines.   All dental instrumentation is individually tracked utilizing the AxiUm Dispensary Module, which ensures that every instrument is   linked to a student and patient in the event of an adverse occurrence. The following outlines our step-by-step sterilization process

INSTRUMENT PROCESSING CENTRAL STERILIZATION

Decontamination Room:

1. Used instrument kits are transported from the clinics to the main decontamination room in central sterilization.
2. Instrument kits are moved from cart to the working table by staff wearing full personal protective equipment (PPE) appropriate for the decontamination area, including mask, safety glasses, heavy duty gloves, fluid resistant gowns, shoe cover, and head cover. If wearing prescription glasses, use visor shield.
3. The empty instrument cart is then placed into the cart washer and is processed.
4. Instrument kits are opened and inspected for debris (trash, cotton rolls, gauze, blades, etc.) and any debris removed.

5. Instrument kits are then closed and scanned into axiUm from the user that last had the kit to "main decontamination."

6. The kits are then scanned into axiUm into the assigned washer (1, 2, or 3) and put into the washer for a 50-minute pre-rinse, wash and disinfecting cycle. **Note: All surgical kits, perio hygiene kits, perio file kits and individual surgical instruments are run in the ultrasonic washer for a complete 7 minute cycle prior to placement into the washer disinfector.**

7. All PPE must be removed and utility gloves wash and put to dry, hands thoroughly wash and sanitized before exiting decontaminated area.

8. Instrument kits that are prepared in the clinical dispensaries for sterilizing are batch transferred in axiUm into main decontamination and then individually scanned into "main clean."

Clean Room:

1. Once the wash cycle is complete the instrument kits are batch transferred in axiUm to "main clean". The kits are then removed from the washer and placed on the work table in the clean room by staff wearing safety glasses, disposable gloves, head cover and clean lab coat. **Note: The washers will not open in main clean if the wash cycle is not complete.**

2. Instrument kits are opened and re-inspected for debris. If small soil is present on non- surgical instrument, this is removed with a brush and if needed orange solvent. For heavy debris and debris present on surgical instruments, these are returned to main decontamination for cleaning.

3. Instrument kits are inspected for completeness and to ensure that all the instruments are in good working condition.

4. If any instrument(s) are not in good working condition, they are put into the appropriate sharps container and replaced by clean instrument(s) located in the clean room. This change is noted in axiUm.

5. Instrument kits are scanned using axiUm from "main clean" to the designated sterilizer 1, 2, or 3.

6. Instrument kits should contain a chemical integrated, placed in a sterilization pouch, dated with current dated and sealed. Begin completing sterilization envelope to include date, number of sterilizer machine (1, 2, or 3) and the date the sterilizer was last cleaned.

7. Confirm that each machine has paper for the daily counter print outs.

8. For the first run of the day on each machine, run Bowie Dick test, annotate results and initial on the envelope. If test fails, check settings and re-test. Any failures after 2nd test, notify your supervisor.

9. Include a Biological Test Pack and a Chemical Integrator Test Pack with the first   load of the day for each machine. The Biological Integrator should be placed in the coldest area of the sterilizer, i.e. over the drain or at the door. **Note: The tests should not be stacked on top of each other and instrument should not be placed directly on top of the test.**

10. All other subsequent load must contain a ChemiPack Chemical Integrator. For loads containing an implantable device an AccuFast Biological Integrator along with a Chemical Integrator must be included.

11. The ChemiPack test is marked with the sterilizer number, load number (1/1, 2/1, 3/1) and date (DD/MM/YY) and placed on the lowest shelf inside the sterilizer.
12. Sterilizer is then loaded with instrumentation kits on their side, oriented paper to plastic until the machine is full. Each instrument kit is color coded with a specific color to match the color assigned to the sterilizer. For kits that don't have a barcode, the load number is written on the package with the color assigned to the sterilizer. **Note: Do not overload sterilizer and do not load the sterilizer until there is enough instrumentation to make a load.**
13. The lot number for the Biological Indicator (Spore Test), Chemical Integrator, Spore Test Control (Unprocessed vial) and the Manufacturer lot numbers and expiration dates are annotated on the sterilization envelope.
14. The sterilization envelope is annotated for the correct exposure temperature and time (273°F/5 mins), load contents and quantity, clinic floor, and operator's initials. **Note: For load contents, specify the exact contents placed in the sterilizer for that cycle including the quantities and applicable clinic floor.**
15. Sterilizer rack is then pushed into the sterilizer and cycle begins after pushing the start button. **Verify that the machine is on the correct cycle before starting.**
16. When exiting main clean always use hand sanitizer.

Sterile Room:
1. All staff in the sterile area should wear clean lab coats and use hand sanitizer before handling any instrument cassettes/packages.
2. Once cycle is complete, the sterilizer is opened in the sterile area of central sterilization. The rack is pulled out by staff wearing clean lab coat and heat proof gloves, and the load is allowed to cool (**never touch hot instrument packages**).
3. Verify that the packages are cool to a temperature between 70°F and 72°F utilizing an infrared thermometer. Once cool, the Chemical integrator test pack must be removed and checked to verify that there's complete color change from purple to green. The card should be completed and signed and the result annotated on the sterilization envelope after the staff verifies on the sterilizer print out that all parameters for sterilization was met (273°F/5Mins). The print out that corresponds to that load must also be initialed by the staff. If the card did not completely change to green, check the print out, identify the problem and contact your supervisor. Once the problem has been researched and the issue corrected, repackage and reprocess the load to include a new multi parameter chemical integrator and chemical integrator test pack. If load fails again contact Getinge for service and reprocess the load in another sterilizer. **NOTE: The load must be batch transfer using axiUm to the new sterilizer.**
4. Once the chemical integrator card is compared to the sterilizer print out, a staff must verify that the daily count is correct and the exposure temperature of 273°F is reached and maintained for at least five (5) minutes.
5. Once verified, the machine printout is initialed, the sterilization envelope is updated by annotating the "print out ok" block indicating that the correct sterilization parameters have been met.

6. The instrument packages are checked for color change and then batch transfer in axiUm from the sterilizer by scanning the sterilizer bar code to sterile storage.

7. The instrument packages are then inspected to ensure that the packages are intact and the indicator on the sterilization pouch changes color from a light to a dark color indicating that the instruments were properly exposed. The kits are then placed on the shelf and those for immediate clinic use are scanned in a case cart and returned to the appropriate clinic floor. All instrument kits are stacked and distributed on a first in first out basis.

8. **NOTE: If a kit(s) is damaged in process it should be transferred to main decontamination and reprocess. This must also be done in axiUm.**

9. Once instrument requests are received from the clinics, the instrument kits are pulled off the shelf, verified that the packages are still intact, the indicator on the pouches is the correct color, and the date on the pouch is verified.

10. The kit is then scanned into axiUm from sterile storage to a washed and disinfected instrument case cart.

11. All prepared case carts must be documented and initial on the case cart log by the staff who prepares the cart. The log at the dispensary must be completed to include date, time and the initial of the staff that drops the cart off.

12. The entire cart is then transported to the appropriate clinic floor and the cart and its contents are then transferred in axiUm to the dispensary.

Spore Test

1. Once the first load is completed, the test is allowed to cool before reading the instant read portion of the test. The test is removed from tray and placed at the workstation near the incubator where a staff member is responsible for reading the test when the package is cool.

2. The indicators on the front of the card should be green and the results of the instant read test card is annotated on the sterilization envelope in the "Instant Read CI" block where the result is circled and initialed by the staff member.

3. Prior to the incubation of the sterilized vial, a live spore vial (control) must be placed in the incubator on a daily basis.

4. It should be verified that the lot number and expiry date on the control vial matches with the lot number and expiry date on the test. The lot number and expiry date of the control vial must be documented on the sterilization envelope. (See Documentation). **Note: If the spore test is from different lots then a control must be incubated from each lot. Always check the lot number programmed in the cells to verify that it matches with the lot number on the test.**

5. The vials are then incubated at +/-60°C for 5 hours. The date and time the spore test was placed in the incubator should be annotated and initialed in the appropriate block on the sterilization envelope and also the incubator temperature. The information must also be completed on the Biological Monitoring Log.

6. Once the incubation time is complete the result will be printed. The vials must be checked and compared with the printed result for accuracy. The result is then annotated on the sterilization envelope in the block "BI Positive Control Result" and "BI Result". The staff member will also

initial the results on the sterilization envelope as well as indicating the date and time the vial was removed from the incubator. The Biological Monitoring Log must also be completed and initialed.

7. **Note: The spore test must be incubated in a timely manner so that it can be read and removed on the day that the test is done.**

8. Remaining live spore vials (controls) from the used batch are sterilized on a normal cycle and disposed of in a biohazard container.

Washer Monitoring Test (Weekly)

On a weekly basis each washer is tested to ensure it is functioning properly and the chemical levels and water temperatures are adequate. The tests are done in conjunction with the first instrument load of the day for each washer. Prior to the test, complete the top portion of the weekly monitoring log as well as cleaning each washer utilizing the checklist on the weekly monitoring log.

A. Water Chemical Test

1. Remove the water test strip from the test package. In separate containers pour hot and cold water from the water source.

2. Dip one test strip into the cold water and one test strip in the hot water for five seconds each and then remove.

3. Shake strips once to remove excess water and then wait twenty (20) seconds.

4. Within ten (10) seconds after the waiting period, compare the color strips PH, Alkalinity and Hardness to the colors on the interpretation chart and record the results on the weekly monitoring log. Acceptable levels are PH 5.0 – 9.5, Alkalinity 80 – 180 and Hardness 50 – 425. Include test strips with the log after they are read and dry. **Note: After 30 seconds of the strip had been read there will be color variances in the strip.**

5. If any levels are outside of the parameters, retest and then notify your supervisor.

B. Test Object Surgical Instrument Test (TOSI)

1. Place a stainless steel rack on each rack of the washer (3)

2. Remove the cold water (1) and hot water thermometers (3) from the test package and peel the release paper from the thermometer.

3. Apply the cold water thermometer (1) to the stainless steel tray on the center rack of the washer ensuring that the thermometer has adhered to the surface.

4. Place on hot water thermometer on each stainless steel rack in the washer (for a total of 3) ensuring that the thermometer has adhered to the surface.

5. Remove the TOSI test (3) from the test package and place one test on each stainless steel rack in the washer.

6. Start washer cycle.

7. Once the cold water rinse cycle is running, record the cold water temperature from the thermometer on the weekly monitoring log as well as circling if the test passed or failed.

Note: The cold water temperature should not exceed 100°F. If it does notify supervisor and initiate maintenance calls.

8. The washing disinfecting cycle is complete, read the hot water thermometer on each rack and record the results on the weekly monitoring log. **Note: The temperature should read at least 170°F. If it does not notify the supervisor and initiate maintenance calls.**

9. Once washing cycle is complete, remove each stainless steel rack and read the test for each rack (allow test to dry before reading to ensure accuracy). Using the interpretation guide on the weekly monitoring log, record the result for each TOSI test. **Note: The result should read 0. If they do not, retest the washer immediately. For a 2nd failure contacts the supervisor and initiates maintenance calls.**

10. Once the test is complete attach/enclose all the results to the weekly monitoring log into an envelope annotating the week of the test. Annotate on slide the date of test, washer level and initial. **Note: Due to the fact that the washer cycle cannot be interrupted, the temperature on the cold water thermometer will change once the cycle is complete.**

C. Daily TOSI Test

1. On a daily basis a TOSI test is conducted to ensure that the washer is functioning properly. This test is run in conjunction with the first instrument load of the day for each washer. In addition, each washer is visually inspected for cleanliness prior to the first cycle been run.

2. Place a stainless steel rack on a rack in the washer.

3. Remove the TOSI test from the test package and place one test on a stainless steel rack in the washer. **Note: Vary rack position daily.**

4. Once the washing cycle is complete, remove the stainless steel rack and read the TOSI test. (Allow test to dry before reading to ensure accuracy).   Using the interpretation guide on the weekly monitoring log, record result for each test.
    Note: The results should read 0; if they do not contact supervisor and retest the washer immediately. For a 2nd failure initiates maintenance calls.

5. Record the results on the test log sheet and initial. Annotate on slide the date of test, washer level and initial. Collect all tests for the week into an envelope for each washer and a copy of the test logs.

Ultrasonic Washer Test

1. The ultrasonic washer is tested daily utilizing a SonoCheck test.

2. Confirm that the machine is set to normal cycle and de-gas unit by running cycle.

3. Place two (2) vials inside the basket (one at each end).

4. Lower the basket into the machine and run a normal cycle (approximately 7 minutes). **Note: The complete cycle will be run as the unit automatically closes during operation which prevents the operator seeing the initial time of the color change.**

5. At the end of the cycle the color of the vials should change from blue to yellow.

6. Record results on log sheet to include ; machine number, normal cycle time, facility's name, date of test, type of detergent used in unit (Sonic 7900), verify that de-gassing cycle was done and the duration of the test. In addition the operator should initial the bottom of the log sheet.
7. Notify supervisor if test fails and initiates maintenance calls.

DOCUMENTATION FOR STEAM STERILIZATION ENVELOPE

The following should be documented by the person loading the sterilizer. Sections 1-10 must be completed before the cycle starts.

1. **STERILIZER ID:** Lisa 1 or Lisa 2
2. **DATE:** Month/Date/Year (04/16/2013)
3. **BOWIE-DICK TEST RESULTS:** Circle **Pass or Fail**, then **Initial**
4. **STERILIZER LAST CLEANED/DATE:** Month/Date/Year
5. **EXPOSURE TEMPERATURE/TIME:** Note temperature and time scales (e.g.   273°F/5 Mins)
6. **LOAD: If** more than one sterilizer, document sterilizer number then load number. E.g. Sterilizer #2 Load 1 (2/1), Sterilizer #1 Load 1 (1/1). This information should be written on the ChemiPack Test Pack in order to identify the load that the pack was placed in.
7. **Mfg. Lot No. /Exp. Date:** Located on the outside of the **AccuFast Test Pack.**
8. **Mfg. Lot No. /Exp. Date:** Located on the outside of the **ChemiPack Test Pack.**
9. **LOAD CONTENTS:** This should include the total number of each instrument/kits placed in the sterilizer. If the load contains a "**spore test"** this should be noted and the spore test information completed in the area that corresponds to the load.
10. **OPERATOR INITIALS:** The person who loads the sterilizer.
11. **OTHER INDICATOR: The ChemiPack Indicator Test Card** must be completed after the cycle is complete. All field must be properly completed, document result on envelope. On the envelope in the field **other indicator**, Circle **"PASS/FAIL"** then **Initial**.

The following sections must be completed before the Spore Test is placed in the incubator.

1. **INCUBATOR TEMPERATURE:** Record the temperature from the thermometer in the incubator e.g. 60°C
2. **INSTANT READ CI: (AccuFast Instant Readout Integrator)** Complete field located on the front of the card and initial.
3. **BI Lot NO. /Exp. Date:** Located on BI vial- SR-433 / 2014-05. The lot number on the spore control vial must be the same as the lot number on the spore test. If the lot numbers does not match, contact your supervisor.
4. **IN INCUBATOR:** Time spore test was placed in the incubator**.** Document Date/Time/Initials. Record time located on the incubator clock (8:40 a.m.) Date - Month/Date/Year.

BIOLOGICAL CULTURE TEST RECORD: Located in Folder. Must be completed when spore test is placed and also when the test is removed from the incubator.

Document **Date** (Month/Day/Year), **Sterilizer Number**, **Exposure Temp/time** (Include Scales), **Load Information**- This is the number load that the spore test was included in (e.g. 1, 2, etc).

Instant Read Result- Circle "**PASS/FAIL**"

Incubator Temperature: Circle "**YES/NO**"

Operator Initials: This is the person who puts the test into the incubator.

The following should be completed by the person removing the **"Spore Test"** from the Incubator.

1. **ChemiPack Indicator Card:** Annotate BI Result on card that corresponds to the load that contained the Spore Test. Annotate "**PASS/FAIL**"
2. **Instant Read CI (AccuFast Instant Readout Integrator) - BI Result: Annotate** Bi Result on card. Annotate "**PASS/FAIL**"
3. **OUT OF INCUBATOR: -** Date/Time/Initials. Document Date and Time test was removed from the incubator.
4. **BI RESULT:** Circle "**+ Growth**" if result is Positive (**FAIL**) and "**- No Growth**" if Negative (**PASS**).
5. **BI POSITIVE CONTROL RESULT: Circle "+ Growth"** if test is Positive (**FAIL**) and "**– No Growth**" Negative (**PASS**).
6. **BIOLOGICAL CULTURE TEST RECORD:** Located in folder.
7. **BI CULTURE RESULT:** Annotate "**+ Growth**" if positive and **"- No Growth"** if Negative for **Control** and **BI Test.** Initial and Date entry.

RECONCILIATION OF ENVELOPES

At the start of each morning, the responsible person and the Supervisor should reconcile the sterilization envelopes; after which these will be checked by the Dispensary Manager. The Director of Procurement, Facilities and Projects or designated representative, will do weekly random audits.

Inserts Include:

14. Bowie-Dick Test Results
   a. Should be black, red, or blue to indicate the test passed – depending on the brand used.
   b. All information should be filled in on the front of the test card.
   c. Annotate and initials result on the Record keeping Envelope.

15. Spore Test Results (Getinge Assure AccuFast Biological Test Pack)

a. Record result under heading "BI Results." Circle + Growth – if test is positive (**FAIL**) and – No Growth – if testis negative (**PASS**), then initial and date. The test result should be documented in the section that corresponds with the load that the test was run in.

b. Put test result in envelope.

c. Ensure that the "**Spore Test**" is documented under the heading load contents.

d. Symbols located on the front of the Instant Readout Card should be green indicating that the chemical integrator has passed. (See Fig.)

e. The Instant Readout Integrator should be completed and initialed.
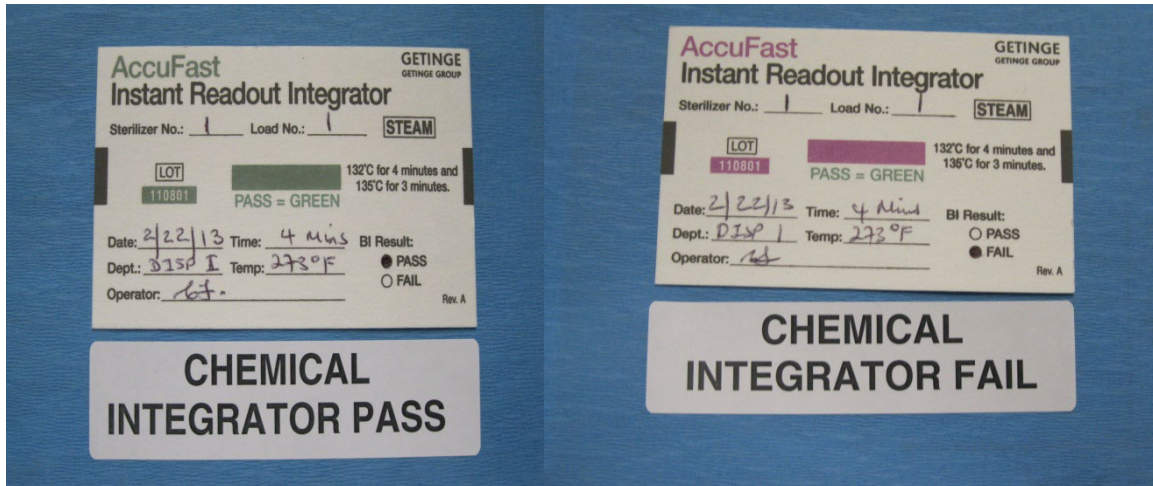
16. ChemiPack Chemical Integrator (Getinge)

a. Machine and load number are required for each package prior to going through cycle.

b. One package per load should be included (number of result cards should match number of loads indicated on the envelope.

c. Symbols located on the front of the ChemiPack Integrator Card will turn green to indicate sterilization cycle passed.

d. The Integrator Card should be completed and initialed.

e. The initials on the Card should match the initials at "Other Indicator"

f. ChemiPack that stays in the autoclave overnight may have a yellow halo around the changed green areas, the test is okay. There is no need to reprocess.

CHEMICAL INTEGRATOR PASS

CHEMICAL INTEGRATOR FAIL
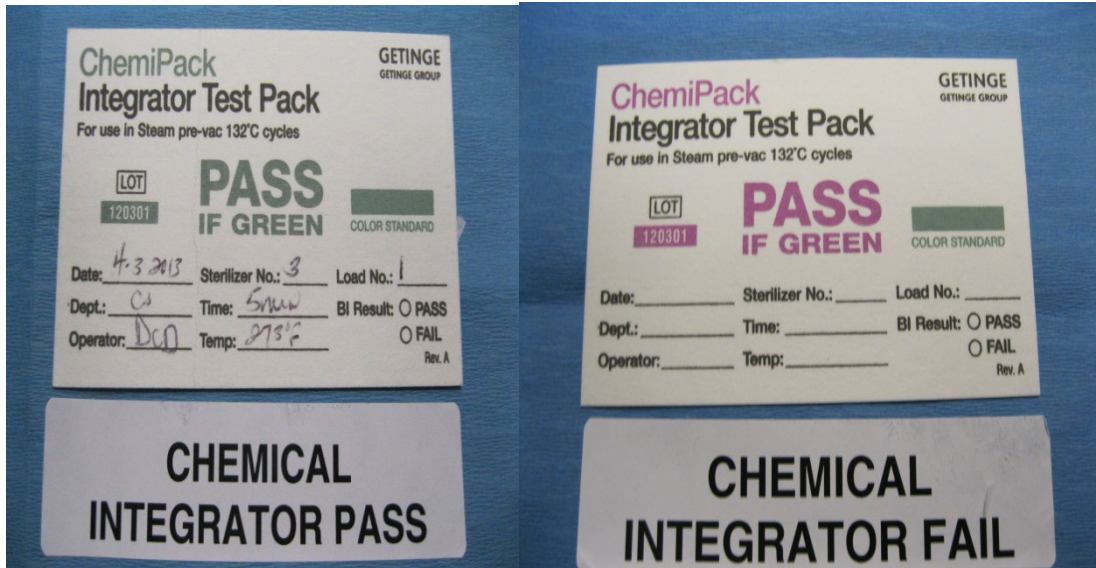
17. Print outs from Sterilizer
a. First print out should be from the Bowie-Dick test.
b. Second and remaining print outs should match the number of loads run.
c. Check date and machine number on prints to ensure that it is in the correct envelope.
d. Check exposure temperature and time on each print to verify that it was exposed for the correct amount of time and at the required temperature (at least 273°F/ 5 mins).
e. Each print out should be initialed by the person who verified that the print out was "ok" on the envelope.

<u>RECONCILIATION OF STEAM STERILZATION RECORD</u>

CHECK FOR THE FOLLOWING:

1. **STERILIZER ID: -** Number located on the front of the sterilizer if there's more than one (1) sterilizer. **(#1, #2 or Lisa 1, Lisa 2)**
2. **DATE: -** Month/Day/Year **(04/17/2013)**
3. **BOWIE DICK TEST RESULTS: -** Validate that the card is properly completed and recorded accurately and initialed on envelope. **"*PASS/FAIL*"** circled and initialed.
4. **DATE STERILIZER WAS LAST CLEANED: -** Month/Day/ Year
5. **INCUBATOR TEMPERATURE: -** (60 +/- 2C) Temperature recorded off thermometer in incubator.
6. **EXPOSURE TEMPERATURE AND TIME:-** (273°F/5Mins)
7. **OPERATOR INITIALS: -** Person who load the sterilizer.

8. **LOAD CONTENTS: -** Total number and description of each instrument/kits. If load contained a **"Spore Test"** it should be noted in load contents and information completed in the blocks on the right that corresponds to the load.

9. **LOAD NUMBER: -** Total number of **"ChemiPack Cards"** Chemical Integrator Cards should correspond with the total number of loads.

10. **INSTANT READ CI: -** **"AccuFast INSTANT READOUT INTEGRATOR"** Should be completed and initialed. **PASS= GREEN** and **FAIL=PURPLE**. Ensure that temperature and time scales are annotated. (°F and Mins).
    Initials Instant Read CI must be the same as initials at In Incubator (**Section 10 & 14**).

11. **Mfg. Lot No/Exp. Date:** Lot number and expiration date of **"AccuFast Test Pack"** e.g. 110801-433/ 2014-05

12. **BI Lot No. /Exp. Date:** Located on the BI vial. It is usually two (2) letters followed by three (3) numerals. E.g. **SR-433**. Validate that the number recorded for the BI Lot Number is the same as the last three (3) numbers at Manufacturer Lot Number for the AccuFast Test Pack (**Number 11**). These should be the same. The print out of the "**Spore Test**" should **have** the same lot numbers e.g. **SR-433**.

13. **Mfg. Lot No. /Exp. Date:** Annotated from the "**ChemiPack Integrator Test Pack**". Validate that lot number is correct by checking number on the front of the card under the word "**LOT**" on your left. E.g. **120301** / 2014-03

14. **IN INCUBATOR:** -Check for Date/Time/ Initials. (**04/16/2013/ 1:03 p.m. /CF**)

15. **OUT OF INCUBATOR:** - Check for Date/Time/Initials. (**04/16/2013 /6:03 p.m. /CF**). Total testing time is five (5) hours therefore the out of incubator time can be greater than five hours but should not be less than five.

16. **BI RESULTS: -**"+ Growth" or "- **No Growth**" must be circled and initialed.

17. **BI POSITIVE CONTROL: -** "+ Growth" or "**– No Growth**" must be circled and initialed. The initials at BI Positive Control Results, BI Results, Out of Incubator and Spore Test Results prints **must** be the same (**Section 15, 16 and 17**).

18. **OTHER INDICATOR:** - "**PASS/FAIL**" must be circled and initialed. Ensure that the ChemiPack Integrator Test Card is properly completed. It the test pack was placed in the load with the Spore Test then BI Results **must** be annotated. The other packs that were in loads that did not contain a Bi, the BI Result "**Pass/Fail**" must not be annotated.
    Initials on the ChemiPack Integrator Test Card should be the same as the initials at Other Indicator (**Section 18**) on the record keeping envelope.

19. **PRINT OUT OK: -** The number of prints
    Number on prints to should match the number of cycles run.
    Check date and machine number to ensure that it is in the correct envelope.
    Check exposure time and temperature on each print to verify that it was exposed for the correct amount of time and at the required temperature (e.g. 273°F/ 5 Mins).
    Each print should be initialed by the person who verified that the print out was "**OK**" on the envelope.

School of Dental Medicine
UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

VIII. Information Technology

8.1   Department of Information Technology

Location: L26 – Room 015 (Basement)
Phone: 303-724-7119
Email: sdmit@ucdenver.edu
Hours of Operation: Monday – Friday, 7:30 am - 5:00 pm

PERSONNEL:

Jaymil Patel, Director of Infrastructure and Technology Services
Ben Wilkoff, Program Manager of Digital Education and Academic Technologies
Pirin Becker, Program Manager
Brendan Joines, Database and Clinical Systems Administrator
Sam Wheeler, Server and Storage Administrator
Ernesto Jamison, Infrastructure Engineer
Thi Nguyen, IT Senior Professional
Chris Ashburn, IT Senior Professional
Erik Cantor, Technical Specialist

8.2 Information Technology Policy

Title: Information Technology Policy
Source: Department of Information Technology, Dean's Office
Effective date: June 1, 2012; Revised: October 2, 2019

INTRODUCTION:

The School of Dental Medicine (SDM) is a highly technical environment. Students, residents, faculty, staff, vendors, and affiliates must adhere to the Information Technology (IT) policies laid out below in order to be in compliance with school policy, University policy, the Health Information Portability and Privacy Act (HIPAA) and the Family Educational Rights and Privacy Act (FERPA) regulatory obligations. The following policy statement applies to all SDM facilities including but not limited to the School of Dental Medicine main clinic building, RC1 South 11th floor labs and offices, and RC1 North second floor labs and offices.

PURPOSE:

To provide guidance, uniformity and direction, especially with regard to security and confidentiality of information and data, to those using and/or purchasing information technology at or for the University of Colorado School of Dental Medicine including hardware, software, intranet, internet and web-based services or products.

SCOPE:

This policy applies to all individuals: faculty, resident, staff, student, volunteer, visitor, vendor, affiliate, or person of interest (POI) who uses or has access to any SDM IT service, application, device or those supported by SDM IT.

POLICY:

Policies for all SDM

Computer support

- IT support will be given to all SDM staff and faculty provided the device was purchased through the SDM IT department using school funds or otherwise approved by the SDM IT department. Supported devices include computers, printers, tablets, phones, scanners, or any other IT related device.

- Support will not be provided for any devices, including smartphones, which were purchased with personal funds.
- Devices that were purchased with school funds without consulting the IT department prior to purchase and that do not meet the current device configuration requirements of the SDM IT department will not be supported. School funds include, but are not limited to departmental funds, faculty development funds, grants, donations, and auxiliary funds.
- Software and/or hardware not purchased by, or approved by, the University is not to be installed or used on University computer hardware.
- SDM IT will not provide support for non-SDM personnel. Non-SDM personnel include but is not limited to individuals who have left the school's employment, personnel who have retired, and students/residents who have graduated.
- Access to SDM computing resources will be taken away as soon as the IT Department signs an individual's checkout form.

Printing

Printing at the school is to be accomplished using networked multifunction printers whenever possible. Desktop printers for individual use are only permitted when authorized by the school administration. Each department and unit must purchase toner for University-owned SDM printers through the IT department.

Hardware

- The SDM IT department must purchase or approve all IT devices that will access University resources. When available, warranty coverage must be purchased for IT devices. IT devices include desktop and laptop computers, printers/MFPs, scanners, barcode/OCR readers, signature pads, tablets, and hand-held devices (iPods, iPads, smart phones, tablets). Devices must meet the minimum specifications recommended by IT personnel. For assistance with IT related purchases, send an email to sdmit@ucdenver.edu stating the equipment you wish to purchase. The IT department will contact you to work out the details.
- All IT devices purchased with school funds (departmental funds, faculty development funds, grants, donations, auxiliary funds) are the property of the school and must be returned upon termination of employment or when the device is no longer in use.
- Phone, iPad/iPod, laptops, and Apple computers will be purchased for faculty only when authorized by the school administration.
- If a tablet computer is authorized for purchase, it must be an Apple iPad.
- Lost, stolen, or damaged IT devices are the end user's responsibility.
- Only devices with intact security features will be supported and allowed to access SDM resources. Rooted or jailbroken devices are not permitted.

Software

- All of the computers in the School of Dental Medicine must be on a supported operating system using supported software (examples are MS Office 2016, Mac OS 10.12, and Windows 10). Exceptions will be made for users that are using special devices or databases that are only

compatible with outdated programs or alternative Operating Systems. IT will try to support these outdated devices/programs but cannot guarantee outcomes. If a computer cannot be updated and patched, according to OIT guidelines it will not be allowed on the University network.

- Software purchased with personal funds cannot be installed on University owned devices without prior approval from SDM IT. (exception for Apple devices)
- All software, applications and services used for SDM purposes requires at least two administrator level accounts managed by SDM IT. This includes but is not limited to: programs purchased with University funds, free/donated software, and programs used on or to access SDM devices or data.
- Any new software acquisitions require coordination and approval from SDM IT prior to purchase/installation/use. As part of this process, a non-IT administrator/owner must be identified.

Apple Devices

All Software available via Mac or iOS App Stores:
- Non-SDM Owned Apple Devices:
  - In order to receive SDM-paid software, these devices will be enrolled in JAMF
    - All SDM-paid Software will be pushed during course of study, and removed after graduation or termination. This software is supported by SDMIT
- SDM-Owned Apple Devices:
  - All devices must be enrolled in JAMF
  - No Hardware Upgrades are allowed
  - Personal Apple IDs are allowable for paid/free apps for work-related purposes, but are not supported by SDMIT
  - All SDM-paid Software will be pushed during course of study, and removed after graduation or termination. This software is supported by SDMIT
  - All requests for paid software will be approved and managed by SDMIT and pushed by JAMF. These software titles will fall under the "supported" category so long as the app continues to be supported by the vendor and compatible with the SDMIT infrastructure

All Software NOT available via Mac or iOS App Stores:
  - All SDM-purchased app licenses must be recoverable upon graduation or termination
  - SDMIT will document the licenses purchased with SDM funds, and will perform a recovery process in addition to checkout process for any outstanding licenses

Jamf

- All Apple devices are subject to enrollment in the School of Dental Medicine mobile device management software, Jamf. This enables SDM IT to maintain device compliance by including, but not limited to: approved applications, pushing software updates and patches, and troubleshooting issues that may arise. axiUm access will only be given to Apple devices that are enrolled in JAMF
- SDM IT holds the right to restrict or delay software upgrades through Jamf to prevent incompatibility with other applications or systems within the University.

- Upon graduation or termination, students/residents and employees will be unmanaged and removed from Jamf

axiUm use

axiUm licenses will only be installed on devices that are supported by the IT department (see above) or a device that is specifically authorized by IT/Administration. We have multiple versions of axiUm that are used for reasons such testing, training, and reporting. Our production environment is labeled "axiUm". Please ensure that you are always accessing the correct version of axiUm. This is indicated by the text next to the axiUm icons, as well as a background label once you have logged in to the application.

Data Security

- Users assume all liability related to loss of data from their use of any IT device on campus or off. Devices include laptop computers, flash/USB drives, external hard drives, CD's/DVD's or any other device that contains SDM related data. This includes all data with PHI, HIPAA/FERPA, or monetary value. Please review HIPAA/FERPA regulations as there are personal consequences for violations of the act.
- Users must log off/lock before leaving any system they are using to make sure other people cannot use the computer under their login credentials.
- While using SDM computing resources, users should not save any credentials when prompted by webpages or applications.
- Passwords must be changed every 90 days in accordance with University policy. Passwords must not be shared with other users or written down where they can be accessed by others.
- Electronically communicating PHI with any means other than university email is not allowed.
- Each individual is responsible for saving data from their computer. IT can assist you in configuring network or backup drives to ensure successful strategies for saving data. Network Drives (e.g. H,G,O drives) are backed-up every night. IT is not responsible for data saved locally on the computer (e.g. Desktop/C/Local Drive).
- OneDrive (Microsoft) and ShareFile (Citrix) are approved for hosting HIPAA/FERPA data. All other cloud sharing platforms (including Dropbox) are not allowed or approved for hosting HIPAA/FERPA data.
- University-owned mobile devices (tablets/phones/iPods) must have a password lock on them.
- University-owned mobile devices must have a case on them to prevent damage.
- University-owned laptops must be encrypted. University-owned desktops that are off campus must be encrypted.
- A waiver for encrypting your laptop/desktop can be obtained from OIT if approved.
- Any attempt to bypass security protocols that are in place is prohibited.
  It is the responsibility of the user to protect any access controls they use including but not limited to: Computer passwords and passphrases, Campus ID badges, one-time token fobs and/or applications/apps, Encryption keys and certificates, and password storage applications/apps. Users must not share or allow to be shared any access controls for which they are responsible.

- For any user-maintained devices (laptops, cellphones, iPads) that access university data and have local passwords, pin codes or other access control methods, the user is responsible for maintaining these methods such that they are compliant with the University password requirements (complexity, must not be based on common words; change frequency, etc.,) where possible. Contact SDM IT personnel for guidelines where this is not possible.
- Any indication of security compromise including but not limited to: data theft, malware or virus activity, theft or loss of computing devices, account compromise, etc. must be reported to SDM IT immediately upon discovery.

Computer Usage

- Computing resources should be used for SDM related work only. Streaming music, videos, online chatting, personal shopping, or any excessive personal internet use while in the School of Dental Medicine building is prohibited. Please consult the IT department if you have any questions.
- Abusive or offensive language in any electronic communication including emails, shared files, or any other SDM document is prohibited.
- In order to connect personal computers to the CU Anschutz (Secured) wireless network, SDM Wired networks, or UCDenver VPN networks, you must maintain your computer or device such that it has: secured credentials for all accounts that meet university requirements, monthly security patches including current officially supported Operating System, application patches by the vendor/s are applied in a timely manner (when available), an up-to-date approved and operational antivirus is maintained, all content on the device is legal, adheres to university policies, and is appropriately licensed.
- Be aware, the University reserves complete rights to the personal computer/device connected to its secured network; including data and the device itself.
- Computing devices that are non-compliant may be administratively disabled for security purposes.

Email

- University email is not to be used for personal gain, entertainment, or for political advocacy.
- Upon graduation, students/residents will be removed from the Students-Dentistry@cuanschutz.edu distribution list.
- The email distribution list for a graduating class will be deleted 1 month after graduation.
- Automatic email forwarding from UCD email to any other email service is not allowed

Telecom

Any telecom (fax, credit card line, phone) related issues such as activation, disconnecting of line, transfer of phone jacks, name display change, voicemail setup and any other telecom issue must go through IT.

Ethernet Access Points

Use of unauthorized hubs and switches is not allowed in the building. If a department needs more internet jacks, installation cost will come from department funds. Contact SDM IT with any requests to add or move internet jacks.

Audio/Visual support

SDM IT does not support hardware outside of the SDM facilities listed in the Introduction paragraph of this policy. Technology Support Services (TSS) should be contacted if there are any issues in any building other than the School of Dental Medicine facilities. If out of the ordinary, audio visual or other computer resources are required for a class or meeting in another building, TSS should be contacted in advance to provide the requested services.

Recording

With certain exceptions, you cannot use video or audio recording devices inside the SDM building. Devices include cell phones, cameras, audio and/or video recorders, or any other electronic recording device. Recording devices may be used to record within the clinical areas for academic assignment or work purposes only. They can be used in other areas with the permission of the person being recorded and the appropriate consent forms completed (e.g. HIPAA/FERPA release form, or other permission form if needed).

Personal Data

Personal data is not allowed on any SDM computer or any of the shared drives. All data on any SDM owned IT device is University property and therefore public.

Policies specific to faculty

Computer rights

For security reasons, faculty members placed on Administrative leave will lose their login privileges for the duration of the leave. Privileges will be reinstated upon their return to SDM employment.

Vital Source

Vital Source privileges will be given to all full-time faculty and some part-time faculty at the department chair's discretion. Privileges will be revoked upon conclusion of service to the SDM.

Printers

- Printers will not be purchased for new faculty members. Faculty members may keep any existing printers as long as they are paying for the maintenance and purchasing the toner from their development account. Funds to cover these costs cannot come from their department funds or a grant.
- SDM IT will support only individual printers and department printers (3-D printers) that are identified as integral. Multifunction Printer/Copiers are supplied to each area of the school, with the school covering the complete cost of operation for these machines.
- Printers purchased with personal funds are not allowed in SDM facilities.

axiUm license/access

Three axiUm licenses will be given to all faculty who are employed at 40% or greater at the school. One license will be dedicated to the faculty member's school computer, one on an iPad and one may be on a personal computer. Windows machines must have an active, up-to-date antivirus program and patches installed. Computers with the Mac operating system must have all the latest apple updates installed and have auto logon switched off. Both Windows and Mac users should check with IT regarding the current recommended software versions. Display/screen saver time out must be set to 10 minutes. A password is required on all computers. For faculty employed 39% or less, access will be allocated based on office availability. A personal/home use license and/or an iPad license for faculty with employment of 39% and less will be evaluated by administration upon request. HIPAA/FERPA training and examination is mandatory and must be updated as required.

Policies specific to staff

Computer rights

All users will be unprivileged users unless IT perceives a need for the staff member to be an administrator of their computer. Staff will only be permitted to use a Windows computer. For security reasons, staff members placed on Administrative leave will lose their login privileges for the duration of the leave. Privileges will be reinstated upon their return to SDM employment.

axiUm License/access

Two personal/home use licenses for staff will be evaluated by administration upon request. One for a laptop and other for an iPad. Windows machines must have an active, up-to-date antivirus program and patches installed. Computers with the Mac operating system must have all the latest apple updates installed and have auto logon switched off. Display/screen saver time out must be set to 10 minutes. A password is required on all computers. HIPAA/FERPA training and examination is mandatory and must be updated as required.

Policies specific to students and residents

Student Laptops

Students will be supported only if they purchase their computer according to the school's recommended configuration.

Email

- Webmail is the only email software supported by IT. There will be no support for any other email software. Webmail is the only official and supported conduit for external access to University email at this time.
- If you are misusing your email account, we will restrict your email address so it cannot send emails to any email distribution list, including your class distribution list. If you misuse your email account after graduation, we will disable it.

axiUm access

Students and residents will lose axiUm/Dolphin/Infinitt access upon graduation. An extension may be requested via email from their program director.

Students may lose axiUm access if they are not current with the compliance and regulatory requirements of the school as administered through the Compliance portal. axiUm access is reinstated once the student becomes compliant with the required documentation.

Printing

A printing quota has been allocated for each DS and ISP class. Please contact the IT department for more details.

axiUm license

axiUm access will be given to students and residents on an Apple computer and/or SDM IT approved device only. Computers must have an antivirus program installed, active, and up to date. Computers must have all the latest software updates installed and have auto logon switched off. Display/screen saver time out must be set to 10 minutes. A password is required on all computers. IT will perform random checks of the computers. People who are not following the guidelines will lose axiUm access. HIPAA/FERPA training and examination is mandatory and must be updated as required.

Vital Source

The Vital Source library is a digital document and textual library required (no exceptions) by the SDM faculty as part of the DDS and advanced programs' curriculum of the School of Dental Medicine. If you are in good financial standing with the University of Colorado bookstore regarding your Vital Source required semester payments, you will have access to the Vital Source library and its upgrades until your graduation day. Upon graduation, per Vital Source, you will retain all of the books for life but you will not have access to any further upgrades unless you choose to pay a fee directly to Vital Source.

Policies specific to residents (Graduate Practice residents (GPR), Graduate Periodontics residents, and Orthodontics residents)

- GPR Residents: A loaner laptop with axiUm will be provided to residents who are covering emergency calls. Residents are responsible for all theft, loss, damage or repair to the loaner computers.
- A school-owned cell phone will be given to residents who are on-call. Residents are responsible for all theft, loss, damage or repair to the phone.
- Vital source – residents will be given a faculty license for use for the duration of the program only.
- Residents with a Mac laptop will be given access to axiUm via the Citrix Apps program; those with a Windows laptop will be given access to the Citrix Desktop program.

REFERENCES:

The Health Insurance Portability and Accountability Act of 1996 (HIPAA)

The Health Information Technology for Economic and Clinical Health Act (HITECH),

The Family Educational Rights and Privacy Act (FERPA).

State of Colorado Acceptable Use of State and Personal Assets

ACCOUNTABILITY:

All faculty, staff, residents, students and vendors who use or purchase SDM IT or University IT services, applications or devices or who have access to SDM information, data, devices or services are responsible for following all the requirements of this policy. All faculty, staff, residents, and students are responsible to follow any other rules and regulations related to information or data security and

confidentiality that are currently written or may be written in the future, even though this policy does not specifically address those rules and regulations at this time.

AUTHORITY:

The SDM Dean and other members of the Executive Team, the SDM IT Director, the Information Technology department members, the University Office of Information Technology (OIT), and any other University departments or individuals who have responsibility for HIPAA,

HITECH, FERPA or information and data security and confidentiality have the authority to enforce this policy.

REVIEW and APPROVAL:

This policy will be reviewed on an annual basis or sooner, as needed, but not to exceed 3 years.

The policy is reviewed and approved by the SDM IT Director, the SDM Operations Committee, SDM Faculty Senate, and SDM Executive Committee.

8.3 User Responsibilities Regarding Protection of Highly Confidential and Protected Health Information Policy and Acknowledgement

Title: User Responsibilities Regarding Protection of Highly Confidential Information, Confidential Information and Protected Health Information

Source: Information Technology Department, Quality and Patient Safety, Clinical Affairs

Effective Date: April 28, 2016

Replaces: September 2015 version

INTRODUCTION:

The University of Colorado School of Dental Medicine (SDM) recognizes and follows all laws, rules and regulations prohibiting the improper use of, improper release of and/or improper and inadequate storage of highly confidential information, confidential information and protected health information or data, as outlined below under the Policy section, and any closely held information or data.

PURPOSE:

It is the legal and ethical responsibility of all University of Colorado School of Dental Medicine (SDM) faculty, staff, students, residents, volunteers, and contractors to use, protect, and preserve confidential and personal patient, employee, student, resident and University business information and data, including medical/dental information or data and data or information used for research purposes, in accordance with state and federal laws, best practices and University policies.

POLICY:

Laws controlling the privacy of, access to, and maintenance of confidential information include, but are not limited to: the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), the Health Information Technology for Economic and Clinical Health Act (HITECH), the HIPAA Final Omnibus Rule and the Family Educational Rights and Privacy Act (FERPA). These and other laws apply whether the information is held in electronic or any other format, and whether the information is used or disclosed orally, in writing, electronically, or in photographic or sound formats including social media posts that either state or allude to confidential information.

University policies that control the manner in which highly confidential information, confidential information and Protected Health Information are used apply to SDM IT processes and take precedence over this policy in the case of a conflict.

Highly confidential and confidential information are defined below. Please reference http://www.cu.edu/ois/data-classifications-impact for additional information regarding these classifications.

Highly Confidential Information

This category includes data elements that require protection under laws, regulations, contracts, relevant legal agreements and/or require the institution to provide notification of unauthorized disclosure/security incidents to affected individuals, government agencies or media.

This information is only for the "eyes of the authorized individuals" in any form including paper or electronic. This information is prohibited from being (1) transmitted or stored without encryption and (2) handled on networks or systems without appropriate firewall, monitoring, logging, patching, anti-malware and related security controls.

The users should contact their Information Technology (IT) Security office to ensure protection of data if compensating controls are used to secure the data in lieu of the above mentioned controls (1) and (2).

The following are the examples of common data types defined as **Highly Confidential**:

- Protected Health Information (PHI)
- Social Security Numbers (SSN)
- Payment card numbers
- Financial account numbers: including university account numbers, student account numbers, and faculty and staff direct deposit account numbers
- Driver's license numbers
- Health insurance policy identification numbers
- Level 4 and 5 of Student Data (SSN, NID, Financial Aid (except work study), loan and bank account numbers, health information, disability, race, ethnicity, citizenship, legal presence, visas, religion)

Confidential Information

This category includes data elements not usually disclosed to the public but are less sensitive than Highly Confidential data. If a legally required and applicable Colorado Open Records Act (CORA) request is submitted, these records may be released. This information is protected by (1) ensuring authenticated access on a need to know basis (2) not using any electronic mediums and services (Emails, file shares, etc.) other than those provided or approved by the institution to transmit/store data (3) storage on machines with the latest anti-virus, security updates installed and residing on networks that have appropriate security controls in-place (firewalls, monitoring, logging).

Protected Health Information (PHI)

The data and information categorized as PHI includes the following, no matter where it is stored and no matter the format: dental, medical, and psychiatric records, photos, videotapes, diagnostic and therapeutic reports, x-rays, scans, laboratory and pathology samples, patient business records (such as bills for service or insurance information), visual observation of patients receiving medical care or accessing services, and verbal information provided by or about a patient. The use of photographs, sound recordings and social media posts or transmissions are considered to be Protected Health Information and are governed by the same policies as all other Protected Health Information. Medical information, including Protected Health Information (PHI), is maintained to serve the patient, health care providers, health care research, and to conform to regulatory requirements.

Unauthorized use, disclosure, viewing of, or access to PHI is in violation of state and/or federal laws and University policies and may result in personal fines, civil liability, licensure sanctions and/or criminal penalties, in addition to University disciplinary actions.

PROCEDURE:

All SDM staff, faculty, students, residents and applicable volunteers will take the University of Colorado Denver-Anschutz Medical Campus on-line Skillsoft courses related to Confidential Data and Information. These courses are: CU: Information Security and Privacy Awareness; CU: FERPA; and CU: HIPAA Regulations. These courses must be completed within 90 days of hiring for employees, or within 90 days of on-boarding for students, residents and applicable volunteers. Access to the SkillSoft program is available at https://universityofcolorado.skillport.com/skillportfe/main.action?content=catalog

A yearly review of this policy "User Responsibilities Regarding Protection of Highly Confidential Information, Confidential Information and Protected Health Information", and any associated training will be completed by staff, faculty, students, residents, applicable volunteers, and any other University employee normally working with or directly involved with the SDM. Acknowledgement of this policy and its requirements will be evidenced by yearly reading and signing the Attestation found in the next section. A copy of this Attestation will be maintained in SDM files.

ATTESTATION:

I understand and acknowledge that:

It is my legal and ethical responsibility as an authorized viewer and user of the University of Colorado data and information to preserve and protect the privacy, confidentiality, and security of all **highly confidential information, confidential information and Protected Health Information** (PHI), relating to the University of Colorado, its patients, its staff, faculty, and any activities and affiliates, in accordance with applicable laws. University users who violate this policy may be subject to penalties and disciplinary actions, including expulsion or dismissal, under applicable University or Board of Regents rules, regulations, laws or policies. Other responsible parties may also refer suspected violations of law to appropriate law enforcement agencies for further investigation or action.

I will access, use, or disclose PHI only in the performance of my University duties, when required or permitted by law, and disclose information only to persons who have the right to receive that information. When using or disclosing PHI, I will use or disclose only the minimum information necessary, consistent with HIPAA Privacy Rules. Please reference - University of Colorado Denver and Anschutz Medical Campus http://www.cu.edu/ope/policy/aps-.

I have received HIPAA Privacy Training. In accordance with the training, I agree to:
- Access, use, or modify PHI only for the purposes of performing my official duties.
- Never access or use PHI out of curiosity, or for personal interest or advantage.
- Never show, discuss, or disclose PHI to or with anyone who does not have the legal authority.
- Never retaliate, coerce, threaten, intimidate or discriminate against or take other retaliatory actions against individuals or others who file complaints or participate in investigations or compliance reviews.
- Never remove PHI from the work area without authorization.
- Never share passwords with anyone or store passwords in a location accessible to unauthorized persons.
- Always store PHI in a place physically secure from access by unauthorized persons.
- Dispose of PHI by utilizing an approved method of destruction, which includes shredding, or witnessed destruction. I will not dispose of such information in wastebaskets or recycle bins.
- I understand that penalties for violating one of the above limitations may include disciplinary action, up to an including dismissal.

I received training on HIPAA Information Security and I will comply with the Information Security Policies & Procedures. I understand the need to:

- Treat passwords as confidential information and change them on a regular basis.
- Take reasonable precautions to ensure the protection of data from unauthorized access, disclosure or destruction.
- Never disable my virus protection software to avoid contamination of data.
- Notify my supervisor and the Information Technology/Security Officer of a possible security violation including unauthorized access, loss disclosure or destruction of equipment or data, misuse, theft, or unauthorized modification of such information, including information stolen in conjunction with the theft of a computer, or any other portable device containing data, and of any possible virus attacks.

I will discuss confidential information for University-related purposes only. I will not knowingly discuss any confidential information within hearing distance of other persons who do not have the right to receive the information. I will protect the confidential information which is disclosed to me in the course of my relationship with the University of Colorado School of Dental Medicine (SDM).

My access to all University electronic information systems is subject to monitoring and audits in accordance with University policy.

It is my responsibility to follow safe computing guidelines:

- I will maintain my laptop in accordance with SDM IT recommendations, including installation and maintenance of an antivirus software, setting display time-out to 5 minutes, and installing updates to keep the laptop updated to the operating system version level recommended by SDM IT.
- I may be personally responsible for any breach of confidentiality resulting from an unauthorized access to data due to my negligence.
- I will not share my login credentials (user ID, password) or University ID card with any other person. If I believe someone else has used my University ID card and/or login credentials, I will immediately report the use to the University of Colorado IT Helpdesk at 303-724-4357 or by email at UCD-OIT-HELPDESK@UCDENVER.EDU and if applicable, change my password.
- My User ID constitutes my signature and I will be responsible for all entries made under my User ID.
- I agree to always log off of or lock shared applications or workstations.

Please direct any questions regarding these guidelines to the School of Dental Medicine Information Systems Department**.**

Under state and federal laws and regulations governing a patient's right to privacy, unlawful or unauthorized access to, use of, or disclosure of patients' confidential information may subject me to disciplinary action up to and including immediate termination from my employment/professional relationship with the University of Colorado School of Dental Medicine (SDM), civil fines for which **I may be personally responsible**, licensure sanctions, as well as criminal penalties.

By signing below, I have read, understand, and acknowledge all of the above Policy, USER RESPONSIBILITIES REGARDING PROTECTION OF HIGHLY CONFIDENTIAL INFORMATION, CONFIDENTIAL INFORMATION AND PROTECTED HEALTH INFORMATION .

SDM Department _____   CU Employee/Student ID Number _____

Signature _____Date _____

Print First Name _____Last Name_____

REVIEW AND APPROVAL:

The policy, User Responsibilities Regarding Protection of Highly Confidential Information, Confidential Information and Protected Health Information is vetted by the Operations Committee. Final approval of the policy is conducted by the Faculty Senate.

REFERENCE DOCUMENTS:

Acceptable Use of Information Technology Resources Policy – Version 1.0 – April 1, 2014

School of Dental Medicine Information Technology Policy, Policy 8.2.

University of Colorado Privacy Policy

http://www.cu.edu/privacy-policy

Anschutz Medical Campus Notice of Privacy Practices – English – v.4 – 9/23/2013

http://www.ucdenver.edu/policy/Pages/PrivacyPolicy.aspx

University of Colorado Denver HIPAA Policies and forms:
http://www.ucdenver.edu/academics/research/AboutUs/regcomp/hipaa/Pages/policies-forms.aspx

University of Colorado Data Classifications and Impact:

http://www.cu.edu/ois/data-classifications-impact

8.4   AxiUm Clinical Information System

OVERVIEW

In 2006, the School of Dental Medicine implemented the use of AxiUm as its electronic health record (HER) for patient management as well as a tool for recording a student's progress through his/her clinical education.

From 2006 through 2014, the School purchased all of the modules associated with AxiUm and has since implemented all but two of the modules (Patient Access and Lab). By implementing each module, the School is able to enhance the patient experience, track instruments from sterilization to use on the clinic floor, and to enhance the faculty/coordinators monitoring of student/resident clinical activities and accomplishments.

In 2013, the Orthodontics Residency Program was transitioned to AxiUm. This allowed for better patient management as Orthodontic patients often needed to be treated in other clinics within the School such as Oral Surgery, Graduate Periodontics, and the Adolescent Dental Clinic prior to starting their orthodontic treatment. With the addition of internal referral forms housed within AxiUm, each clinic is able to monitor and coordinate their patient's treatment in a more efficient manner.

AxiUm is used by faculty, clinic managers, staff, and students/residents to monitor all areas of clinical operations to include but not limited to: patient management, grades, student/resident accomplishments, scheduling, billing, clinical revenues, and instrument management.

TRAINING

AxiUm training is provided to faculty, students, and staff by the School of Dental Medicine's IT AxiUm Staff, currently Scott Nesbett.

Faculty Training
Within the first couple of weeks of being hired, faculty are scheduled for a one on one training session with Arthur Swanson to learn the basics of AxiUm.

On a monthly basis, AxiUm Calibration sessions are held for a one week period to go over specific topics covering each of the areas in AxiUm relative to faculty members' responsibilities.

Faculty can also contact Arthur Swanson for additional one-on-one training sessions at sdmit@ucdenver.edu.

Staff Training
At any time during their employment, staff are welcome to contact Arthur Swanson for one-on-one AxiUm training through the IT ticket system at sdmit@ucdenver.edu. However, most staff training is done by supervisors or designated personnel in their areas.

Student Training

Students are first introduced to AxiUm in their Managing Your Student Practice and Transition Clinic courses which take place during their DS 2 Fall and Spring Semesters and ISP 1 Spring Semester.

All students, residents and faculty have remote 24/7 access to AxiUm. This was initiated in 2014 to facilitate training in the use of the AxiUm by providing large group access to the EHR during general training sessions and for individual convenience during training and patient care.

Refresher sessions are held during Team Meetings each semesters, and students are always welcome to contact Arthur Swanson for additional training by submitting a ticket to sdmit@ucdenver.edu.

HOW TO DOCUMENTS

In an effort to assist students, faculty, and staff on the clinic floor or in their daily activities, How To documents have been created and are housed in AxiUm for easy access. These documents can be found in the links tab, under "AxiUm "How To" Documents Folder:

Links | AxiUm "How To" Documents Folder
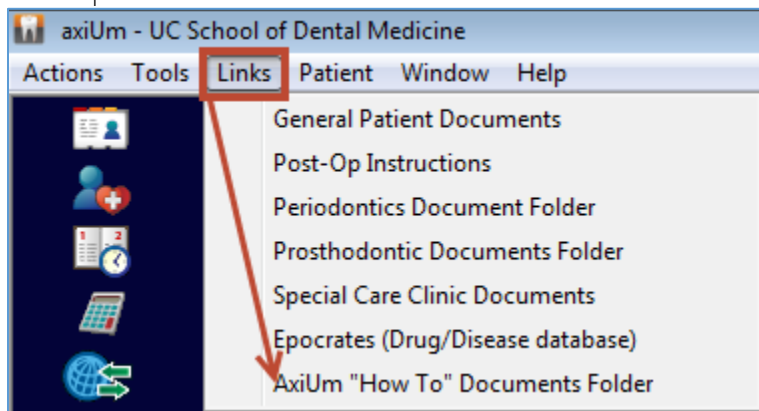
For any questions or concerns, please contact Scott Nesbett at sdmit@ucdenver.edu

8.5   IT Orientation for DS and ISP Students

SDM IT DEPARTMENT

Location: SDM Basement – Room 015
Phone: 303-724-7119 (off campus) 47119 (on campus)
Email: sdmit@ucdenver.edu

Staff: Jaymil Patel, Chris Ashburn, Sam Wheeler, Pirin Becker, Ernesto Jamison, Thi Nguyen, Erik Cantor, Brendan Joines, Ben Wilkoff.

UNIVERSITY CENTRAL IT

The AMC has a campus-wide IT department (OIT) that can also help you with your problems. They handle anything that is campus-wide (emails, networking, wireless connections). You can always start with us but we might refer you to OIT.

OIT Phone - 303-724-4357 (off campus) and 44357 - 4HELP (on campus)

SDM IT HELPDESK
- The **ONLY** way to contact us for IT questions/support is to SUBMIT A TICKET. We will entertain walk-in issues only after a ticket has been submitted.
- Email us at: **sdmit@ucdenver.edu** (You will need to put something in both the subject line AND the body of the email) You MUST use your university email account to submit a ticket. **Make sure to tell us your location.**
- Other emails you might need in order to put in a ticket: sdmfac@ucdenver.edu (Facilities), sdmdr@ucdenver.edu (Dental Repair).
- You should have received an email confirming the creation of your account. Please click on the link and make a password.
- We have given you a copy of the IT policy that explains what we can and cannot help you with.

Self service
- We have configured a self-service portal and app for your Mac laptops. It can be reached at https://jamf.sdm.ucdenver.edu:8443/Enroll. You may need to access this if you get a new computer or upgrade your hard drive.

- Once enrolled and the app is installed, you can open "Self Service" on your laptops. This has several very useful features including:

  o "Easy Button", which will run some common maintenance tasks and fix some minor problems that commonly arise with laptops.

  o Xerox installer, which will reinstall the Xerox driver and configure it in the event it is not working properly.

    o   Citrix Workspace, which is necessary to access axiUm.

AxiUm Login

- To use the AxiUm software program you will need to log in twice using two different passwords. Your username will be the same at both logins but your password will not. The first login is the Citrix login. Here you will use your Passport ID username and password. Please click on AxiUm icon once only. If you click on it two times it will launch two clients. At the second login you may use your university issued badge, which will automatically enter your username and password for you, or you can enter your username and password manually. You can and should change your AxiUm password at the same time interval and to the same password as your Passport ID. (Remember you have to change your Passport ID password every 90 days, which means you should change your AxiUm password every 90 days too). We recommend that you login to AxiUm using your username and password every now and then even if you have your card with you. To change your AxiUm password click on "Tools-Change Password" or put in a ticket and come see us and we can help you with it.

AxiUm is the only thing we will support on your personal laptop. Your Laptop must have OS 10.14, be up to date with patches, and have an antivirus installed. We recommend Avast (it is free).

Microsoft Office

- You are eligible for a free copy of the Microsoft Office Suite. Install from self-service.

- When you open an Office application for the first time (Word, Excel, PowerPoint), you will register using your university email and password.

Username, Password & Email

- Your password must be changed every 90 days by going to https://passport.ucdenver.edu. The Password format must be: at least 8 characters, one number or symbol (*don't use characters above numbers 6-0), and one Capital letter. You cannot use your name in your password or use one of your last 12 passwords. After 5-failed login attempts you will be locked out for 30 minutes.

- The University Username and Password (Passport ID) will be your key to logging in to 5 things. 1) email. 2) The computers in the student lounge and bump-outs. 3) The Citrix/Apps Login (the first part of our axiUm login): http://sdm-citrix/Citrix/AppStoreWeb/ 4) The CU Student Portal https://portal.cusys.edu/UCDAccessFedAuthLogin.html 5) VPN

- University email is the ONLY official means of communication used by faculty and staff.

- To check your emails, go to https://myemail.ucdenver.edu.

- When you give your email address to someone else it will be firstname.lastname@ucdenver.edu (in most cases)

- WE DON'T SUPPORT ANYTHING OTHER THAN MYEMAIL.

- Your Group email class list is: students-dentistry-ISP20xx@ucdenver.edu or students-dentistry-DS20xx@ucdenver.edu. This will send an email to all your classmates.

- Do not send emails with PHI in them without encryption. Emails to another UCDenver email account are automatically encrypted, as are emails to Children's Hospital or University Hospital. To encrypt an email to any other account simply type the word "encrypt" in the subject line. You can find out more about encrypting emails here: **https://www1.ucdenver.edu/docs/default-source/offices-oit-documents/how-to-documents/office-365-encryption.pdf?sfvrsn=765b8eb8_2**

- Do not set up forwarding to automatically forward your ucdenver email account to another account (Gmail, Hotmail etc.)

- If you set up your university email account on a mobile device, make sure you update your password on that device when you change your Passport ID password. Also remember to change the password in the CUAnschutz Wi-Fi connection if you use that.

- Again, when your password is changed, you must change your password in all of your mobile devices that connect using your Passport ID (CUAnschutz Wi-Fi and email).

- Please use your school email address for only work/school related content. OIT monitors email as to what you receive and what you send.

- Your email account has a limit of 50GB. You also get 1TB space on One Drive and use of all of the Office 365 Applications. One Drive is HIPAA compliant so you can save PHI there. You will lose your One Drive when you graduate. http://www.ucdenver.edu/email/Pages/OneDrive.aspx

- You will keep your ucdenver email account for life after graduation

- If you need to send an email about a lost and found item, please email Amanda Gonzales because she is the only one authorized to send an email to the whole school.

University Directory
- To look up any Faculty, Staff or Student, go to https://directory.ucdenver.edu. If you want to edit your information on the directory log in using your Passport ID and make the changes. Save it after you are done making changes.

Computer, Printer, Policies
- Use the school computers for Work/School related activities only. DO NOT use them for checking out CNN, Facebook, personal email, etc. You may use your personal laptop for these functions.

- DO NOT stream music or videos on any computer in the building including your personal laptop as streaming uses up the school's bandwidth. This slows everyone down. Please be courteous to others. This includes playing online/offline games, chatting online etc. We monitor our networks constantly and OIT monitors our building and the whole campus. Be very careful what you use the computers for while on campus.

- There are three Xerox printers for your use, one in the basement, one at the top of the stairs on the 2nd Floor, and one in the Northeast corner of the 4th floor. You can use your laptop to print to these printers. Please help us out by refilling paper or putting in a ticket if there is a problem with the printer (needs toner, etc.)

- Xerox use is for school related purposes only. If you print something it will stay in the printer queue for 72 hours. If you need paper, there is a cabinet full of paper in the basement right next to the Dispensary window.

- DS1= $170, DS2= $160, DS3= $115, DS4= $60   DS Year is August 1-July 31

- ISP1= $160, ISP2= $85   ISP Year is December 1-November 30

- Cost is $.05 for black and $.10 for color so use black and white whenever possible.

- If you want to know your account balance, please put in a ticket to sdmit@ucdenver.edu.

BACKUPS, Thumb / External Drive
- It is your responsibility to back up your data from your computer. Do it every day if possible. If your computer crashes, even if it is under warranty it may come back from repairs with a new, empty hard drive. Buy at least a 1TB hard drive to back up your laptop.

Vital Source
- When you install your Vital Source software, you will register your software using an email address and password. It is very important that you remember the email address and password that you use to set this up with. Make sure you give them a valid email address. We recommend you use your school email, which will stay with you throughout your school time and even after you graduate. If you use a personal email address, you are responsible for changing the email address stored in your registration should you change or delete that email account. If you ever need to reinstall your software, even 2 or 3 years from now, you will need that email account and credentials.

EPOCRATES
- https://online.epocrates.com/noFrame/. Pharmacy software, which is free for everyone in school. It will work from anywhere on campus with a wireless or wired connection on any device.

ZOOM
- You have been given an account in an application called Zoom. Zoom is a meeting software similar to Citrix Gotomeeting, and is available free for use by employees and students.   Your

UCDenver email name will register you for a pro level user license. ZOOM is a cloud-based application that allows users to connect with other PCs, Macs, IPods, IPads, IPhones, and Android. ZOOM accounts can be used anywhere; you are not limited to campus use or any specific device.

- To register for your free ZOOM account, or to learn more about its capabilities, go to http://ucdenver.zoom.us.

Qualtrics
- A new survey software, Qualtrics, is available to all ucdenver users.

Examplify
- * Install from self-service, run, log in with university credentials
- You will need to take some Examplify tests soon. To start taking these courses, you will need to install the app from self-service, log into it by typing "coloradodental" for the institution ID and log in with your Passport ID.

Skillsoft Training
- Here is the link to Skillsoft training: http://view.communications.cu.edu/?qs=6d1cda48e8f25e27e6b771fe10df0b093c57b01a1d66b0a ac28351d7b1bfa4d4bf50e696a10c2a8c7bdce5f305b3368da4941fd92238eafd89e230c3903e4f8b 9b6e3dbe02d77997

Compliance Portal
- You will need to upload your Skillsoft test results into the Compliance portal. You will need to do it from on campus or through VPN. http://compliance.sdm.ucdenver.edu After you complete the test, click on the arrow next to the "Launch" button and clock "View Certificate". Click the print button and turn it into a pdf by clicking pdf at the bottom left and "Save as PDF". In the Compliance portal, click on "Enter my Immunizations/Certifications". Click on "Add Attachment" in the course that you want to upload the certificate for. Choose your saved pdf and upload it. Then click on the "Submit" button.

Electronic Signature

- Use the attached pdf document to create an electronic signature

Canvas
- We don't have access to Canvas and cannot help you with it. Please call 303-315-3700 or 303-724-HELP (4357) for any questions related to Canvas.

Laptop Repair

- We use Netbuilders for Apple and Windows computer repair. They can do warranty and non-warranty repairs and they will pick up and deliver from the dental school. They can be reached at 303-922-0481.

- The AMC Library can loan you a laptop if you need one.

Phone Setup
- We don't support phone configurations. You will find instructions for them outside the IT room on the board. Also, they are in your folder.

Utilities
- Disk Utility. Run First Aid once a month

- Crucial.com, order more RAM or SSD Hard drive to improve performance

- Do all Apple Updates and Office Updates

University Badge
- If you lose your badge or forget your badge you will need to get a new badge from the badging office. Please come and give us your new badge number so we can change it in axiUm. You will also have to register your new badge on a Xerox machine.

- You can log in to the Xerox machine with your badge OR with your user name and password

IT Department
We are here to help you! If you have a problem or a suggestion, please let us know about it. Maybe one of your classmates has the same problem, too. If you have a problem, PLEASE SUBMIT A TICKET.

PLEASE SUBMIT A TICKET to sdmit@ucdenver.edu

8.6   IT Orientation for GPR and Graduate Periodontics Residents

SDM IT DEPARTMENT

Location: SDM Basement – Room 015
Phone: 303-724-7119 (off campus) 47119 (on campus)
Email: sdmit@ucdenver.edu

Staff: Jaymil Patel, Chris Ashburn, Sam Wheeler, Pirin Becker, Ernesto Jamison, Thi Nguyen, Erik Cantor, Brendan Joines, Ben Wilkoff.

The AMC has a campus-wide IT department (OIT) that can also help you with your problems. They handle anything that is campus-wide (emails, networking, wireless connections). You can always start with us but we might refer you to OIT.

OIT Phone - 303-724-4357 (off campus) and 44357 - 4HELP (on campus)

SDM IT HELPDESK
- The **ONLY** way to contact us for IT questions/support is to SUBMIT A TICKET. We will entertain walk-in issues only after a ticket has been submitted.
- Email us at**: sdmit@ucdenver.edu** (You will need to put something in both the subject line AND the body of the email) You MUST use your university email account to submit a ticket. **Make sure to tell us your location.**
- Other emails you might need in order to put in a ticket: sdmfac@ucdenver.edu (Facilities), sdmdr@ucdenver.edu (Dental Repair).
- You should have received an email confirming the creation of your account. Please click on the link and make a password.
- We have given you a copy of the IT policy that explains what we can and cannot help you with.

Self Service
- We have configured a self-service portal and app for your Mac laptops. It can be reached at https://jamf.sdm.ucdenver.edu:8443/Enroll. You may need to access this if you get a new computer or upgrade your hard drive.

- Once enrolled and the app is installed, you can open "Self Service" on your laptops. This has several very useful features including:

   o "Easy Button", which will run some common maintenance tasks and fix some minor problems that commonly arise with laptops.

   o Xerox installer, which will reinstall the Xerox driver and configure it in the event it is not working properly.

   o Citrix Receiver, which is necessary to access axiUm.

Microsoft Office
- You are eligible for a free copy of the Microsoft Office Suite. Install from self-service.

- When you open an Office application for the first time (Word, Excel, PowerPoint), you will register using your university email and password.

Username, Password & Email

- Your password must be changed every 90 days by going to https://passport.ucdenver.edu. The Password format must be: at least 8 characters, one number or symbol (*don't use characters above numbers 6-0), and one Capital letter. You cannot use your name in your password or use one of your last 12 passwords. After 5-failed login attempts you will be locked out for 30 minutes.

- The University Username and Password (Passport ID) will be your key to logging in to 5 things. 1) email. 2) The computers in the student lounge and bump-outs. 3) The Citrix/Apps Login (the first part of our axiUm login): http://sdm-citrix/Citrix/AppStoreWeb/ 4) The CU Student Portal https://portal.cusys.edu/UCDAccessFedAuthLogin.html 5) VPN

- University email is the ONLY official means of communication used by faculty and staff.

- To check your emails, go to https://myemail.ucdenver.edu.

- When you give your email address to someone else it will be firstname.lastname@ucdenver.edu (in most cases)

- WE DON'T SUPPORT ANYTHING OTHER THAN MYEMAIL.

- Your Group email class list is: students-dentistry-perio2021@ucdenver.edu or students-dentistry-gpr2019@ucdenver.edu This will send an email to all your classmates.

- Do not send emails with PHI in them without encryption. Emails to another UCDenver email account are automatically encrypted, as are emails to Children's Hospital or University Hospital. To encrypt an email to any other account simply type the word "encrypt" in the subject line. You can find out more about encrypting emails here: **http://www.ucdenver.edu/about/departments/ITS/EnterpriseComputing/Pages/EmailEncrypted.aspx**

- Do not set up forwarding to automatically forward your ucdenver email account to another account (Gmail, Hotmail etc.)

- If you set up your university email account on a mobile device, make sure you update your password on that device when you change your Passport ID password. Also remember to change the password in the CUAnschutz Wi-Fi connection if you use that.

- Again, when your password is changed, you must change your password in all of your mobile devices that connect using your Passport ID (CUAnschutz Wi-Fi and email).

- Please use your school email address for only work/school related content. OIT monitors email as to what you receive and what you send.

- Your email account has a limit of 50GB. You also get 1TB space on One Drive and use of all of the Office 365 Applications. One Drive is HIPAA compliant so you can save PHI there. You will lose your One Drive when you graduate. http://www.ucdenver.edu/email/Pages/OneDrive.aspx

- You will keep your ucdenver email account for life after graduation

- If you need to send an email about a lost and found item, please email Amanda Gonzales because she is the only one authorized to send an email to the whole school.

University Directory
- To look up any Faculty, Staff or Student, go to https://directory.ucdenver.edu. If you want to edit your information on the directory log in using your Passport ID and make the changes. Save it after you are done making changes.

Computer, Printer, Policies
- Use the school computers for Work/School related activities only. DO NOT use them for checking out CNN, Facebook, personal email, etc. You may use your personal laptop for these functions.

- DO NOT stream music or videos on any computer in the building including your personal laptop as streaming uses up the school's bandwidth. This slows everyone down. Please be courteous to others. This includes playing online games, chatting online etc. We monitor our networks constantly and Central IT monitors our building and the whole campus. Be very careful what you use the computers for while on campus. NOTE: If you do play games, stream music/video online and get malware or virus on your personal laptop, WE WILL NOT TAKE CARE OF IT ON YOUR COMPUTER.

- We have cordless phones in each resident room for scheduling your patients in AxiUm. You cannot use these phones for long distance calling or international calls. Please use these phones for school related purpose only and keep them in the charger when not in use.

- There are 2 printers available to you in your resident rooms. One is a B&W LaserJet and the other is the Xerox machine. The Xerox machine is much cheaper and much more secure. Please use it whenever possible. The Xerox machine will Fax, Scan, Print or Copy. If you print something to the Xerox it will stay in the printer queue for 72 hours. You can pick up your job at any Xerox machine. The LaserJet is there as a backup only. If the printer runs low on toner, please let Pam or Mac know and they will replace it. Again, the printer use is for school/work related purpose only. If you print something please pick it up, as we don't want to keep piling papers on the printer or the desk. If you need paper, there is a cabinet full of paper in the basement right next to the Warehouse window. We will register your badges today.

Vital Source
- We have installed Vital Source on each of your workstations for your use. You will need to register Vital Source with an email account. It is very important that you remember the email address and password that you use to register your Vital Source account. Each license will allow you to have your books on two computers and two mobile devices. We would like you to use your ucdenver email account for the account that will access your faculty/residency books. These books will only be available while you are in the residency program. That means if you attended dental school at CU you will need to change the email address associated with your dental school books to a personal email account.

BACKUPS

- It is your responsibility to back up your data from your computer. Do it every day if possible. If your computer crashes, even if it is under warranty it may come back from repairs with a new, empty hard drive. Buy at least a 1TB hard drive to back up your laptop.

Consult Pro

Go to http://chairsideonline.consult-pro.com/cu/q70fUY6DM1n470GwKHq-g-1g6N3F3Ma0y

EPOCRATES

https://online.epocrates.com/noFrame/. Pharmacy software, which is free for everyone in school. It will work from anywhere on campus with a wireless or wired connection on any device.

ZOOM

- You have been given an account in an application called Zoom. Zoom is a meeting software similar to Citrix Gotomeeting and is available free for use by employees and students. Your UCDenver email name will register you for a pro level user license. ZOOM is a cloud-based application that allows users to connect with other PCs, Macs, IPods, IPads, IPhones, and Android. ZOOM accounts can be used anywhere; you are not limited to campus use or any specific device.

To register for your free ZOOM account, or to learn more about its capabilities, go to http://ucdenver.zoom.us.

Qualtrics

- A new survey software, Qualtrics, is available to all ucdenver users.

AxiUm Login

- To use the AxiUm software program you will need to log in twice using two different passwords. Your username will be the same at both logins but your password will not. The first login is the Citrix login. Here you will use your Passport ID username and password. Please click on the AxiUm icon once only. If you click on it two times it will launch two clients. At the second login you may use your university issued badge, which will automatically enter your username and password for you, or you can enter your username and password manually. You can and should change your AxiUm password at the same time interval and to the same password as your webmail. (Remember you have to change your webmail password every 90 days, which means you should change your AxiUm password every 90 days too). We recommend that you login to AxiUm using your username and password every now and then even if you have your card with you. To change your AxiUm password click on "Tools-Change Password" or put in a ticket and come see us and we can help you with it.

- If you have a Mac laptop, we can install axiUm on it. We will need to change your computer's name in order for it to work. AxiUm is the only thing we will support on your personal laptop. Your Laptop must have OS 10.14, be up to date with patches, and have an antivirus installed. We recommend Avast (it is free). Skillsoft Training

- Here is the link to Skillsoft training: http://view.communications.cu.edu/?qs=6d1cda48e8f25e27e6b771fe10df0b093c57b01a1d66b0aac28351d7b1bfa4d4bf50e696a10c2a8c7bdce5f305b3368da4941fd92238eafd89e230c3903e4f8b9b6e3dbe02d77997

Compliance Portal

- You will need to upload your Skillsoft test results into the Compliance portal. You will need to do it from on campus or through VPN. http://compliance.sdm.ucdenver.edu After you complete the test, click on the arrow next to the "Launch" button and clock "View Certificate". Click the print button and turn it into a pdf by clicking pdf at the bottom left and "Save as PDF". In the Compliance portal, click on "Enter my Immunizations/Certifications". Click on "Add Attachment" in the course that you want to upload the certificate for. Choose your saved pdf and upload it. Then click on the "Submit" button.

Electronic Signature

- Use the attached pdf document to create an electronic signature

Laptop Repair
- We use Netbuilders for Apple and Windows computer repair. They can do warranty and non-warranty repairs and they will pick up and deliver from the dental school. They can be reached at 303-922-0481.

- The AMC Library can loan you a laptop if you need one.

Utilities
- Disk Utility. Run First Aid once a month

- Crucial.com, order more RAM or SSD Hard drive to improve performance

- Do all Apple Updates and Office Updates

University Badge
- If you lose your badge or forget your badge you will need to get a new badge from the badging office. Please come and give us your new badge number so we can change it in axiUm. You will also have to register your new badge on a Xerox machine.

- You can log in to the Xerox machine with your badge OR with your user name and password

Laptops and Presentations
The conference rooms on the 1st floor (Meskin and Hiatt) 2nd floor (Delta Room) 3rd floor (Dean's Room) & 4th floor have built in TV monitors that you can hook your laptops up to. They also have Mac and Windows computers in each room so you can plug your flash drive into those if you prefer. We can help you with the setups if you need it. Just connect your laptop to the VGA or HDMI cable and you can display everything to the TV. You will need a VGA or HDMI adapter. If you are presenting in any other building other than the SDM we cannot help you with the setup. Please call Technology Support Services (4-8129) and schedule with them for setting up your equipment.

IT Department
We are here to help you! If you have a problem or a suggestion, please let us know about it. Maybe one of your classmates has the same problem, too. If you have a problem, PLEASE SUBMIT A TICKET.

PLEASE SUBMIT A TICKET to sdmit@ucdenver.edu

Resident Room Computers

- Please use your resident workstation computers for work related use only. DO NOT save personal files, pictures, videos or music on it. It will be deleted if found. Your computer will be wiped clean on your last day of school. No exceptions.

8.7   IT Orientation for Orthodontic Residents

SDM IT DEPARTMENT

Location: SDM Basement – Room 015
Phone: 303-724-7119 (off campus) 47119 (on campus)
Email: sdmit@ucdenver.edu

Staff: Jaymil Patel, Chris Ashburn, Sam Wheeler, Arthur Swanson, Harley Robertson, Pirin Becker, Ernesto Jamison, Thi Nguyen, Erik Cantor, Brendan Joines.

The AMC has a campus-wide IT department (OIT) that can also help you with your problems. They handle anything that is campus-wide (emails, networking, wireless connections). You can always start with us but we might refer you to OIT.

OIT Phone - 303-724-4357 (off campus) and 44357 - 4HELP (on campus)

SDM IT HELPDESK
- The **ONLY** way to contact us for IT questions/support is to SUBMIT A TICKET. We will entertain walk-in issues only after a ticket has been submitted.
- Email us at**: sdmit@ucdenver.edu** (You will need to put something in both the subject line AND the body of the email) You MUST use your university email account to submit a ticket. **Make sure to tell us your location.**
- Other emails you might need in order to put in a ticket: sdmfac@ucdenver.edu (Facilities), sdmdr@ucdenver.edu (Dental Repair).
- You should have received an email confirming the creation of your account. Please click on the link and make a password.
- We have given you a copy of the IT policy that explains what we can and cannot help you with.

Self service
- We have configured a self-service portal and app for your Mac laptops. It can be reached at https://jamf.sdm.ucdenver.edu:8443/Enroll. You may need to access this if you get a new computer or upgrade your hard drive.

- Once enrolled and the app is installed, you can open "Self Service" on your laptops. This has several very useful features including:

  o "Easy Button", which will run some common maintenance tasks and fix some minor problems that commonly arise with laptops.

  o Xerox installer, which will reinstall the Xerox driver and configure it in the event it is not working properly.

  o Citrix Receiver, which is necessary to access axiUm.

Microsoft Office

- You are eligible for a free copy of the Microsoft Office Suite. Install from self-service. When you open an Office application for the first time (Word, Excel, PowerPoint), you will register using your university email and password.

Username, Password & Email

- Your password must be changed every 90 days by going to https://passport.ucdenver.edu. The Password format must be: at least 8 characters, one number or symbol (*don't use characters above numbers 6-0), and one Capital letter. You cannot use your name in your password or use one of your last 12 passwords. After 5-failed login attempts you will be locked out for 30 minutes.

- The University Username and Password (Passport ID) will be your key to logging in to 5 things. 1) email. 2) The computers in the student lounge and bump-outs. 3) The Citrix/Apps Login (the first part of our axiUm login): http://sdm-citrix/Citrix/AppStoreWeb/ 4) The CU Student Portal https://portal.cusys.edu/UCDAccessFedAuthLogin.html 5) VPN

- University email is the ONLY official means of communication used by faculty and staff.

- To check your emails, go to https://myemail.ucdenver.edu. When you give your email address to someone else it will be firstname.lastname@ucdenver.edu (in most cases)

- WE DON'T SUPPORT ANYTHING OTHER THAN MYEMAIL.

- Your Group email class list is: students-dentistry-ortho2021@ucdenver.edu. This will send an email to all your classmates.

- Do not send emails with PHI in them without encryption. Emails to another UCDenver email account are automatically encrypted, as are emails to Children's Hospital or University Hospital. To encrypt an email to any other account simply type the word "encrypt" in the subject line. You can find out more about encrypting emails here: **http://www.ucdenver.edu/about/departments/ITS/EnterpriseComputing/Pages/EmailEncrypted.aspx**

- Do not set up forwarding to automatically forward your ucdenver email account to another account (Gmail, Hotmail etc.)

- If you set up your university email account on a mobile device make sure you update your password on that device when you change your Passport ID password. Also remember to change the password in the CUAnschutz Wi-Fi connection if you use that.

- Again, when your password is changed, you must change your password in all of your mobile devices that connect using your Passport ID (CUAnschutz Wi-Fi and email).

- Please use your school email address for only work/school related content. OIT monitors email as to what you receive and what you send.

- Your email account has a limit of 50GB. You also get 1TB space on One Drive and use of all of the Office 365 Applications. One Drive is HIPAA compliant so you can save PHI there. You will lose your One Drive when you graduate. http://www.ucdenver.edu/email/Pages/OneDrive.aspx

- You will keep your ucdenver email account for life after graduation

- If you need to send an email about a lost and found item, please email Amanda Gonzales because she is the only one authorized to send an email to the whole school.

University Directory
- To look up any Faculty, Staff or Student, go to https://directory.ucdenver.edu. If you want to edit your information on the directory log in using your Passport ID and make the changes. Save it after you are done making changes.

Computer, Printer, Policies
- Use the school computers for Work/School related content only. DO NOT use them for checking out CNN, Facebook, personal email, etc. You may use your personal laptop for these functions.

- DO NOT stream music or videos on any computer in the building including your personal laptop as streaming uses up the school's bandwidth. This slows everyone down. Please be courteous to others. This includes playing online games, chatting online etc. We monitor our networks constantly and Central IT monitors our building and the whole campus. Be very careful what you use the computers for while on campus. NOTE: If you do play games, stream music/video online and get malware or virus on your personal laptop, WE WILL NOT TAKE CARE OF IT ON YOUR COMPUTER.

- The laptop you have is your personal laptop and you are free to install whatever you want on it. HOWEVER, we would like you to wait until after you graduate before installing anything because if you do install while you are here and it causes conflict with your work software then you are on your own.

- Printers – You have monthly quota for the Xerox printer. You will get $40 on your account every month on the first day of the month. If you have questions about the printer, please contact Amy.

- Cost is $.05 for black and $.10 for color so use black and white whenever possible.

- Xerox use is for school related purposes only. If you print something it will stay in the printer queue for 4 days.

- If you want to know your account balance, please put in a ticket to sdmit@ucdenver.edu.

BACKUPS
- It is your responsibility to back up your data from your computer. Do it everyday if possible. If your computer crashes, even if it is under warranty it may come back from repairs with a new, empty hard drive. Buy at least a 1TB hard drive to back up your laptop.

Consult Pro
Go to http://chairsideonline.consult-pro.com/cu/q70fUY6DM1n470GwKHq-g-1g6N3F3Ma0y

EPOCRATES
- https://online.epocrates.com/noFrame/. Pharmacy software, which is free for everyone in school. It will work from anywhere on campus with a wireless or wired connection on any device.

ZOOM

- You have been given an account in an application called Zoom. Zoom is a meeting software similar to Citrix Gotomeeting and is available free for use by employees and students. Your UCDenver email name will register you for a pro level user license. ZOOM is a cloud-based application that allows users to connect with other PCs, Macs, IPods, IPads, IPhones, and Android. ZOOM accounts can be used anywhere; you are not limited to campus use or any specific device.

To register for your free ZOOM account, or to learn more about its capabilities, go to http://ucdenver.zoom.us.

Qualtrics

- A new survey software, Qualtrics, is available to all ucdenver users.

AxiUm Login

- To use the AxiUm software program you will need to log in twice using two different passwords. Your username will be the same at both logins but your password will not. The first login is the Citrix login. Here you will use your Passport ID username and password. Please click on the AxiUm icon once only. If you click on it two times it will launch two clients. At the second login you may use your university issued badge, which will automatically enter your username and password for you, or you can enter your username and password manually. You can and should change your AxiUm password at the same time interval and to the same password as your webmail. (Remember you have to change your webmail password every 90 days, which means you should change your AxiUm password every 90 days too). We recommend that you login to AxiUm using your username and password every now and then even if you have your card with you. To change your AxiUm password click on "Tools-Change Password" or put in a ticket and come see us and we can help you with it.

- If you have a Mac laptop, we can install axiUm on it. We will need to change your computer's name in order for it to work. AxiUm is the only thing we will support on your personal laptop. Your Laptop must have OS 10.14, be up to date with patches, and have an antivirus installed. We recommend Avast (it is free).

Skillsoft Training

- Here is the link to Skillsoft training: http://view.communications.cu.edu/?qs=6d1cda48e8f25e27e6b771fe10df0b093c57b01a1d66b0aac28351d7b1bfa4d4bf50e696a10c2a8c7bdce5f305b3368da4941fd92238eafd89e230c3903e4f8b9b6e3dbe02d77997

Compliance Portal

- You will need to upload your Skillsoft test results into the Compliance portal. You will need to do it from on campus or through VPN. http://compliance.sdm.ucdenver.edu After you complete the test, click on the arrow next to the "Launch" button and clock "View Certificate". Click the print button and turn it into a pdf by clicking pdf at the bottom left and "Save as PDF". In the Compliance portal, click on "Enter my Immunizations/Certifications". Click on "Add Attachment" in the course that you want to upload the certificate for. Choose your saved pdf and upload it. Then click on the "Submit" button.

Electronic Signature

- Use the attached pdf document to create an electronic signature

Laptop Repair
- We use Netbuilders for Apple and Windows computer repair. They can do warranty and non-warranty repairs and they will pick up and deliver from the dental school. They can be reached at 303-922-0481.

- The AMC Library can loan you a laptop if you need one.

Utilities
- Disk Utility. Run First Aid once a month

- Crucial.com, order more RAM or SSD Hard drive to improve performance

- Do all Apple Updates and Office Updates

University Badge
- If you lose your badge or forget your badge you will need to get a new badge from the badging office. Please come and give us your new badge number so we can change it in axiUm. You will also have to register your new badge on a Xerox machine.

- You can log in to the Xerox machine with your badge OR with your user name and password

IT Department
We are here to help you! If you have a problem or a suggestion, please let us know about it. Maybe one of your classmates has the same problem, too. If you have a problem, PLEASE SUBMIT A TICKET.

PLEASE SUBMIT A TICKET to sdmit@ucdenver.edu

8.8   IT Orientation for Faculty

SDM IT DEPARTMENT

Location: SDM Basement – Room 015
Phone: 303-724-7119 (off campus) 47119 (on campus)
Email: sdmit@ucdenver.edu

Staff: Jaymil Patel, Chris Ashburn, Sam Wheeler, Pirin Becker, Ernesto Jamison, Thi Nguyen, Erik Cantor, Brendan Joines, Ben Wilkoff.

The AMC has a campus-wide IT department (OIT) that can also help you with your problems. They handle anything that is campus-wide (emails, networking, wireless connections). You can always start with us but we might refer you to OIT.

OIT Phone - 303-724-4357 (off campus) and 44357 - 4HELP (on campus)

SDM IT HELPDESK

- The **ONLY** way to contact us for IT questions/support is to SUBMIT A TICKET. We will entertain walk-in issues only after a ticket has been submitted.
- Email us at**: sdmit@ucdenver.edu** (You will need to put something in both the subject line AND the body of the email) You MUST use your university email account to submit a ticket. **Make sure to tell us your location.**
- Other emails you might need in order to put in a ticket: sdmfac@ucdenver.edu (Facilities), sdmdr@ucdenver.edu (Dental Repair), sdmsch@ucdenver.edu (Scheduling).
- Use our website at: **www.ucdenversodm.zendesk.com** (REGISTRATION IS REQUIRED - Click signup on the top right hand side and follow the instructions-make sure to sign up using your university email address).
- The IT policy that explains what we can and cannot help you with is available on request and is posted outside the IT room.

Username, Password & Email

- Once HR puts an employee in the system, that person's Passport ID is created automatically in approximately 2 business days. We will get an email confirmation stating that the account for the new employee has been created. If you are an existing UCD employee then we will not get an email so please let us know if this is the case. At that point we will forward the email to the respective supervisor. You must "Claim Your Passport ID" by browsing to https://myaccount.ucdenver.edu and submitting the required information. This will allow you to set up your password. Your password must be changed every 90 days by going to https://passport.ucdenver.edu. The Password format must be: at least 8 characters, one number or symbol (*don't use the characters above the 6-7-8-9-0 keys), and one Capital letter. You cannot use your name in your password or use one of your last 12 passwords. After 5-failed login attempts you will be locked out for 30 minutes.

- Your Passport ID will be your key to logging in to 4 things. 1) Your desktop computer. 2) Myemail or Outlook. 3) The Citrix Login (the first part of our axiUm login): http://sod.ucdenver.pvt 4) The CU Portal https://portal.prod.cu.edu/UCDAccessFedAuthLogin.html

- University email is the only OFFICIAL means of communication used by faculty and staff.

- To check your emails go to https://myemail.ucdenver.edu or you may use Outlook if your computer is not shared.

- WE ONLY SUPPORT myemail and Outlook.

- Your Group email list is: AMC-SOD-FACULTY@ucdenver.edu. This will send an email to all faculty members. We have similar email lists for Staff (AMC-SOD-Staff@ucdenver.edu) and Students (Students-Dentistry@ucdenver.edu)

- Emails to another UCDenver email account are automatically encrypted, as are emails to Children's Hospital or University Hospital. To encrypt an email to any other account simply type the word "encrypt" in the subject line. You can find out more about encrypting emails here: **http://www.ucdenver.edu/about/departments/ITS/EnterpriseComputing/Pages/EmailEncrypted.aspx**

- You cannot set up forwarding to automatically forward your ucdenver email account to another account (Gmail, Hotmail etc.)

- If you set up your university email account on a mobile device, make sure you update your password on that device when you change your Passport ID password. Also remember to change the password in the UCDenver Wi-Fi connection if you use that.

- Please use your email address for only work related content. Campus IT monitors all emails.

- Your email account has a limit of 50GB. You also get UNLIMITED space on One Drive and use of all of the Office 365 Applications. Don't save PHI to One Drive.

University Directory

- To look up any Faculty, Staff or Student, go to https://directory.ucdenver.edu. If you want to edit your information on the directory log in using your Passport ID and make the changes. Save it after you are done making changes.

Computer and Printer Policy

- Each clinic chair has a computer with a wireless keyboard and wireless mouse. It is very important that the mice and keyboards stay in the same operatory because they are paired with only that computer. If you need to change batteries, be sure not to take the mouse or keyboard away from the operatory, instead bring the new batteries to the operatory so they will stay paired up. Each keyboard and mouse has a tag on the underside which shows what operatory it belongs in.

- Once you are done working on a clinic computer, please log out of axiUm and Citrix. Please DO NOT shut down the computer or log out. Please DO log out of any other computers that you log in to with your credentials. If you log in, log out. If you don't log in, don't log out.

- Use the school computers for Work/School related activities only. DO NOT use them for checking out CNN, Facebook, personal email, etc. You may use your personal laptop for these functions.

- DO NOT stream music or videos on any computer in the building including your personal laptop as streaming uses up the school's bandwidth. This slows everyone down. Please be courteous to others. This includes playing online/offline games, chatting online etc. We monitor our networks constantly and Central IT monitors our building and the whole campus. Be very careful what you use the computers for while on campus.

- Your University ID badge will allow you to print on any of our 16 Xerox machines. You will need to register your badge on any Xerox machine the first time you use it or any time you get a new badge. The Xerox machines will Fax, Scan, Print or Copy. Personal printers will not be purchased per the IT policy.

Software

- We install and support many different software programs. We need to know what software you need in order to do your job. Here are a few of the most popular ones:

- Unified Messaging – this turns your voicemails into emails and delivers them to your email inbox.

- VPN – This allows you access your university files or the axium program from off campus

- Dolphin – Orthodontic X-ray viewing software

- Zoom – You have been given an account in an application called Zoom. Zoom is a meeting software similar to Citrix Gotomeeting, and is available free for use by employees and students. Your UCDenver email name will register you for a pro level user license. ZOOM is a cloud-based application that allows users to connect with other PCs, Macs, IPods, IPads, IPhones, and Android. ZOOM accounts can be used anywhere, you are not limited to campus use or any specific device.

- Electronic Signature - Use the attached pdf document to create an electronic signature

- To register for your free ZOOM account, or to learn more about its capabilities, go to http://ucdenver.zoom.us.

- Lync – Instant messaging

- Skype – video conferencing

- Microsoft Office - You are eligible for a free copy of the Microsoft Office Suite. Go to: http://www.ucdenver.edu/about/departments/ITS/EnterpriseComputing/office365/Pages/default.aspx

- When you open an Office application for the first time, you will register using your university email and password.

Vital Source

- Faculty members who teach classes outside of the clinic will be given a Vital Source license. Each license will allow you to have your books on two computers and two mobile devices. It is very important that you remember the email address and password that you use to register your Vital Source account. You must use your University email address, which will stay with you throughout your school time.

TOOTHIQ

- Go to http://roark.toothiq.com/login/Login.aspx

- Username – sdm Password – 4teeth (Dental procedures education software) It will work from anywhere.

EPOCRATES

- https://online.epocrates.com/noFrame/ Pharmacy software, which is free for everyone in school. It will work from anywhere on campus with a wireless or wired connection on any device.

- It will work anywhere on campus. Wired/Wireless. (Pharmacy software free for everyone in school)

AxiUm Login

- After claiming your Passport ID, please have your supervisor put in a help desk ticket with the following information in order to get access to axiUm: First Name, Last name, Passport ID, Gender, Email Address, level of access, and expiration date of access.

- To use the AxiUm software program you will need to log in twice using two different passwords. The first login is the Citrix login. Here you will use your Passport ID and password. At the second login you may use your University ID badge or enter your username and password manually. To change your AxiUm password, when you are in axiUm, click on "Tools", and then click on "Change Password".

Canvas

- We don't have access to Canvas and cannot help you with it. Please call 303-315-3700 or 303-724-HELP (4357) for any questions related to Canvas.

BACKUP POLICY

- It is your responsibility to backup your data from your computer. Do it everyday if possible. The best way to backup is by saving your Data to your H-drive. The H-drive is your personal drive and only you can access it. If you don't backup your data and your computer crashes then we cannot recover your data. Whatever data you save to the H-drive needs to be work related only. Do not put personal pictures, music or personal files on the H-drive. We monitor what is on the H-drive and due to space and policy constraints we will delete any non work related data.

Laptop & Presentations

- The conference rooms on the 1st(Meskin and Hiatt) 2nd floor (Delta Room) 3rd floor (Dean's Room) & 4th floor have built in TV monitors that you can hook your laptops up to. They also have Mac computers

in each room so you can plug your flash drive into those if you prefer. We can help you with the setups if you need it. You just have to connect the laptop to the VGA or HDMI port and you can display everything to the TV. If you are presenting in any other building other than SDM we can loan you an adapter but we cannot help you with the setup. Please call Educational Support Services (4-8129) and schedule with them for setting up the equipment.

Phone Setup

- We don't support phone configuration. You will find instructions for them outside the IT room on the board. Also, they are in your IT folder.

University Badge

- You can log in to the Xerox machine with your badge OR with your user name and password.

- If you lose your badge or forget your badge you will need to get a new badge from the badging office. Please come and give us your new badge number so we can change it in axiUm. You will also have to register your new badge on a Xerox machine.

IT Department

- We are here to help you! If you have an IT problem or a suggestion, please let us know about it.

- PLEASE SUBMIT A TICKET to sdmit@ucdenver.edu

8.9   IT Orientation for Staff

SDM IT DEPARTMENT

Location: SDM Basement – Room 015
Phone: 303-724-7119 (off campus) 47119 (on campus)
Email: sdmit@ucdenver.edu

Staff: Jaymil Patel, Chris Ashburn, Sam Wheeler, Pirin Becker, Ernesto Jamison, Thi Nguyen, Erik Cantor, Brendan Joines, Ben Wilkoff.

The AMC has a campus-wide IT department (OIT) that can also help you with your problems. They handle anything that is campus-wide (emails, networking, wireless connections). You can always start with us but we might refer you to OIT.

OIT Phone - 303-724-4357 (off campus) and 44357 - 4HELP (on campus)

SDM IT HELPDESK

- The **ONLY** way to contact us for IT questions/support is to SUBMIT A TICKET. We will entertain walk-in issues only after a ticket has been submitted.
- Email us at**: sdmit@ucdenver.edu** (You will need to put something in both the subject line AND the body of the email). You MUST use your university email account to submit a ticket. **Make sure to tell us your location.**
- Other emails you might need in order to put in a ticket: sdmfac@ucdenver.edu (Facilities), sdmdr@ucdenver.edu (Dental Repair).
- The IT policy explains what we can and cannot help you with is will be emailed to you.

Username, Password & Email

- Once HR puts an employee in the system, that person's Passport ID is created automatically in approximately 2 business days. We will get an email confirmation stating that the account for the new employee has been created. If you are an existing UCD employee then we will not get an email so please let us know if this is the case. At that point we will forward the email to the respective supervisor. You must "Claim Your Passport ID" by browsing to https://myaccount.ucdenver.edu and submitting the required information. You will need your employee ID number. This will allow you to set up your password.

- Your password must be changed every 90 days by going to https://passport.ucdenver.edu. The Password format must be: at least 8 characters, one number or symbol (*don't use the characters above the 6-7-8-9-0 keys), and one Capital letter. You cannot use your name in your password or use one of your last 12 passwords. After 5-failed login attempts you will be locked out for 30 minutes.

- Your Passport ID will be your key to logging in to 4 things. 1) Your desktop computer. 2) Myemail or Outlook. 3) Citrix Login (the first part of our axiUm login): https://sdm-citrix.ucdenver.edu 4) CU Portal https://portal.prod.cu.edu/UCDAccessFedAuthLogin.html

- University email is the only OFFICIAL means of communication used by faculty and staff.

- To check your emails go to https://myemail.ucdenver.edu or you may use Outlook if your computer is not shared.

- WE ONLY SUPPORT Webmail and Outlook.

- You will need to put a picture in your email account (directions will be emailed to you) and you will need to set up a signature.

- If you don't share a phone you can have your voicemails sent to your email account. Put in a helpdesk ticket and ask to have Unified Messaging set up.

- Emails to other UCDenver email accounts are automatically encrypted, as are emails to Children's Hospital or University Hospital. To encrypt an email to any other account simply type the word "encrypt" in the subject line. You can find out more about encrypting emails here: **http://www.ucdenver.edu/about/departments/ITS/EnterpriseComputing/Pages/EmailEncrypted.aspx .** We recommend testing out the encryption system to become familiar with it before you send confidential data.

- You cannot set up forwarding to automatically forward your UCDenver email account to another account (Gmail, Hotmail etc.)

- If you set up your university email account on a mobile device, make sure you update your password on that device when you change your Passport ID password. Also remember to change the password in the UCDenver Wi-Fi connection if you use that.

- Please use your email address for only work related content. OIT monitors all emails.

- Your email account has a limit of 50GB. You also get UNLIMITED space on One Drive and use of all of the Office 365 Applications. Don't save PHI to One Drive.

University Directory

- To look up any Faculty, Staff or Student, go to https://directory.ucdenver.edu. If you want to edit your information on the directory log in using your Passport ID and make the changes. Save it after you are done making changes.

Computer and Printer Policy

- Once you are done working on a computer, please log out of axiUm and Citrix. Please DO NOT shut down the computer.

- Use the school computers for Work/School related activities only. DO NOT use them for checking out CNN, Facebook, personal email, etc. You may use your personal laptop for these functions.

- DO NOT stream music or videos on any computer in the building including your personal laptop as streaming uses up the school's bandwidth. This slows everyone down. Please be courteous to others. This includes playing online/offline games, chatting online etc. We monitor our networks constantly and Central IT monitors our building and the whole campus. Be very careful what you use the computers for while on campus.

- Your University ID badge will allow you to print on any of our 27 Xerox machines. You will need to register your badge on any Xerox machine the first time you use it or any time you get a new badge. Alternatively, you can put in a help desk ticket giving us your badge number and we will register it for you. The Xerox machines will Fax, Scan, Print or Copy. Personal printers will not be purchased per the IT policy.

- Show Xerox Video

Software

- We install and support many different software programs. We need to know what software you need in order to do your job. Any additional software that you want purchased or installed must first be approved by the IT department Here are a few of the most popular ones: Unified Messaging – this turns your voicemails into emails and delivers them to your email inbox.

- VPN – This allows you access your university files or the axium program from off campus

- Zoom – You have been given an account in an application called Zoom. Zoom is a meeting software similar to Citrix Gotomeeting, and is available free for use by employees and students.   Your UCDenver email name will register you for a pro level user license. ZOOM is a cloud-based application that allows users to connect with other PCs, Macs, IPods, IPads, IPhones, and Android. ZOOM accounts can be used anywhere, you are not limited to campus use or any specific device.

- To register for your free ZOOM account, or to learn more about its capabilities, go to http://ucdenver.zoom.us.

- Microsoft Office - You are eligible for a free copy of the Microsoft Office Suite. Go to: http://www.ucdenver.edu/about/departments/ITS/EnterpriseComputing/office365/Pages/default.aspx

- When you open an Office application for the first time, you will register using your university email and password.

File Policy

- It is your responsibility to safely save your data from your computer. The best way to do this is by saving your Data to your H-drive. The H-drive is your personal drive and only you can access it. If you don't backup your data and your computer crashes then we cannot recover your data. Whatever data you save to the H-drive needs to be work related only. Do not put personal pictures, music or personal files on the H-drive. We monitor what is on the H-drive and due to space and policy constraints we will delete any non-work related data.

- You may also have access to other shared folders including the G-Drive, O-Drive, W-Drive, and U-Drive. If you need access to additional folders, please have your supervisor or the person in charge of the folder submit a request via ticket. We need to know your logon username, the full path to the folder, and whether you need read-only or read/write privileges.

AxiUm Login

- After claiming your Passport ID, please have your supervisor put in a help desk ticket with the following information in order to get access to axiUm: First Name, Last name, Passport ID, Gender, Email Address, level of access, and expiration date of access.

- To use the AxiUm software program you will need to log in twice using two different passwords. The first login is the Citrix login. Here you will use your Passport ID and password. At the second login you may use your University ID badge or enter your username and password manually. To change your AxiUm password, when you are in axiUm, click on "Tools", and then click on "Change Password".

University Badge

- Immediately report a lost or stolen access control badge to the Security Badging Office (SBO) Monday – Thursday 8:00am – 4:00pm and on Fridays 8:00am – 12:30pm, or contact University Police Dispatch outside of SBO hours at 303-724-4444, so that the lost/stolen access control badge is deactivated.

- You can log in to the Xerox machine with your badge OR with your user name and password.

- If you lose your badge or forget your badge you will need to get a new badge from the badging office. Please come and give us your new badge number so we can change it in axiUm and on the Xerox machines

IT/HIPAA Policies

- It is the responsibility of every SDM employee to read, understand and comply with the school of dental medicine and the university's IT and HIPAA policies. These policies are in place to protect the university, the school of dental medicine, the patients, and perhaps most importantly, to protect you. Because of the complex nature of protecting patient records in our computing environment, it is very important to understand what actions may place HIPAA data at risk. Please read the policies and ask us if you have any questions.
- http://www.ucdenver.edu/research/ORC/HIPAA/Pages/Policy.aspx
- TODO: insert permalink to SDM IT policy

IT Department

- We are here to help you! If you have an IT problem or a suggestion, please let us know about it.

- PLEASE SUBMIT A TICKET to sdmit@ucdenver.edu

IX.   Quality Assurance

9.1   Swallowing of Foreign Objects Policy

Title: **Swallowing or Aspiration of Foreign Objects**
Source: **Clinical Affairs**
Effective Date: **July 31, 2014; Revised Oct. 2018; Revised Feb. 2019, Revised Nov. 2019;**
                     Revised Jan. 4, 2021

INTRODUCTION:

It is the intent of the University of Colorado School of Dental Medicine (SDM) to provide safe, quality dental care to a broad range of patients in an educational setting. Swallowed or aspirated foreign objects represent a significant health hazard to the patient as well as a malpractice risk to the provider. Timely treatment can prevent serious complications.

It is always prudent to order a chest radiograph (x-ray) and an abdomen radiograph (x-ray); to accurately determine if the patient has aspirated or ingested the object.

PURPOSE:

This policy outlines the steps to take in order to expedite emergency treatment, assessment and referral for follow-up care for a patient who swallows or aspirates a foreign object during dental procedures.

This policy provides guidelines and procedures to prevent the swallowing or aspiration of dental instruments, prosthesis, or their component parts. Students and residents are educated on various methods and techniques to assist in the prevention of a patient swallowing or aspirating a foreign object. Such techniques include, but are not limited to, the use of a rubber dam, tying of dental floss to instruments and other objects during procedures where a rubber dam is not practical, and use of gauze or packs to block the oral pharynx. See the Precautions section later in this policy.

POLICY:

If you believe a patient under your care swallows or aspirates an object (crown, bridge, orthodontic band, instrument or part of an instrument, etc.) during your treatment, it is always prudent to assume it has been aspirated, even if the patient exhibits no symptoms of airway obstruction. Aspirated objects pose an immediate hazard to the patient's life. Swallowed objects may also pose a serious health risk but not immediately life threatening.

Emergency Treatment and Assessment If You Believe Your Patient Has Aspirated or Swallowed an Object

1. Check to confirm that your patient has a patent airway. If the patient shows any signs of distressed breathing, i.e. not able to speak, labored respiration, lips turning blue (cyanotic), skin turning a dusky color, immediately, activate the School's Rapid Response Team (RRT) by using the red phone emergency system. Medical emergency procedures are outlined in Policy 9.2 Medical Emergency Response Policy and Procedures. If your patient is not exhibiting, signs of distressed breathing proceed to #2 below.

2. Inform and reassure your patient chairside.

3. Inform your covering faculty immediately.

4. Perform a complete visual evaluation of the oral cavity in an attempt to locate the object, instrument or piece of the instrument.

5. Keep the patient on their back or supine; consider placing the patient on their right side or in the Trendelenburg position. These positions may be helpful in preventing the patient from swallowing an object that is in the back of the throat.

6. Check all disposable items used on the patient. Check the floor, bracket table, instrument cassette, dental chair, your clothes, your patient's clothes, etc. in an attempt to find the object.

7. Check the trap on the dental unit (rinse suction with a copious amount of water prior to checking the trap).

8. Take a panoramic radiograph to see if the item, instrument or piece of the instrument is still in the oral cavity.

9. Inform the patient of the need for a **chest radiograph (x-ray)** and an **abdomen radiograph (x-ray)** to determine the location of the object.

10. If the patient is absolutely certain that he/she ingested or swallowed the object rather than aspirated it, it is still optimal to refer the patient for a medical evaluation and follow-up imaging. In this case, you would still order a **chest radiograph (x-ray)** and an **abdomen radiograph (x-ray)**.

11. Complete a radiology order.

    a. The University of Colorado Hospital (UCH) Radiology order form is located in axiUm under Links, General Patient Documents. Print the form.

    b. Alternatively, blank order forms are located in the SDM Coordinator's suites on the second, third and fourth floors, including Orthodontics. On the first floor, you may need to ask the manager or lead dental assistant for a blank UCH Radiology Outpatient order form.

c. See the below example of a completed UCH Radiology form.

- Complete the patient-specific fields (name, DOB, phone), include the UCH MRN # if known.
- Ordering Health Care provider is the covering faculty
- Include faculty NPI # (The NPI # can be found at https://npinumberlookup.org/)
- Include faculty phone #
- Include SDM address and phone #
- Diagnosis/Clinical Question: retained foreign body or object
- Answer the patient-specific questions including Allergies
- Insurance information: patient's insurance
- Complete the Diagnostic Exam Requested section: **chest radiograph** AND **abdomen radiograph**; mark as Urgent
- Complete Signs and Symptoms section, as applicable
- Provider Signature: Covering faculty will sign the form with Title, Date and Time of order

University of Colorado Hospital
RADIOLOGY OUTPATIENT ORDER
External Referring Provider

Patient Name: LAST NAME, FIRST NAME
Date of Birth: _____
UCH MRN #: _____
Phone #: _____

Verbal/Telephone Order received, read back and verified: Date: / / Time: Signature: Date:
Ordering Healthcare Provider: Faculty Member Name NPI #: Pager/Cell:
Address: School of Dental Medicine Phone #: Fax #:
Diagnosis: Retained Foreign Object ICD9: _____
Clinical Question: _____

Please answer all of the following questions:
Could the patient be pregnant or nursing? □ YES □ NO
Is the patient's weight greater than 350 pounds? □ YES □ NO
Is this exam part of a research study? □ YES □ NO Billable to grant? □ YES □ NO If yes, Grant #:
Will the patient be bringing previous images for comparison? □ YES □ NO
Allergies: _____

Insurance Information:
Insurance: Patient's Insurance Referral/Authorization #: _____
Obtained by – initials/extension: / (Exams may be scheduled for time prior to receipt of authorization.)

ULTRASOUND: Exam Requested:	Signs & Symptoms:	ICD 9
□ Urgent □ Routine		
DIAGNOSTIC: Exam Requested: CHEST AND ABDOMINAL RADIOGRAPHS	Signs & Symptoms:	ICD 9
☑ Urgent □ Routine		
BONE DENSITY: Exam Requested:	Signs & Symptoms:	ICD 9
□ Urgent □ Routine		
NUCLEAR MEDICINE: Exam Requested:	Signs & Symptoms:	ICD 9
□ Urgent □ Routine		
PET SCAN: Exam Requested:	Signs & Symptoms:	ICD 9
□ Urgent □ Routine		

FOR CT EXAMS AND MRI EXAMS requiring IV Contrast:
A serum creatinine is required within 30 days prior to study with IV contrast in patients with risk factors for CIRF (Contrast Induced Renal Failure): pre-existing renal insufficiency or chronic renal disease, dehydration, renal insufficiency and diabetes, CHF (Congestive Heart Failure), hypertension, or taking high blood pressure medications.

Transplanted organs	□ YES □ NO	Sedation needed for claustrophobia/comfort	☑ YES □ NO
Known reaction to contrast	□ YES □ NO	Patient on contact precautions	□ YES □ NO
Anaphylactic Reaction	□ YES □ NO	For MRIs: pacemaker present	□ YES □ NO
Premedication Ordered	□ YES □ NO	For MRIs: metal in the eye	□ YES □ NO
		For MRIs: implants present	□ YES □ NO

CT Exams: Exam Requested:	Signs & Symptoms:	ICD 9
□ Urgent □ Routine		
MRI Exams: Exam Requested:	Signs & Symptoms:	ICD 9
□ Urgent □ Routine		

Provider Signature: Faculty Signature Title: Date: Time:

Appointments May be Scheduled Prior to Receipt of Authorization: Phone: 720-848-1065
Diagnostic, Nuc. Med., DEXA – Fax-AOP: 720-848-1651 | CT/MRI – Fax-AOP: 720-848-1651
Ultrasound – Fax – AOP: 720-848-1182

RAD 91048 I/R (Rev 07/13) DOD   Page 1 of 1

d. An SDM provider must sign the UCH Radiology order. The covering faculty, Dr. Johnson or Dr. Powell can sign the order. It is best that the NPI number is included (see top of order form). The NPI # can be found at https://npinumberlookup.org/

e. The Oral and Maxillofacial (OMFS) surgeons can order radiographs in EPIC for their patients.

f. In the rare occasion that you cannot find Dr. Johnson or covering faculty does not sign the order, proceed with the patient to the University of Colorado Hospital (UCH) emergency room and follow the standard admission procedure.

12. Document the conversation in the treatment notes.

The patient's student or resident should accompany the patient to the University of Colorado Hospital Outpatient Radiology department on the first floor of the Outpatient Pavilion between 7 a.m. and 6 p.m. Take the radiology order with you. During off hours take the patient and the radiology order to the University of Colorado Hospital Emergency department.

If the patient is transported via EMS, the student, resident or faculty should follow-up with the patient as soon as possible.

Notify the Sr. Associate Dean of Clinics and Professional Practice at 303-724-6976 or extension 4-6976. The Dean of Clinics or the Director of Quality & Patient Safety will notify the University Professional Risk Manager.

If the patient (patient's parent or caregiver) refuses to obtain radiographs (x-rays), have the faculty explain to the patient the seriousness of swallowing or aspirating an object. Explain to the patient that there can be incidents of aspiration without symptoms. Complete the Against Urgent Medical and Dental Advice (AMDA) form located in axiUm (Links, General Patient Documents). File scanned document in axiUm patient attachments.

Note: The patient should provide their medical insurance card to the University Hospital Radiology department or Emergency department. This is especially important for Medicare patients. The patient may receive a bill. Inform the patient that any bill should be forwarded to their student and/or the Department of Clinical Affairs right away. The patient might receive more than one bill: for the radiographs, for the hospital, and/or for the doctor. For billing questions, consult the Clinical Affairs department.

Referral and follow-up

1. A faculty member with EPIC access or the University Professional Risk Manager may review the UCH Radiology report in EPIC. The Dean of Clinics, attending faculty, or student/resident will call the patient with the results of the radiograph(s). The patient will be advised to continue follow-up with their primary care provider (PCP) if the object is still visible on the radiograph(s) or if they experience any adverse effects. If the patient does not have a PCP or medical doctor, the patient can be referred to:

   - UCH Gastroenterology for follow-up:
     o Contact Melissa Strathman, Clinical Nurse Coordinator/Digestive Health Center at Melissa.Strathman@uchealth.org
     o If a patient needs an endoscopy to retrieve an object, contact Kellie Haygood at Kellie.Haygood@uchealth.org.
     o For either service, provide the patient's name, patient's date of birth (DOB), and patient's phone number. The clinic or the endoscopy lab will reach out to the patient and get them scheduled for a follow-up appointment.
   - Non-Medicaid patients can call the UCH Primary Care or UCH Internal Medicine clinics for an appointment as a new patient.

- Denver Health Medicaid or Denver Health Choice patients may contact their primary care provider for an appointment.

2. Serial radiography (multiple radiographs over time) may be necessary to watch the object or instrument move through the digestive system. The physician managing the patient's follow-up care best orders these radiographs. In unusual circumstances, Dr. Johnson or Dr. Powell may order serial radiographs.

3. In every instance, referral to a physician is the most prudent course of action, as it demonstrates that you are acting in the patient's best interest. Appropriate and timely medical management is critical to ensure prompt retrieval of the object and prevent complications related to ingestion or aspiration. Retrieval can be naturally (stool) or surgical or endoscopic retrieval. The patient should be advised to provide a copy of the radiology report(s) to their PCP.

4. In cases of aspiration or certain abdominal cases, the patient may be admitted to UCH inpatient service. The University Professional Risk manager can help SDM faculty follow-up with admitted patients by accessing the EPIC medical record and/or contacting the inpatient provider. SDM faculty should communicate with the patient and/or their caregiver as appropriate.

Precautions

Precautions or preventive measures include, but are not limited to:

- Rubber dam
- Oral pharyngeal screen, gauze pack or drape
- Attempt to displace the bur from the hand piece (give it a tug)
- Run the hand piece outside of the mouth before using
- Tie floss on larger items (screw drivers)

Documentation

1. Document the event in the patient's electronic health record. Document your actions following the incident and any conversations with the patient. Documentation should include your recommendation of a medical evaluation, including imaging, how the patient was transported for medical evaluation and by whom, and any telephone discussions with the medical facility and treating physician. A copy of the treating physician's report should be retained in the patient's file.

2. If the patient or parent refuses treatment, complete and file the Against Urgent Medical and Dental Advice form scanned into the patient attachments in axiUm. Send the patient letters and scan the letters to axiUm.

3. Document all preventive measures (rubber dam, pharyngeal drape, etc.) that were used to prevent the swallowing or aspiration of the object and any pre-treatment referrals or discussion about referrals.

4. Complete a patient safety occurrence report (Safety Intelligence electronic database).

REFERENCES:

University of Colorado Outpatient Radiology

ACCOUNTABILITY:

All faculty, staff, residents and students are responsible for the safety of our patients. All individuals are responsible for reading and following this policy.

AUTHORITY:

The Sr. Associate Dean of Clinics and Professional Practice, the faculty responsible for patient care, directors, manager, and supervisors have the authority to enforce this policy per professional practice and community standards.

REVIEW AND APPROVAL:

The Sr. Associate Dean of Clinics and Professional Practice, the Operations Committee, Faculty Senate and SDM Executive Committee grant final approval of this policy. The policy is reviewed on a triennial basis or sooner, as needed.

Quick Guide: Protocol for UCH Radiology Referrals due to Aspirated or Swallowed Object Patient Occurrence

If a student, resident, or faculty suspects that a patient may have aspirated or swallowed an object, he/she should take the following initial steps:

1. If the patient is in distress, activate the School's Rapid Response Team using the red emergency phone.
2. Inform the covering faculty of the occurrence.
3. Inform and reassure the patient.
4. Perform a complete visual evaluation of the oral cavity in an attempt to locate the instrument, piece of the instrument, or object.
5. Keep the patient on their back or in the supine position.
6. Check all disposable items used on the patient, the floor, dental chair, clothing, etc. in an attempt to find the instrument or object.
7. Check the trap on the dental unit (rinse suction line prior).
8. Take a panoramic radiograph to see if the object is still in the oral cavity.
9. Document the conversation with patient regarding occurrence in treatment notes. See the policy for specific documentation requirements.

If the object is not located after completing the above steps, the patient must be referred to University of Colorado Hospital (UCH) Radiology department to locate the object and arrange for appropriate medical care for the patient.

1. Inform the patient of the need for a chest x-ray **and** an abdomen x-ray.
2. Complete the Radiology Outpatient order form:
   a. Complete all patient-specific fields (name, DOB, phone, etc.)
   b. Ordering Health Care provider is the covering faculty; include the covering faculty's NPI #. The NPI # can be located at https://npinumberlookup.org/
   c. Include covering faculty phone #.
   d. Include SDM address and phone #.
   e. Diagnosis/Clinical Question: retained foreign object
   f. Answer the patient-specific questions including allergies
   g. Insurance information: **bill the patient's insurance**
   h. Diagnostic Exam requested: chest x-ray **and** abdomen x-ray
   i. Mark as urgent.
   j. Covering faculty should sign form in the "Provider Signature" field including title, date and time
3. Escort the patient to UCH Outpatient Radiology (between 7 a.m. and 6 p.m.) or the Emergency Department at UCH if after Radiology normal working hours (6 p.m.).
4. The patient will need to provide their medical insurance and will need to give SDM any bills.
5. Contact Sr. Associate Dean of Clinics and Professional Services, Dr. Lonnie Johnson at 303-724-6976, with the patient's name, description of occurrence, and patient's phone number.
6. Contact the clinic coordinator or clinic manager for completion of the Safety Intelligence Occurrence report.

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

9.2 Medical Emergency Response Policy and Procedures

Title: Medical Emergency Response Policy and Procedures
Source: Medical Emergency Management Committee
Effective Date: December 1, 2013;
Revised: November 2016; October 22, 2018

INTRODUCTION:

The University of Colorado School of Dental Medicine (SDM) has a consistent and effective emergency response system that ensures the highest quality of treatment in the event of a medical emergency for anyone within the SDM.

PURPOSE:

To provide guidance, direction and uniformity in handling a medical emergency in the University of Colorado School of Dental Medicine

POLICY:

The response system is comprised of a number of facets: the immediate response system for an acute emergency; patient screening; education, training and drills; supplies and equipment; and review. The components of the medical emergency plan for the dental school include:

1. Medical emergency prevention and patient screening
2. Recognizing a patient's distress, Chain of Survival
3. Immediate response; Internal Rapid Response System & Team
4. Management of medical emergencies
5. Emergency response drugs, supplies and equipment
6. Education, training and documentation
7. Drills, Quality Assurance, and Medical Emergency Management sub-committee of Sedation Committee

Medical Emergency Prevention

Obtaining an accurate medical and dental history, an assessment of the patient's dental and major medical conditions including comorbidities, baseline vital signs and early recognition of warning signs are key to preventing a medical emergency. All patients who request admission to the School of Dental Medicine (SDM) are required to complete a medical history questionnaire for inclusion in their dental patient records. It is the responsibility of the faculty/health care provider to review and update the medical history prior to initiation of treatment. For patients with a history of hypertension (high blood pressure), a blood pressure reading should be performed at each visit when the patient will undergo a dental procedure.

Patient Screening Criteria

All patients that are deemed ASA III (a patient with severe systemic disease or substantive functional limitations; a patient with one or more moderate to severe diseases) are acceptable in the CUDT clinic with faculty approval, if stable and all other screening criteria are met. If some question remains, but the patient is otherwise stable for acceptance, a medical consult should be sent to the primary care or other provider for clearance. Patients with ASA III or higher status may be seen in graduate or faculty programs at the discretion of the faculty provider. A verbal consult is acceptable as long as the conversation is documented in the electronic health record. Preferably, a verbal consult will be followed with a written medical consult. See also policy 3.6 Acceptance of Medically Compromised Patients that includes an outline of all ASA classification. See policies 3.4 and 3.5 for general screening procedures

Recognizing a Patient's Distress

Chain of survival and management of acute emergency

Purpose of CPR (cardiopulmonary resuscitation) = Circulate oxygenated blood to the vital organs

Purpose of AED (Automated External Defibrillator) = Re-establish a normal cardiac rhythm

The immediate response to a potential emergency is best managed by the early recognition of a potential emergent patient need and the appropriate response to that need. The immediate provider should initiate basic emergency measures and initiate the chain of survival process that includes

ADULT AHA (American Heart Association) CHAIN OF SURVIVAL

- Activation of the emergency response system
- Early CPR that emphasizes chest compressions
- Rapid defibrillation if indicated
- Effective advanced life support
- Integrated post–cardiac arrest care

Immediate Response

Upon recognition of a medical emergency in any clinical and or nonclinical area of the SDM, any SDM faculty, staff member, student, or resident should respond by using the BLS (Basic Life Support) assessment algorithm. Once at the scene, the responding faculty/senior health care provider assumes responsibility for medical evaluation and appropriate action. When additional medical assistance is needed, activation of the SDM Internal Rapid Response System and notification of the Rapid Response Team is performed by any SDM staff, faculty, student or resident in the proximity.

Internal Rapid Response System

The Internal Rapid Response System uses the SDM telephone system as the primary means of activation.

Red Phones: Red phones are located strategically and prominently throughout the clinics, student lounge area in the basement (Cyber Café), Oral Surgery clinic, Dental Faculty Practice (DFP) and administrative Pods 104 and 130. The Facilities Management department maintains current schematic drawings of the location of each red phone, adjacent emergency cabinets and code carts throughout the school.

Adjacent to the red phone is a placard with instructions on how to activate the emergency procedures within the school. When the red phone receiver is lifted in any location other than the first floor, the red emergency phones in the Oral Surgery clinic, administrative pod 104 and pod 130 will ring, simultaneously. Faculty, staff, students or residents in these areas will answer the phone and respond to the caller's request. At a minimum, the SDM Rapid Response Team will be activated. The SDM Rapid Response Team includes the Oral Surgeon, Oral Surgery dental assistant, Oral Surgery resident, and may include Graduate Periodontics resident(s), GPR residents and administrative personnel, among others.

If the emergency phone in Oral Surgery, Pod 104 or Pod 130 is not answered within 10 seconds, the call will automatically roll through to campus police dispatch who will notify the City of Aurora Emergency Management System (EMS). The response time to the school by Aurora EMS is approximately three to five minutes. The caller will provide requested information to the campus police dispatch or 911 operators such as name of caller, nature of emergency, location, phone number and whether the patient is conscious and/or breathing on their own. The placard located next to each red phone includes the location of the phone, phone number, etc.

If the SDM Rapid Response Team has not responded to the scene of the medical emergency (the emergency call rang through to campus police dispatch bypassing the SDM Internal Rapid Response System), the caller will then activate the SDM Rapid Response Team by sending a runner to Oral Surgery, administrative pod 104 or 130. The patient should not be moved from the location of the emergency unless absolutely necessary.

In the event that the call does not roll through to campus police dispatch, the caller should dial 911 or 4-4444 from an SDM phone to access campus police dispatch directly or by calling 303-724-4444 from a cell phone. The last option should be calling 911 directly on a cell phone because this call will bypass campus police dispatch who provide direct activation of Aurora EMS and the campus police.

The red phones in Oral Surgery, Pod 104, Pod 130 and Faculty Practice (DFP) ring directly to campus police dispatch.

Note: any person whether student, resident, SDM faculty or staff may pick-up a red phone to activate the Internal Rapid Response System or may respond to a ringing red emergency phone.

SDM Rapid Response Team

The SDM Rapid Response Team consists of Oral and Maxillofacial Surgery personnel (the Oral Surgeon, Oral Surgery dental assistant, and/or the Oral Surgery resident). The response team may include Graduate Periodontics resident(s), GPR resident and administrative personnel, among others. In the absence of the Oral Surgeon as designated team leader, the Department of Surgical Dentistry faculty, the Sr. Associate Dean of Clinics or the senior most faculty present will be the Rapid Response Team leader. Other Oral Surgery, Emergency Department dental assistants or administrative personnel will respond to provide emergency care, to be the recorder or to provide other support as needed.

The responsibility for management of the medical emergency is transferred to the SDM Rapid Response Team upon its arrival to the scene. The SDM Rapid Response Team leader will receive a report from the initial faculty provider, student or resident at the scene. The pertinent information should include medical history of the patient, nature of the emergency, patient's vital signs and all treatments rendered. The SDM Rapid Response Team leader will determine the plan and disposition of the emergent patient and will direct other team members and overall treatment including administering emergency medications, resuscitation and defibrillation.

The SDM Rapid Response Team leader may order that EMS support be requested through the red phone Internal Rapid Response System outlined in the above section, if EMS has not previously been activated.

Management of Medical Emergencies

Immediate Action and Intervention

Upon recognition of a medical emergency in any clinical and or nonclinical area of the SDM any SDM faculty, staff member, student, or resident should respond by using the BLS (Basic Life

Support) assessment algorithm. Once at the scene, the responding faculty/health care provider assumes responsibility for medical evaluation and appropriate action. It is expected that the first faculty member arriving on the scene assumes responsibility for evaluation and treatment until the SDM Rapid Response Team or the EMS arrives.

Immediate actions upon recognition of medical emergency include but are not limited to

- Stop dental treatment, remove intraoral materials, clamps, and discontinue nitrous oxide.
- Assess consciousness; and take vital signs (blood pressure, pulse, respiratory rate and oxygen saturation) immediately and position the dental chair according to the patient's symptoms. Record vital signs in patient's electronic health record treatment note. Record any medications given including dosage and route. Include any IV infusions including type, volume and placement of catheter.
- Bring an oxygen tank to the scene and when appropriate, oxygen is to be administered in all cases but hyperventilation. An oxygen tank is located on the side of each code cart for immediate use. And, an oxygen tank is located in the red phone cabinets.

- Print a copy of the patient's medical history and the patient's demographic information and give both to EMS if the patient is transferred.
- If the patient is <u>conscious and breathing normally</u> with vital signs that are within normal limits continue to support and monitor the status of the patient. Continue to monitor and record vital signs, medications and infusions. (See above).
- For a patient who is <u>not breathing normally, but has a pulse</u> (occasional or irregular gasping, snorting or gurgling sounds are NOT considered normal) provide and continue rescue breaths or rescue breathing. Have a scribe record the patient's vital signs, rescue breathing and any medications or treatment given in the treatment note.
- If the patient has <u>no pulse or you are not certain</u> (check for an obvious carotid pulse in the neck, take no longer than 10 sec.), CPR is to be initiated immediately. Have a scribe record the use of CPR and any medications given in the treatment note.
- Activate the SDM Rapid Response Team or EMS by picking up the red phone (see Internal Rapid Response System above).
- Bring the code cart to the scene; the code cart may be opened by breaking the tagged/numbered plastic lock located at the bottom front of each cart. The bins located along the top of the code cart are locked with a plastic lock that can be easily broken. The code cart has oxygen on it, an AED and emergency medications and supplies/equipment should further rescue measures become necessary. Any SDM faculty, staff, student or resident is allowed and encouraged to break open the code cart by breaking the plastic, numbered lock. It is always best to bring the code cart to the scene at the first signs of medical emergency. Ensure that an AED is at the scene. An AED is located on the top of each code cart and in each red phone cabinet.
- Oral surgery personnel respond to the medical emergency with the portable 3-lead EKG/monitor that is stored in oral surgery.

- Once the Rapid Response Team arrives at the scene or if there are other SDM personnel available, the scene is to be secured and unnecessary individuals directed away from the area. The patient's privacy must be maintained as much as possible.
- Any family members or other individuals accompanying the patient are to be moved to a confidential location, not the lobby or waiting areas. An SDM person, preferably a faculty member, should remain with the patient's family or other individual accompanying the patient.
- Once available, the attending faculty, senior faculty or their designee should update the patient's family member or other individual with the status of the patient, whether the patient is being transferred and by what means, location of the transfer and how to contact the receiving facility.
- The family member or other individual will be provided with the name and contact information of a School representative who can provide additional information, as needed.
- Any patient belongings may be given to the family member or other person accompanying the patient. Alternatively, they may be transferred with the patient.

See also Appended, visual instructions for Adult and Pediatric BLS algorithms

The CABDs of BLS (Basic Life Support) Adult, Child and Infant

Assess *Circulation*

- Check for pulse for 5-10 seconds.

- If pulse is present, check rate and strength and record
- If NO pulse, lay the patient flat with backboard beneath chest or move patient to floor and begin chest compressions (backboard is located on the back of the code cart).

o To provide effective chest compressions for adults, push hard and push fast. It is reasonable for laypersons and healthcare providers to compress the adult chest at a rate of at least **100 compressions per minute with a compression depth of at least 2 inches/5 cm**. Rescuers should allow complete recoil of the chest after each compression, to allow the heart to fill completely before the next compression.

o Rescuers should attempt to minimize the frequency and duration of interruptions in compressions to maximize the number of compressions delivered per minute.

o **A compression-ventilation ratio of 30:2 is recommended. (30 compressions to 2 breaths)**

- Once an AED is at the scene, turn it on immediately and follow the voice instructions.
- DO NOT STOP CPR until the AED is ready to analyze the heart rhythm (An AED automatically starts analyzing once the pads are in place.)
- STOP CPR (chest compressions and rescue breaths) while the AED is analyzing and delivering a shock.
- Immediately, after a shock is delivered by the AED, RESUME CPR beginning with chest compressions.

- If the patient responds, stop CPR and place him in a recovery position. Leave the AED on and attached in case cardiac arrest occurs again.

CPR
1 Rescuer – Ratio (all ages) = 30:2 **5 Cycles of 30:2 take approximately 2 minutes

---

Assess *Airway*

- Open airway:
  > **Techniques to Open the Airway:** Tilt Head and Lift Chin or Jaw Thrust (if cervical spine injury is suspected) ** *If you cannot get adequate chest rise with the Jaw Thrust, use the Head Tilt/Chin Lift.*
- Suction as necessary

Assess *Breathing*

- Check for breathing
- If not breathing, give two breaths via pocket mask (100% O_2 if possible)
- Each breath should be 1 sec. in length. Create a visible rise of the chest, but no more.
- Remove your mouth and let the patient exhale completely. Take a fresh breath in between breaths.
- Insert oral airway if apneic

Rescue Breathing with or without Bag-Valve Mask and supplementary Oxygen:

- *Adults* = 1 breath every 5-6 seconds or about 10 to 12 breaths per minute
- *Children/Infants* = 1 breath every 3-5 seconds or about 12 to 20 breaths per minute.
- *Assess the pulse every 2 minutes taking no longer than 10 sec. to do so. If the pulse is absent or you are unsure, perform CPR starting w/compressions.*

Advanced Airway (ET (Endotracheal tube), LMA, King) (all ages) = 1 breath every 6-8 seconds
- *CPR when Advanced Airway is in place (all ages)* = No pause for breaths. Continuous chest compressions at the rate of 100 compressions per minute while breaths are done; Regardless of age, provide 1 breath every 6-8 seconds or, about 8 to 10 times a minute.

- *If there are two rescuers* = switch roles after approximately 5 cycles of compressions (~150), so that each rescuer has a break from chest compressions that can be tiring.

Defibrillation – AED (Automatic External Defibrillator) - Universal Steps to run the AED:

1. Position AED close to patient's head.
2. Power
3. Place pads on chest
4. Plug in pads to unit (if needed)
5. Analyze (CLEAR!!)
6. Shock (if indicated) (CLEAR!!)
7. Begin immediate cycles of CPR beginning with compressions (DO NOT pause for pulse, check after first shock). Continue until next prompt from AED (will be approximately 2 minutes).

Rate/Speed of Chest Compressions (all ages) = At least 100 compressions per minute

Emergency Response Drugs, Supplies, and Equipment

Every clinical floor has a code cart with an AED (automatic external defibrillator), oxygen cylinder, appropriate masks and bag valve resuscitation supplies, equipment, and drugs for use during a medical emergency as well as tourniquets for use in penetrating trauma (loss or traumatic injury to limb).

Every clinical floor including the Emergency Clinic on the first floor has an emergency cabinet that is located adjacent to the red phone. The cabinets are identified by a white and red AED sign above the cabinet. These cabinets contain an AED (automatic external defibrillator) oxygen, appropriate masks and bag valve resuscitation supplies, equipment, CPR barrier and tourniquets for use in penetrating trauma. When the door to an emergency cabinet is opened, an audible alarm sounds and the campus police dispatch is notified of an emergency.

The basement level is a non-clinical area. The emergency cabinet located adjacent to the red phone in the student lounge is equipped with the same supplies as the emergency cabinets in clinical areas. The basement level does not have a code cart; however, the emergency cabinet contains a stethoscope and a sphygmomanometer (BP device). The warehouse stores a back-up code cart used to exchange a clinic code cart when opened. The warehouse code cart is stored behind a locked door and should not be counted on in the case of medical emergency.

Every clinic has red phones located throughout the clinic adjacent to an emergency cabinet to report an emergency. The red phones located in Oral Surgery, DFP (Dental Faculty Practice), Pod 104 and Pod 130 do not have emergency cabinets and are primarily intended to activate the SDM Rapid Response Team but if picked-up, the phone will activate EMS (ring through to Campus Police Dispatch). Emergency supplies and equipment on the first floor are located in the Oral Surgery code cart or the Emergency Clinic red phone cabinets.

Each code cart and emergency cabinet is checked for adequate oxygen, equipment, supplies and drugs every business day. Monthly checks of supplies, equipment and battery function are conducted. Drugs, equipment and supplies are monitored for expiration dates and are replaced prior to the date of expiration. Written inspection records of equipment, supplies, and code cart drugs will be maintained by the Facilities Management department.

Equipment, supplies and drugs used during an emergency or a drill must be restocked within 24 business hours to include any emergency event that may occur on a weekend, for example during Boards. Facilities Management responds to each RRT in order to support equipment needs and to exchange the opened code cart with the back-up code cart in the warehouse.

Contingency plans must be made to ensure adequate drugs, supplies and equipment in each clinic on every day that patients are seen in that clinic, even in screening only clinics. SDM works with the University of Colorado Hospital Pharmacy to manage code cart and sedation drug inventories.

Education, Training and Documentation

All faculty undergo review of emergency medical procedures as a part of their orientation to the School of Dental Medicine prior to their participation in clinical activities within the SDM. SDM staff participate in regularly scheduled medical emergency drills. Members of the SDM Rapid Response Team are oriented to the code cart, emergency cabinets and Immediate Response System (red phones), at a minimum. All faculty, residents, students and most staff are required to complete and pass the Basic Life Support for Healthcare Providers course every 2 years. Additionally, select faculty and residents are ACLS – Advanced Cardiovascular Life Support, PALS – Pediatric Advanced Life Support, or ATLS – Advanced Trauma Life Support, certified.

In addition to the basic life support course the dental students take a course in the "Prevention and Management of Medical Emergencies" DSSD 6608 in the spring of their 2nd year and a "Medical Problems and Physical Assessment" DSDD 7700 in the spring of the 3rd year. Other corresponding ISP courses include "Prevention and Management of Medical Emergencies DISP 7126 in the spring of 1st year and "Medical Problems and Physical assessment" DISP 8127 in the spring of 2nd year. Students receive simulation training in medical emergencies in the CAPE –Center for Advancing Professional Excellence as a part of their inter-professional educational experience and all faculty, residents and students have simulated emergency training via SIM MAN provided by the Division of Oral and Maxillofacial surgery.

All BLS certified employees are required to complete and pass BLS recertification bi-annually. The courses are offered through the SDM. Designated SDM Rapid Response Team members will maintain current ACLS certification. Faculty will be updated and oriented to any new information or requirements during Calibration sessions. Students will be updated and oriented to new information during Teams Meetings and residents will be updated during program-specific educational meetings. Staff will be updated and oriented to new information during staff meetings. Most patient care and front office staff receive first aid training.

Documentation of education, training and refresher courses is maintained in the Compliance portal or if necessary, by program-specific staff.

ACCOUNTABILITY:

Current BLS certification is a condition for maintaining clinical privileges for all faculty, students and residents of SDM. Select staff members must keep their BLS certification current and may be suspended from duty if not maintained. Failure of faculty to maintain current certification results in suspension of clinical privileges in all areas to which the individual is assigned until evidence of successful course completion is presented to the Senior Associate Dean of Clinical Affairs and Professional Services or delegate. Disciplinary action up to and including dismissal will be initiated for any staff, student or resident who is non-compliant with this policy.

QUALITY ASSURANCE:

Medical Emergency Management Drills

Clinical areas are required to participate in medical emergency drills four times per year. The main lobby is considered a clinical area for the purposes of medical emergency drills. Actual events may be used to assess performance and response in lieu of drills. Actual events and drills are reviewed and critiqued by the Medical Emergency Management sub-committee of the Sedation Committee.

An evaluation of each medical emergency or drill or event will be documented by an observer(s) or by a person involved in the event. (See Medical Emergency Evaluation Tool.) A review of the event with responders and others involved or present should be conducted in real time. A group review of the event may be conducted by the Oral Surgeon or other Faculty member who managed the event. An occurrence report is generated in the patient safety occurrence reporting system.

Medical Emergency Management Committee sub-committee of the Sedation Committee

The Medical Emergency Management sub-committee is tasked with quality assurance oversight of all Medical Emergency activities to include review of drills and event evaluations, performance of post-event reviews when warranted, creation of action plans for performance improvement findings, and implementation or management of action plans. The Committee reviews other medical emergency related processes such as code cart maintenance, changes to supplies or the formulary and policy updates. The Medical Emergency Management sub-committee coordinates training and education and manages medical emergency updates or communications. The sub-committee meets at least quarterly and reports to the Quality and Patient Safety Committee.

AUTHORITY:

The Sr. Associate Dean of Clinics and Professional Practice, the faculty responsible for patient care,

directors, managers, and supervisors have the authority to enforce this policy per professional practice and community standards.
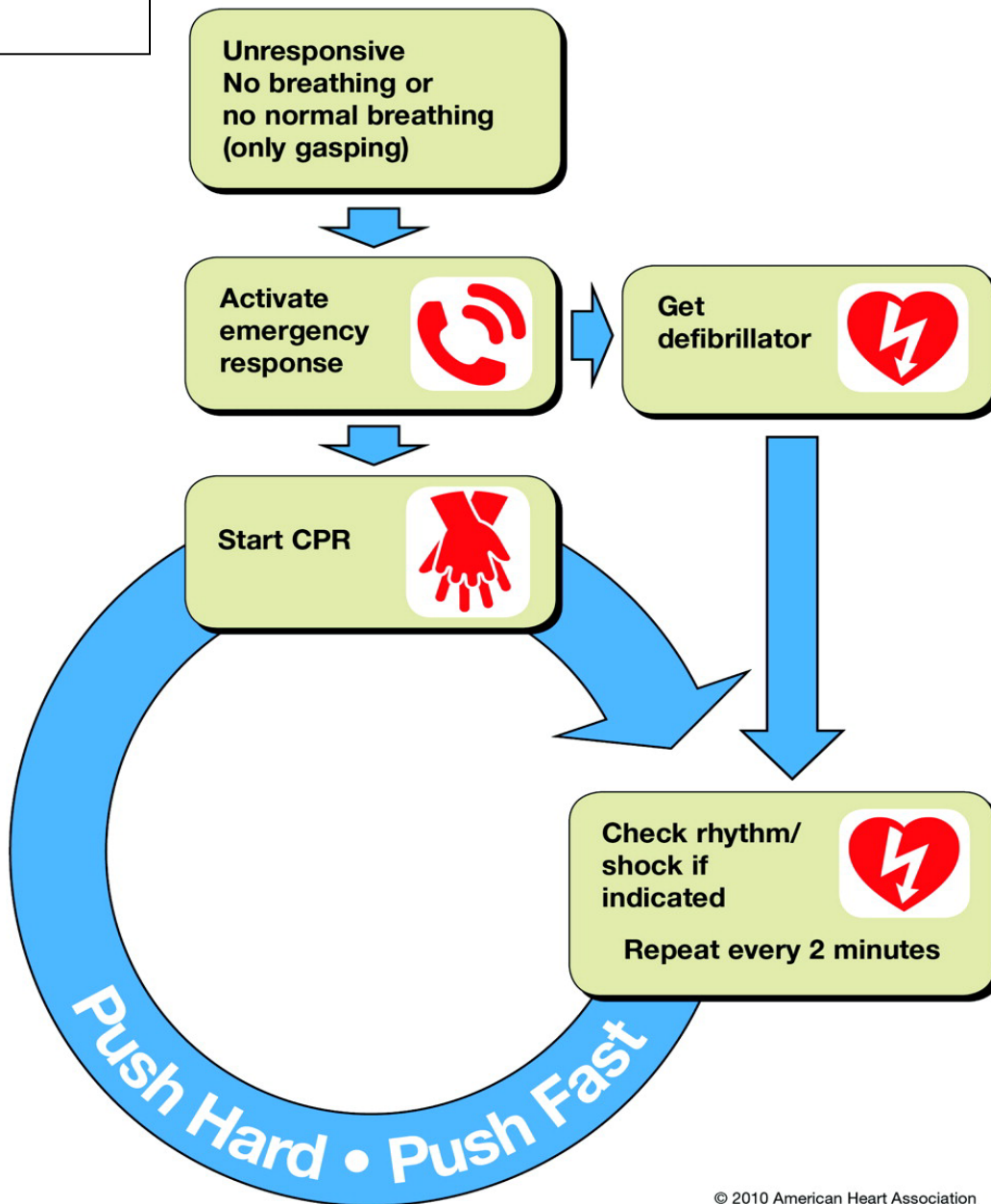
REVIEW AND APPROVAL:

The Sr. Associate Dean of Clinics and Professional Practice, the Operations Committee, Faculty Senate and SDM Executive Committee grant final approval of the policy. The policy is reviewed on a triennial basis or sooner, as needed.

REFERENCES:

2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. Robert A. Berg, Chair; Robin Hemphill; Benjamin S. Abella; Tom P. Aufderheide; Diana M. Cave; Mary Fran Hazinski; E. Brooke Lerner; Thomas D. Rea; Michael R. Sayre; Robert A. Swor, Circulation 2010;122:S862-S875

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

APPENDUM

Simplified Adult BLS

**Unresponsive
No breathing or
no normal breathing
(only gasping)**

**Activate
emergency
response**

**Get
defibrillator**

Start CPR

**Check rhythm/
shock if
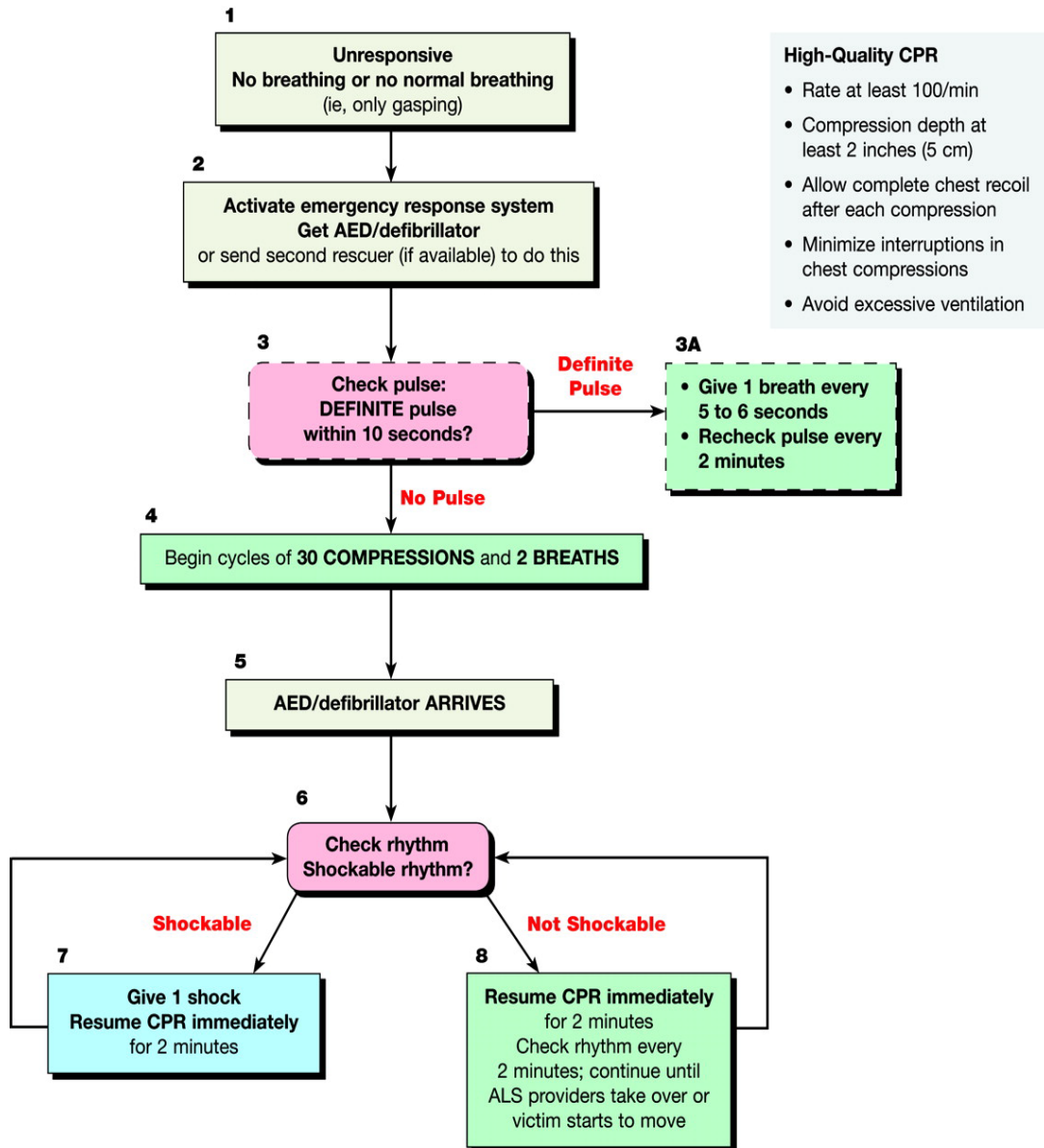indicated**

Repeat every 2 minutes

Push Hard • Push Fast

© 2010 American Heart Association

NOTE: the following algorithms indicate that boxes (processes) that are bordered with dashed lines are to be performed by a healthcare provider. SDM follows current AHA guidelines that require anyone involved in the rescue to be trained in these processes to include lay rescuers.

BLS ADULT ALGORITHM

Adult BLS Healthcare Providers

1
Unresponsive
No breathing or no normal breathing
(ie, only gasping)

High-Quality CPR
- Rate at least 100/min
- Compression depth at least 2 inches (5 cm)
- Allow complete chest recoil after each compression
- Minimize interruptions in chest compressions
- Avoid excessive ventilation

2
Activate emergency response system
Get AED/defibrillator
or send second rescuer (if available) to do this

3
Check pulse:
DEFINITE pulse
within 10 seconds?

Definite Pulse →

3A
- Give 1 breath every 5 to 6 seconds
- Recheck pulse every 2 minutes

No Pulse

4
Begin cycles of **30 COMPRESSIONS** and **2 BREATHS**

5
AED/defibrillator ARRIVES

6
Check rhythm
Shockable rhythm?

Shockable

7
Give 1 shock
Resume CPR immediately
for 2 minutes

Not Shockable

8
Resume CPR immediately
for 2 minutes
Check rhythm every
2 minutes; continue until
ALS providers take over or
victim starts to move

Note: The boxes bordered with dashed lines are performed by healthcare providers and not by lay rescuers

© 2010 American Heart Association

Berg R A et al. Circulation 2010;122:S685-S705

BLS PEDIATRIC ALGORITHM

Pediatric BLS Healthcare Providers

1
Unresponsive
Not breathing or only gasping
Send someone to activate emergency
response system, get AED/defibrillator

2
Lone Rescuer: For SUDDEN COLLAPSE,
activate emergency response system,
get AED/defibrillator

3
Check pulse:
DEFINITE pulse
within 10 seconds?

Definite Pulse

3A
- **Give 1 breath every 3 seconds**
- **Add compressions if pulse remains <60/min with poor perfusion despite adequate oxygenation and ventilation**
- **Recheck pulse every 2 minutes**

No Pulse

4
One Rescuer: Begin cycles of **30 COMPRESSIONS** and **2 BREATHS**

Two Rescuers: Begin cycles of **15 COMPRESSIONS** and **2 BREATHS**

5
After about 2 minutes, activate emergency response system and get
AED/defibrillator (if not already done).
Use AED as soon as available.

6
Check rhythm
Shockable rhythm?

Shockable

Not Shockable

7
Give 1 shock
Resume CPR immediately
for 2 minutes

8
Resume CPR immediately
for 2 minutes
Check rhythm every
2 minutes; continue until
ALS providers take over or
victim starts to move

High-Quality CPR
- Rate at least 100/min
- Compression depth to at least ⅓ anterior-posterior diameter of chest, about 1½ inches (4 cm) in infants and 2 inches (5 cm) in children
- Allow complete chest recoil after each compression
- Minimize interruptions in chest compressions
- Avoid excessive ventilation

Note: The boxes bordered with dashed lines are performed by healthcare providers and not by lay rescuers

© 2010 American Heart Association

Berg M D et al. Circulation 2010;122:S862-S875

Title: Antibiotic Prophylaxis for Infective Endocarditis and Total Joint Replacement

Source: Clinical Affairs Department

Effective Date: 12/1/2013; Revised 2/4/2015; Revised 12/2020; Revised 07/2021

INTRODUCTION:

The University of Colorado School of Dental Medicine (SDM) will adopt the current recommendations of the American Heart Association (AHA) and the American Dental Association (ADA) for the prevention of infective endocarditis. SDM will adopt the current recommendations of the American Dental Association (ADA) and the American Academy of Orthopaedic Surgeons (AAOS) in regards to the use of prophylactic antibiotics prior to dental procedures in patients with prosthetic joints. This policy will automatically adopt the current guidelines of these organizations when they are published.

PURPOSE:

To protect patients who are at risk for the development of infective endocarditis (IE) and/or infection of a total joint replacement subsequent to dentally induced bacteremia.

POLICY:

Antibiotic Prophylaxis for Infective Endocarditis

Patients who are at risk for infective endocarditis shall be treated using the current AHA and ADA guidelines for the prevention of bacterial endocarditis unless a significant medical reason exists for deviating from this policy.

The current infective endocarditis/valvular heart disease guidelines state that use of preventive antibiotics before certain dental procedures is reasonable for patients with:

- **prosthetic cardiac valves,** including transcatheter-implanted prostheses and homografts;
- prosthetic material used for cardiac valve repair, such as annuloplasty rings and chords;
- a history of infective endocarditis;
- a cardiac transplant[a] with valve regurgitation due to a structurally abnormal valve;
- the following congenital (present from birth) heart disease:[b]
  - unrepaired cyanotic congenital heart disease, including palliative shunts and conduits
  - any repaired congenital heart defect with residual shunts or valvular regurgitation at the site of or adjacent to the site of a prosthetic patch or a prosthetic device

[a] *According to limited data, infective endocarditis appears to be more common in heart transplant recipients than in the general population; the risk of infective endocarditis is highest in the first 6 months after transplant because of endothelial disruption, high-intensity immunosuppressive therapy, frequent central venous catheter access, and frequent endomyocardial biopsies.*

[b] Except for the conditions listed above, antibiotic prophylaxis is no longer recommended for any other form of congenital heart disease.

Any dental procedure that involves manipulation of the gingiva or periapical tissues or perforation of the oral mucosa (except for the injection of local anesthetic through non-infected tissues) warrants prophylaxis if the patients fall into one of the categories above.

Primary regimes for dental procedures are as follows:

Regimen: Single Dose 30 to 60 min before procedure

Situation	Agent	Adults	Children
Oral Unable to take oral medication	Amoxicillin Ampicillin **OR** Cefazolin or ceftriaxone	2 g 2 g IM or IV 1 g IM or IV	50 mg/kg 50 mg/kg IM or IV 50 mg/kg IM or IV
Allergic to penicillin or ampicillin—oral	Cephalexin*† **OR** Doxycycline **OR** Azithromycin or clarithromycin	2 g 100 mg 500 mg	50 mg/kg <45 kg, 4.4 mg/kg >45 kg, 100 mg 15 mg/kg
Allergic to penicillin or ampicillin and unable to take oral medication	Cefazolin or ceftriaxone†	1 g IM or IV	50 mg/kg IM or IV

Clindamycin is no longer recommended for antibiotic prophylaxis for a dental procedure.
IM indicates intramuscular; IV indicates intravenous.
*Or other first- or second-generation oral cephalosporin in equivalent adult or pediatric dosage.
†Cephalosporins should not be used in an individual with a history of anaphylaxis, angioedema, or urticarial with penicillin oral ampicillin.

If the dosage of antibiotic is inadvertently not administered before the procedure, the dosage may be administered up to 2 hours after the procedure. If a patient with an indication for prophylaxis who appropriately received antibiotic premedication prior to a dental procedure one day and who is then scheduled the following day for a dental procedure also warranting premedication (e.g., dental prophylaxis), the antibiotic prophylaxis regimen should be repeated prior to the second appointment. Because of the nature of the pharmacokinetics of an antibiotic prophylaxis regimen, a single loading dose is given in order to cover the period of potential bacteremia produced by a single procedure.

If a patient is already receiving chronic antibiotic therapy with an antibiotic that is also recommended for IE prophylaxis for a dental procedure, select an antibiotic from a different class rather than increase the dosage of the current antibiotic. If possible, it would be preferable to delay a dental procedure until at least 10 days after completion of the antibiotic therapy. This may allow time for the usual oral flora to be re-established.

Antibiotic Prophylaxis for Total Joint Replacement

The SDM recommends medical consultation when possible prior to dental treatment. Antibiotic prophylaxis should be considered in patients who are immunocompromised such as diabetes mellitus, systemic autoimmune disorders, HIV or AIDS, immunosuppressant therapy for organ transplantation, chemotherapy for cancer treatment, or a history of previous joint infections. "The practitioner and patient should consider possible clinical circumstances that may suggest the presence of a significant medical risk in providing dental care without antibiotic prophylaxis, as well as the known risks of frequent or widespread antibiotic use. As part of the evidence-based approach to care, this clinical recommendation should be integrated with the practitioner's professional judgment and the patient's needs and preferences" JADA 2015: 146: 11-16. In accordance with the recommendations put forth in an evidence-based clinical practice guideline on the use of prophylactic antibiotics in patients with prosthetic joints who are undergoing dental procedures by the ADA (JADA 2015: 146: 11-16), the SDM makes the following clinical recommendation.

1. Clinical Recommendations

In general, for patients with prosthetic joint implants, prophylactic antibiotics ARE NOT recommended prior to dental procedures to prevent prosthetic joint infection. For patients with a history of complications associated with their joint replacement surgery, who are undergoing dental procedures that include gingival manipulation or mucosal incision, prophylactic antibiotics should be considered after consultation with the patient and orthopedic surgeon. To assess a patient's medical status, a complete health history is always recommended when making final decisions regarding the need for antibiotic prophylaxis. Patients may also take antibiotics as prescribed by their orthopedic surgeon of primary care physician upon their recommendation. See ADA Chairside Guide below.

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Management of patients with prosthetic joints undergoing dental procedures

Clinical Recommendation:

In general, for patients with prosthetic joint implants, prophylactic antibiotics are *not* recommended prior to dental procedures to prevent prosthetic joint infection.

For patients with a history of complications associated with their joint replacement surgery who are undergoing dental procedures that include gingival manipulation or mucosal incision, prophylactic antibiotics should only be considered after consultation with the patient and orthopedic surgeon.* To assess a patient's medical status, a complete health history is always recommended when making final decisions regarding the need for antibiotic prophylaxis.

Clinical Reasoning for the Recommendation:

- There is evidence that dental procedures are not associated with prosthetic joint implant infections.

- There is evidence that antibiotics provided before oral care do not prevent prosthetic joint implant infections.

- There are potential harms of antibiotics including risk for anaphylaxis, antibiotic resistance, and opportunistic infections like *Clostridium difficile*.

- The benefits of antibiotic prophylaxis may not exceed the harms for most patients.

- The individual patient's circumstances and preferences should be considered when deciding whether to prescribe prophylactic antibiotics prior to dental procedures.

ADA. Center for Evidence-Based Dentistry™

* In cases where antibiotics are deemed necessary, it is most appropriate that the orthopedic surgeon recommend the appropriate antibiotic regimen and when reasonable write the prescription.

Sollecito T, Abt E, Lockhart P, et al. The use of prophylactic antibiotics prior to dental procedures in patients with prosthetic joints: Evidence-based clinical practice guideline for dental practitioners — a report of the American Dental Association Council on Scientific Affairs. JADA. 2015;146(1):11-16.

AUTHORITY:

The Sr. Associate Dean for Clinics and Professional Practice and the faculty responsible for the patient's care have the authority to enforce this policy per professional practice and community standards.

REVIEW AND APPROVAL:

The Sr. Associate Dean for Clinics and Professional Practice, the Operations Committee, Faculty Senate and SDM Executive Committee grant final approval of the policy. The policy is reviewed on a triennial basis or sooner, as needed.

REFERENCES:

American Academy of Orthopaedic Surgeons/American Dental Association. Prevention of Orthopaedic Implant Infection in Patients Undergoing Dental Procedures: Evidence-based Guideline and Evidence Report. American Academy of Orthopaedic Surgeons 2012. https://www.aaos.org/globalassets/quality-and-practice-resources/dental/pudp_guideline.pdf. Accessed March 23, 2020.

Rethman MP, Watters W, 3rd, Abt E, et al. The American Academy of Orthopaedic Surgeons and the American Dental Association clinical practice guideline on the prevention of orthopaedic implant infection in patients undergoing dental procedures. J Bone Joint Surg Am 2013;95(8):745-7.

Sollecito TP, Abt E, Lockhart PB, et al. The use of prophylactic antibiotics prior to dental procedures in patients with prosthetic joints: Evidence-based clinical practice guideline for dental practitioners--a report of the American Dental Association Council on Scientific Affairs. J Am Dent Assoc 2015;146(1):11-16 e8.

Wilson WR, Gewitz M, Lockhart PB, et al. Prevention of Viridans Group Streptococcal Infective Endocarditis: A Scientific Statement From the American Heart Association. Circulation 2021:Cir0000000000000969. https://www.ahajournals.org/doi/pdf/10.1161/CIR.0000000000000969

9.4   Administration of Nitrous Oxide

Title: Policy for the Administration of Nitrous Oxide/Oxygen
Source: Division of Oral and Maxillofacial Surgery
Effective Date: December 9, 2014 (replaces policy dated 2008)

OVERIEW

Nitrous oxide/oxygen is available for use by trained clinicians at the School of Dental Medicine. This policy is written as a reference and guideline for the School of Dental Medicine to ensure that the quality and standards imposed on this modality of pain control is superior.

POLICY

I.   **Indications**: Nitrous oxide/oxygen is indicated for apprehensive patients, medically compromised patients and patients with a hyperactive gag reflex.

II.   **Clinicians**: Nitrous oxide/oxygen can only be given by students who have completed a CU School of Dental Medicine 16-hour course of didactic and laboratory training in the correct administration of nitrous oxide and oxygen conscious sedation. The extent of resident training is at the discretion of the program director pending the scope and history of previous training and clinical utilization of nitrous oxide/oxygen inhalation analgesia. Faculty members anesthesia privileges for the administration of nitrous oxide/oxygen inhalation analgesia are included in their Colorado Dental Licensure (Rule XIV, E, 1, d).

III.   **Equipment**: All analgesia (nitrous oxide only) equipment shall be fail-safe, meaning that the equipment cannot function without an ongoing available supply of at least 100% pure oxygen. Nitrous oxide/oxygen machines currently employed for use at the University of Colorado School of Dental Medicine are both portable machines requiring no central piping or large reservoir of gas (Mobile Dental Van) and machines that are connected to a central supply of nitrous oxide and oxygen (School of Dental Medicine Clinics). It should be noted that analgesia machines are to be readily available as secondary tools of urgent medical care for airway support that allows an almost instant supply of 100% oxygen at 50 lpm. The primary tool for the administration of 100% oxygen are the oxygen cylinders associated with the crash carts in each clinic. The equipment should be checked quarterly for leakage and should never be used without scavenging equipment. To do so violates a significant standard of care issue.

IV.   **Post-Operative**: All nitrous oxide administrations shall conclude with a minimum of 5 minutes of pure 100% oxygen – more if deemed appropriate by the clinician.

V.   **Documentation**: All uses of nitrous oxide shall be recorded in a proper manner with information as indicated on the axiUm form CONSED – Nitrous Oxide Administration Record and save it as part of the patient's permanent electronic record.

The use of nitrous oxide is encouraged for appropriate clinical experiences for the students and patients of the School of Dental Medicine and to be recognized as a useful and safe modality for pain control.

Qualifications of faculty for supervising the administration of nitrous oxide/oxygen inhalation are governed by the Colorado State Board rules which require that all dentists who administer nitrous oxide/oxygen inhalation must have a current Colorado Dental License. Upon request licensed dentists should be able to produce documentation of previous education and/or a history of clinical use of nitrous oxide/oxygen inhalation analgesia.

Delegation**:** Nitrous oxide/oxygen monitoring and administration may be delegated under direct supervision to appropriately trained personnel. The supervising dentist is responsible for determining the maximum dosage of nitrous oxide/oxygen analgesia. The maximum dose of nitrous oxide/oxygen anesthesia that a student is allowed to give is 50% without direct instruction by the attending faculty to increase the dose to a higher percentage.

Other State Board Requirements to note:
- Basic Life Support: The dentist and all personnel, including, but not limited to, dental auxiliaries, who render patient care services in a dental setting where nitrous oxide/oxygen is administered shall have proof of current basic life support (BLS) knowledge and skills.
- Examination: "Prior to the administration of nitrous oxide/oxygen, the dentist or auxiliary shall record, in the patient's chart, the patient's medical history and the pertinent physical findings."
- Documentation: "When administrating nitrous oxide/oxygen, the dentist or auxiliary shall record, in the patient's chart, the treatment given, the dosage administered and the patient's response to treatment."
- Emergency Care: "Prior to the administration of nitrous oxide/oxygen, the supervising dentist and auxiliaries shall have appropriate training to recognize the symptoms and reasonably treat the complications and emergencies incident thereto."

The School of Dental Medicine shall keep records of faculty who meet the certification standards for the State of Colorado as listed above.

9.5 Water Testing Protocol

Title: Water Testing Protocol
Source: Facilities, Quality and Patient Safety and Clinical Operations
Effective Date: May 3, 2015
Revised: September 2015, June 2016, March 2018, Oct. 2019

INTRODUCTION:

The University of Colorado School of Dental Medicine (SDM) follows all rules, regulations and guidelines regarding dental unit water testing as put forth from the Center for Disease Control and Prevention (CDC) and the American Dental Association (ADA).

PURPOSE:

It is the legal and ethical responsibility of the SDM to provide safe patient care including the assurance that dental unit waterlines are maintained regularly to deliver water of an optimal microbiologic quality. Although infection associated with microbial contamination of dental waterlines appears to be rare, over time dental water lines continue to develop a biofilm of bacteria, fungi, and protozoans that may lead to accumulation of unacceptable levels of these organisms in the lines. The standards set by the CDC and ADA is that the appropriate level of microbiologic contamination in these water lines not exceed 500 CFU/ml. The purpose of this policy is to assure compliance to this standard.

POLICY:

This policy assures compliance to standards set by the CDC and ADA that state that the microbiologic contamination of dental water lines not exceed 500 CFU/ml. To assure compliance the SDM uses two processes: the use of a Sterisil water treatment system throughout all the patient care areas and regularly scheduled testing and maintenance of this water treatment system.

Testing and Maintenance of the Sterisil Water Treatment System

The School of Dental Medicine conducts random testing on a quarterly basis to include one quarter of the dental units per test cycle to assure that each dental unit's waterlines are tested once per year. Testing is scheduled during the calendar year to coordinate with clinical breaks allowing for re-testing as necessary. This testing schedule is maintained in the SDM maintenance tracking system.

Testing Process

1. Call the testing facility (Agenics) to order the testing equipment (i.e. test vials, ice packs, coolers, packaging, shipping label and testing directions).

2. Choose dental units to be tested from the School of Dental Medicine maintenance tracking system schedule on a quarterly basis. Choose the dental units as per the pre-determined number of chairs per floor and or clinics.

3. On the test date, follow the directions from the testing facility (Agenics) precisely, including how samples are taken, recorded and shipped. Flush all portions of the system for 30 seconds before samples are taken. A sample from the dental unit needs to include samples from each location on the dental unit that supplies water.

4. After the results are received from the testing facility any action taken will be determined by the results. If all results pass, then no action is required with the exception of documenting the results in the maintenance tracking system and a hard copy of the results kept on file. If the test results show a fail in HPC (Heterotrophic Plate Count) that is above 500 CFU (Colony Forming Units) on any of the dental units, those dental units will not be used until a chemical shock and retesting are complete in accordance with the following procedures. The results of the retest must be negative prior to bringing the chair back into service.

5. Perform a chemical shock on the dental unit using a Citrisil shock tablet. Add 6 fluid ounces of warm distilled water to the dental unit's water bottle and place one tablet in the bottle. Wait 60 seconds for tablet to fully dissolve. Swirl orange shock solution to clean and disinfect inside the bottle. Connect bottle to dental unit, switch the water routing valve to activate the bottle and run lines until orange color appears. Leave in lines overnight. The following day empty orange shock solution from bottle, switch water routing valve back to the Sterisil water treatment system supply and flush lines until orange color disappears. Complete a retest in accordance with the original testing procedures outlined by the testing facility. (See item #3 above.)

6. Once results are determined, if the unit passes no further action is required with the exception of documenting the results in the maintenance tracking system and a hard copy of the results kept on file. If there is second failure, a repeat shock and additional re-test will be completed. This sample will be sent to the appropriate state testing facility or reference lab in accordance with their testing protocol using a 5-minute flush. After a 3rd test failure, the water system supplier is called to determine what further maintenance or repair is required. The water delivery system on the dental unit in question will remain out of use until a result below the threshold of 500 CFU/mL is achieved.

7. If the water treatment system is determined to be malfunctioning, the system supplier (Sterisil) will be called to determine what further maintenance is required. If the malfunction is systemic and is resulting in CFU's greater than 500 CFU's/mL, all affected dental units will be deemed out of service until the malfunction is corrected.

Maintenance

The School of Dental Medicine will monitor the system for any expired filters and proper operation of the units utilizing the School of Dental Medicine maintenance tracking system.

REVIEW AND APPROVAL:

The members of the SDM Infection Control and Life Safety Committee and the Sr. Associate Dean for Clinics and Professional Practice vet the SDM Water Testing Protocol. The SDM Operations Committee, Faculty Senate and SDM Executive Committee conduct final approval of the SDM Water Testing Protocol. The SDM Water Testing Protocol is reviewed on an annual basis or sooner, as needed.

REFERENCES:

CDC Guidelines for Infection Control in Dental Health-Care Settings – 2003
http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5217a1.htm

CDC Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care - 2016
http://www.cdc.gov/oralhealth/infectioncontrol/guidelines/index.htm

American Dental Association Statement on Dental Unit Waterlines

9.6   SDM Infection Prevention and Exposure Control Plan

INFECTION PREVENTION AND EXPOSURE CONTROL PLAN

Section I

INTRODUCTION AND PURPOSE:

Infection Control is an integral component of all procedures and patient care activities. The overall goal of an infection control program is to prevent or reduce risk of disease transmission among patient/clients, students, staff and faculty. This protocol is also intended to provide an educational model reinforcing the ethics and practices necessary to provide safe care to patients.

This policy will be made available to any patient or patient representative who requests a copy. Applicants for admission may also request a copy. A paper copy will be supplied to these groups upon request. The policy is available on-line to all School of Dental Medicine clinical and non-clinical personnel including faculty, staff, students and residents.

RATIONALE:

Dental care personnel including dental students, faculty, staff, laboratory and other support personnel are occupationally exposed to a wide variety of infectious materials and pathogens including body substances, contaminated supplies and equipment, and environmental surfaces. In addition dental care personnel are ethically and legally obligated to provide care which minimizes the risk of cross contamination and nosocomial infection to patient/clients. Since pathogens may cause infections with serious complications including various types of hepatitis, AIDS, tuberculosis, etc. and the chain of transmission is largely microscopic, infectious patients or staff may not be readily identified.

Therefore it will be the policy of the University of Colorado, School of Dental Medicine (CU SDM) to adhere to Standard Precautions. OSHA mandates this approach to infection control in which all human blood, body fluids including saliva, excretions, secretions, non-intact skin, and mucous membranes are treated as if known to be infectious for HIV, HBV, HCV and other bloodborne pathogens. Standard precautions are procedure specific, not patient specific.

EPIDEMIOLOGICAL BASIS FOR INFECTION CONTROL:

The spread of infection in health care is best described through the five components of disease transmission:

(1) Sufficient source of infecting pathogens;

(2) Location or medium where the organisms are able to supply and multiply such as the blood stream or dental unit water lines;

(3) Route of transmission such as hands, surfaces, blood, water, air, droplet spatter, etc.;

(4) Portal of entry such as cuts or punctures or exposed mucosa;

(5) Reception of infectious agents by a susceptible host.

Disease may be transmitted from patients to dental care personnel; from dental staff to patients; and from patient to patient. Effective infection control disrupts one or more of those components. Precautions outlined in this protocol are based upon the measures recommended to protect against transmission of the benchmark bloodborne pathogens Hepatitis B (HBV) and Human Immunodeficiency Virus (HIV).

Regulatory Basis for Infection Control:

All protocols will be based on the most recent guidelines or regulations promulgated from the Centers for Disease Control (CDC) in the Guidelines for Infection Control in Dental Health-Care Settings 2003, MMWR, Dec. 19, 2003, Vol. 52, No. RR-17; and all laws currently in force from the Occupational Safety and Health Administration (OSHA), Bloodborne Pathogen Standard; and the Dental Practice Law of Colorado**: C.R.S. 12-35-129. Causes for denial of issuance or renewal - suspension or revocation of licenses - other disciplinary action - unprofessional conduct defined - disciplinary panels - cease and desist.** *(1) The board may deny the issuance or renewal of, suspend for a specified time period, or revoke any license provided for by this article or may reprimand, censure, or place on probation any licensed dentist or dental hygienist after notice and hearing, which may be conducted by an administrative law judge, pursuant to the provisions of article 4 of title 24, C.R.S., or it may issue a letter of admonition without a hearing by certified mail for any of the following causes: ... (k) An act or omission*

constituting grossly negligent dental or dental hygiene practice or that fails to meet generally accepted standards of dental or dental hygiene practice; (C.R.S. 12-35-129 (1)(k)). Grossly negligent practice in relation to infection control is further defined in the Colorado Board of Dental Examiners Rules and Regulations **3 CCR 709-1 Rule XVII. Infection Control A**. *Failure to utilize generally accepted standards of infection control procedures may violate 12-35-129 (1) (k), CRS.*

Scope

The scope of this plan encompasses all working facilities (treatment areas, clinics both on the grounds, mobile and free-standing) administered, staffed, and managed by University of Colorado School of Dental Medicine

APPLICATION

The stipulations of this document apply generally to all personnel and activities at University of Colorado School of Dental Medicine and specifically to all tasks, activities, jobs, or positions that have a potential for exposure to bloodborne pathogens and the employees who perform those tasks and activities or occupy those jobs and positions.

Section II

DEFINITIONS:

For the purpose of this document, the following terms/phrases from the Bloodborne Pathogen Standard have been extracted and revised/expanded/modified/qualified to reflect application/practice at University of Colorado School of Dental Medicine.

"At Risk": When, in the performance of an employee's duties, there exists an actual or reasonably anticipated* potential for skin, eye, mouth, mucous membrane or parenteral contact with blood or other potentially infectious materials, this employee is considered "At Risk" for OCCUPATIONAL EXPOSURE. This document applies most specifically to employees in this category. A list of tasks and jobs in the "At Risk" category can be found in the classification of risk section of this document.

Blood: Refers to human blood, human blood components and products made from human blood; May also pertain to blood from experimental animals infected with HBV, HCV or HIV.

Bloodborne Pathogens:

Microorganisms present in human blood that can cause human disease; including, but not limited to, Hepatitis B Virus (HBV), Hepatitis C Virus (HCV) and Human Immunodeficiency Virus (HIV).

Clinical Laboratory: Work place where diagnostic or other screening procedures are performed on human blood or other potentially infectious materials.

Contaminated: Actual or reasonably anticipated* presence of human blood or other potentially infectious materials in or on an item or surface.

Contaminated Laundry: Bedding, clothing, textiles, gowns, bath linens are processed by a laundry service and cleaning cloths, mop heads, cleaning supplies soiled with human blood or other potentially infectious materials etc. handled and processed by Environmental Services personnel

Contaminated Sharps: Any object contaminated with human blood or other potentially infectious material that can penetrate skin--includes, but is not limited to, needles, scalpels, broken glass, broken capillary tubes, exposed dental wire ends and surgical instruments.

Decontamination: The removal, inactivation or destruction, by physical or chemical means, of bloodborne pathogens in or on a surface or item to the point the pathogens are no longer capable of causing disease, or transmitting infectious particles, and the surface or item is rendered safe for handling, use or common disposal.

Dental Health Care Worker (DHCW): Refers to any healthcare worker including staff, students and faculty at the School of Dental Medicine.

Dental Laboratory: Workplace where dental laboratory procedures are performed on dental appliances, impressions that were exposed to potential infectious materials.

Engineering Controls: Controls--typically mechanical devices--that isolate or remove the bloodborne pathogen from the work place and minimize or eliminate the potential of exposure incidents for employees and others in the environment. Examples include the sharps disposal containers, "needleless" IV systems, self-sheathing needles, sleeved IV connecting needles, retracting Vacutainer holders, etc.

Exposure Incident: Any actual and specific eye, mouth, other mucous membrane, non-intact skin or parenteral contact with blood or other potentially infectious material resulting from performance of employee's duties; for example, contaminated needle stick to employee after using needle to start IV on patient, splash of fluid to eye/mouth while performing care, etc.

Fluid-Resistant: Materials that resist penetration by fluids/semi-fluids are described as "fluid-resistant." These materials do not totally prevent "strike-through" or liquid penetration; they delay it, thus providing only immediate and temporary protection against a splash.

Hand Hygiene: Use of hand washing facilities to remove soil and organisms from the hands or application of alcohol based hand-rubs to disinfect the hands when they are not visibly soiled.

Hand Washing Facilities: Apparatus (usually a sink) that provides potable running water, soap and single-use paper towels--found primarily in bathrooms and clinical patient care areas.

Hepatitis B Virus (HBV, Hep B): Causes Hepatitis B disease in humans.

Hepatitis C Virus (HCV, Hep C): Causes Hepatitis C disease in humans.

Human Immunodeficiency Virus (HIV): Causes Acquired Immunodeficiency Syndrome (AIDS) in humans.

Impervious: Materials that deflect and totally prevent penetration of a liquid/semi-liquid while the integrity of the material is intact are described as "impervious." These materials provide total, long-lasting protection from splash to the areas/items they cover.

Occupational Exposure: Actual or reasonably anticipated* skin, eye, mouth, mucous membrane or parenteral contact with blood or other potentially infectious material as a result of performance of employee's duties.

Other Potentially Infectious Materials:

Human Body Fluids

Semen.

Vaginal secretions.

Synovial fluid.

Cerebrospinal fluid (CSF).

Pleural fluid.

Pericardial fluid.

Peritoneal fluid.

Amniotic fluid.

Saliva in dental procedures.

Any body fluid with visible blood in it.

Any unidentified body fluid, whether it contains visible blood or not.

Unfixed tissue or organs, except intact skin, from a human, and

Cell, tissue or organ cultures, culture media or other solutions containing HIV, HCV or HBV; blood, organs and tissue from experimental animals infected with HIV, HCV or HBV.

Parenteral: Piercing of the skin or mucous membrane, as in needle stick, cuts, abrasions and human bites.

PEP: Post Exposure Prophylaxis.

Personal Protective Equipment (PPE): Specialized clothing, equipment and supplies worn by a DHCW as protection against an actual or reasonably anticipated* hazard. General work clothing (uniforms, cotton lab coats, skirts, pants, shirts, blouses, etc.) do not qualify as PPE. PPE is to be worn in addition to scrubs, or over, general work clothing, and provides a barrier to exposure for the DHCW and his/her normal attire. PPE is used in conjunction with Engineering Devices and Work Practice Controls for prevention of actual exposure incidents. See SPECIFICATIONS for types of PPE that can be used in certain areas and situations.

*Reasonably Anticipated: If actual eye, mouth, mucous membrane or parenteral contact with blood or other potentially infectious materials is a potential outcome of the employee's performance of a procedure or task; i.e., if blood or other potentially infectious materials are an integral part of the procedure or activity, it is reasonable to anticipate that contact may result. Measures must be taken to prevent contact.

Regulated Waste: Also known as "Red-Bag Trash," "Contaminated Waste," "Infectious Waste," etc.:

Liquid, semi-liquid blood or other potentially infectious materials.

Items that would release blood or other potentially infectious materials if squeezed or compressed.

Items caked with dried blood or other potentially infectious materials that are capable of releasing these materials during handling.

All used needles, disposable sharps and syringes (except bulb syringes).

All other pathological and microbiological wastes.

Source: The patient or individual whose blood or other potentially infectious material came into eye, mucous membrane, non-intact skin or parenteral contact with an employee.

Standard Precautions: An approach to clinical practice whereby all human blood and certain other body fluids (see OTHER POTENTIALLY INFECTIOUS MATERIALS) are presumed to be infected with HIV, HCV, HBV and other bloodborne pathogens, and treated accordingly. Standard Precautions are practiced at University of Colorado School of Dental Medicine.

Sterilize: Destruction of all microbial life, including spores.

Strike-Through: Penetration of a garment or other material by a liquid or semi-liquid that results in presence of the liquid or semi-liquid on both sides of the materials.

Work Practice Controls: Modifications or alterations in performance of procedures or tasks designed to minimize or eliminate potential for occupational exposure; including, but not limited to, consistent use of Engineering Devices and PPE in all appropriate situations, consistent hand hygiene after glove removal, never directly recapping a needle or using improper technique for recapping.

SPECIFICATIONS:

Personal Protective Equipment:

In order to meet the protection needs of the user/DHCW and the stipulations of the Bloodborne Pathogen Standard, the protective equipment provided must meet certain specifications under certain conditions of use:

Gowns: Fluid-Resistant vs. Impervious

Fluid-Resistant - In controlled situations where the DHCW , even though handling blood or other potentially infectious material, has the latitude to stop the task/procedure, remove and replace the gown before "strike-through" to the skin or clothing underneath occurs, a fluid-resistant garment may be utilized for protection. An example would be bench work in a clinical laboratory or in our dental clinics.

Impervious - A garment that deflects liquids and is impermeable to "strike-through" unless its integrity is physically damaged should be worn for protection in all situations where the DHCW cannot immediately stop and remove/replace the gown in the event of a blood/body fluid splash. Examples would include direct involvement in a full COR-arrest resuscitation or other emergency situation and direct performance or assistance with an invasive procedure (usually does not include routine IV manipulations).

Gowns: Front Opening vs. Back Opening

Front Opening - In situations where the DHCW, even though handling blood/body fluids, is not likely to encounter uncontrolled emission of blood/body fluids and the DHCW is normally in a position to stop participation in the procedure to remove/replace the gown, a front-opening garment may be worn. Again, the example would be bench work in a clinical laboratory.

Back-Opening or Closing - Garments with a solid front, preferably of impervious material, should be worn by DHCW engaged in situations/procedures where there is likely to be uncontrolled emission of blood/body fluids and the DHCW cannot halt participation in the event to remove/replace the gown. Again, an example would include direct involvement in a full COR-arrest resuscitation.

GLOVES:

Must be impervious to fluids in all situations until and unless the integrity of the material is damaged.

MASKS, EYE PROTECTION AND FACE SHIELDS:

Either a chin-length face shield that wraps the face and provides eye protection on the sides of the face back to the hairline or a mask in combination with goggles or glasses with solid side shields must be worn in situations where facial protection from uncontrolled emission of blood/body fluids is a potential anticipated outcome.

Section III

RESPONSIBILITIES

Administration and Management

Director of Quality Management and Patient Safety is the Infection Control Officer designated by the Dean and is responsible to review policies and protocols related to infection control in the CU SDM. The Director of Quality Management is the designated administrative staff in the Office of Clinical Affairs and ultimately the Dean will be responsible to oversee the implementation of these policies and protocols. It is the shared responsibility of faculty, staff and students at CU SDM to recognize the need for implementation of standard precautions as outlined in this policy and to comply with standard operating procedures. Faculty members are ultimately responsible for supervision of clinical care and must ensure that compliance is adequate to maintain a safe treatment environment for patients, students and staff. Key responsibilities and oversight functions are listed as below:

Maintain readily accessible copies of the Infection Control and Exposure Control Plan within the facility.

Establish and maintain working knowledge of provisions of the Infection Control and Exposure Control Plan.

Establish, provide resources for, monitor and enforce compliance with the provisions of the Infection Control and Exposure Control Plan.

Provide readily accessible and adequate supplies of appropriate engineering devices and personal protective equipment within the immediate work environment for DHCW protection and use.

Ensure there is a process in place to clean, repair, replace, or dispose of used/contaminated engineering devices and personal protective equipment.

Review and update relevant internal policies/procedures as necessary to maintain Standard compliance. Communicate changes to DHCW and assure compliance.

Maintain records of training and documentation of compliance.

Dental Health Care Worker (DHCW) Responsibilities

Faculty, Employee, Student, and Dental health care workers

Participate in initial training

Given during orientation for new DHCW

Special sessions held at implementation of Standard

Participate in additional training no less than annually.

Know the locations of and demonstrate appropriate use of engineering devices and personal protective equipment applicable to the particular work area and related task.

Be able to identify tasks and procedures that may result in occupational exposure.

Consistently utilize appropriate engineering devices, work practice controls and personal protective equipment to prevent occupational exposure in the performance of duties.

If DHCW has not already received Hepatitis B vaccine, communicate consent or declination for vaccination within ten days of hiring; if consenting to receive vaccine, should initiate series within three months of hiring.

DHCW who sign a vaccination declination have the option to reverse this decision, and may receive vaccine at any time during enrollment and employment at University of Colorado School of Dental Medicine

Immediately report to supervisor and appropriate authorities all exposures to blood / other potentially infectious materials as defined by the Standard and comply with follow-up procedures.

Follow established policies and procedures relevant to the Bloodborne Pathogen Standard.

Participate in the selection/evaluation of engineering devices and personal protective equipment.

Immediately report to appropriate supervisors/authorities unsafe or incompetent products that do not provide expected/appropriate level of protection.

Dental Infection Control and Safety Officer or Designee

Coordinates with Infectious Disease Clinic/ Emergency care for immediate and long-term follow up of sharps injuries and body fluid exposures.

Schedules appropriate follow-up physical assessments and indicated laboratory testing of injured DHCW

Maintains records documenting DHCW injury, test results and DHCW clinical response to follow-up.

Arrange for procuring and administering Hepatitis B vaccine to DHCW in accordance with manufacturer guidelines and the provisions of the Bloodborne Pathogen Standard.

Maintain written declinations and/or vaccination records in the DHCW's health file.

Maintain all DHCW health files and medical records required in accordance with the Standard

Keep current of relevant regulations and legislation. Communicate requirements / changes to administration and staff. Initiate policy adaptation.

Establish and maintain working knowledge of provisions of Bloodborne Pathogen Standard.

Maintain the Needle stick tracking log in event reporting system required by OSHA Standard

Maintain Sharps Injury tracking log in event reporting as required by OSHA Standard.

Present analysis of data from Needle stick Log to appropriate committees that oversee quality, Product Safety and Infection Control at least annually

Make recommendations for approval or discontinuation of a device based on data analysis

Oversee and coordinate follow up activities with ID Clinic.

Facilitate training and orientation of requirements of Bloodborne Pathogens Exposure Control Plan to new DHCW.

Oversee and provide guidance in the selection and evaluation of personal protective equipment and engineering devices.

Participate in the development of work practice controls designed to prevent exposure to bloodborne pathogens appropriate for each work setting.

Monitoring and analysis of DHCW exposure incidents. Recommend corrective actions when appropriate. Participate in resolution of potentially exposure-prone situations.

Collect/Analyze/evaluate data and recommend corrective actions:

Liaison with UCH Occupational Health Nurse as needed and or Risk Manager regarding incident reports

Personal communications with staff

Review of literature

Observation

Attendance at relevant seminars, workshops, etc.

Appropriate Committee communication:

Personal communication with involved managers, administration, etc.

Make findings and recommendations known to administration, management, and appropriate staff.

Memos.

Personal verbal and written communication with involved manager, staff, faculty, student or resident

Evaluate results of changes made

Initiate and conduct at least annual review/revision of the Exposure Control Plan--more often if necessary to comply with regulatory or policy changes.

Maintain master copy of Exposure Control Plan with current reference documents attached for ease of review/revision.

Provide instructional counseling following infection control breaks by DHCW.

Infectious Disease Clinic

Conduct DHCW initial post-exposure evaluation and follow-up procedure according to the Standard and policy.

Keep current of relevant regulations and legislation. Communicate requirements/ changes to administration and staff.

Establish and maintain working knowledge of Bloodborne Pathogen Standard provisions.

Forward relevant reports immediately to Dental Infection Control and Safety Officer or designated Occupational Health Coordinator.

Emergency/Urgent Care Department

Conduct initial DHCW post-exposure evaluation when DHCW Health and Infectious Disease Clinics are closed.

Refer DHCW to appropriate venue for follow up depending on evaluation outcome.

Section IV

DHCW EXPOSURE RISK CLASSIFICATION

All employees and DHCW of the University of Colorado School of Dental Medicine (CU SDM) will be classified in accordance with OSHA guidelines into Category I, II or III (29 CFR 1910.1030) according to their tasks/job related risk of exposure to infectious disease agents within 10 working days of employment.

Category I – Tasks that involve an exposure to blood, body fluids or tissues

> Positions: All undergraduate and postgraduate dental students, ISP students, residents, all full and part time clinical faculties, staff dental assistants including Central Processing and Dispensary, dental production laboratory technicians, dental equipment repair and maintenance staff, environmental services staff.

Category II – Tasks that involve no routine exposure to blood, body fluids or tissues, but employment may require performing unplanned Category I tasks

> Positions: administrative assistants, clinical coordinators, and staff assigned to clinical coordination, scheduling, financial, records; material managers or dental stores staff.

Category III – Tasks that involve no exposure to blood, body fluids or tissues as a condition of employment

<u>**Responsibility for Classification:**</u>

The Sr. Associate Dean for Clinics and Professional Practice or Designee upon input by the appropriate department chair or designated staff person, will classify all personnel within CU SDM for purposes of exposure to infectious disease agents. Employees include full and part- time faculty, clinical dental assistants and dental hygienists, group practice coordinators, dental equipment repair technicians, dental laboratory production technicians and assistants, and contracted environmental services staff. Pre-doctoral dental students, post graduate dental students, residents and ISP students are by definition in Category I.

<u>**Exposure Determination:**</u>

1. Complete UCD HSD Form 1030-1, for Employee Exposure Categories

   a. Record the names and job classification information for each employee, and categorize with respect to occupational exposure. Be sure to include student workers and work study employees.

   b. This exposure determination is to be made without regard to mitigation by the use of personal protective equipment (PPE).

   c. An example of the completed form would look as follows:

Name	Job Classification Title	Exposure Category	HBV Vaccine Y/N
John Doe	Clinical Lab Tech	I	Y
Mary Smith	Lab Tech	I	Y
James Jones	Professor	II	N
Anne Jones	Secretary	III	N/A

2. Complete UCD HSD Form 1030-2, Employee Exposure Category Assessment.

    a. List employees identified on Form 1030-1, including student workers and work-study employees. List the tasks and procedures that may result in occupational exposure to human blood and OPIM.

    b. Fill in the other blanks, as appropriate, with a checkmark to identify the infectious materials, PPE and so on, associated with each task.

EDUCATION AND TRAINING IN INFECTION CONTROL PROTOCOLS AND EXPOSURE CONTROL PLAN

Credentials of Trainers:

Training will be coordinated and provided by personnel with documented expertise. Name of trainer and credentials will be included as part of training records.

Students:

All CU SDM pre-doctoral and ISP students will be trained in basic infection control protocols prior to their first direct patient care experiences. A review of basic infection control guidelines along with site specific training in CU SDM protocols will be provided to postdoctoral and international ISP students prior to clinical activities. Update training will be mandatory for all students on an annual basis.

CU SDM Staff/Faculty:

All CU SDM clinical staff and faculty are required to complete initial training that will review all topics in this protocol. Initial training and OSHA safety information must be made available prior to clinical assignments. Update training will be mandatory for all staff at least annually is available online. Faculty and staff are expected to participate in bloodborne pathogens and hazard communications training from the UCDHSC Health and Safety Office. Training will include department specific issues affecting infection control as identified by department supervisors. The Dental safety officer will be responsible to coordinate training.

Content of Training:

1) A description of exposure risks and pathogens inherent to clinical dental care and the epidemiology of disease transmission in dental settings.

2) A review of the prevention strategies and protocols in place at the CU SDM with emphasis on personal protective attire and equipment; hand hygiene; post exposure protocols and environmental management.

3) Protocols for work restrictions related to illness or injury.

4) Types of records that will be maintained for employees and methods to maintain confidentiality.

Training Parameters:

1. Initial training within 30 working days of employment and before beginning assigned duties in patient treatment areas. Each clinical specialty area will be responsible for developing and providing acceptable training in procedures unique to that department. Specialty training is in addition to the basic training in standard precautions.

2. All employees and DHCW will be reviewed for understanding and compliance after initial training.

3. Training updates will be provided during working hours at no charge to employees at least annually and whenever significant changes occur in equipment or protocols.

4. Training must include all personnel with potential exposure to occupationally related hazards: all clinical staff, faculty, undergraduate students, graduate post-doctoral students and housekeeping/maintenance staff.

5. Training records will be kept by the Clinical Manager for the duration of employment plus three years.

Section V

EXPOSURE CONTROL PROGRAM: EXPOSURE PREVENTION

Definition of an Exposure:

1. Splash of blood or other potentially infectious material to mouth, eyes, open wound, mucous membranes, other non-intact skin;

2. Needle stick/sharps injury involving used/contaminated needle or other sharp (human bites resulting in broken integument also fit into this definition); *OR*

3. Minimal exposure is when body fluids are splashed onto intact skin.

How Exposures Occur:

The School of Dental Medicine places a priority on exposure prevention. Occupationally acquired infections may occur through percutaneous injury (needle stick, cut, "poke" with contaminated instrument); or through contact of potentially infectious blood, saliva, tissues or other body fluids with mucous membranes of the eye, mouth, nose or non-intact exposed skin. Research indicates that burs, syringe needles, lab knives, and processing of contaminated instruments are the most common sources of "sharps" percutaneous exposure.

The University of Colorado School of Dental Medicine will emphasize use of evidence based strategies most likely to reduce infection through exposures:

Immunizations: Immunizations especially Hepatitis B immunization. Refer to Immunization Requirements policy

Standard Precautions and PPE: Personal protective attire and equipment including consistent use of gloves, masks, gowns, and appropriate eyewear.

Engineering Controls: Passive engineering controls to limit exposure to percutaneous injuries ("sharps" exposures): cassette instrument holding and processing systems; closed solid side transport trays; automated instrument cleaning using ultrasonic instrument cleaners and automated instrument washers; and hard side biohazard sharps collection devices located at every treatment unit.

Work Practice Controls and Housekeeping: Work practice controls incorporated into Standard Operating Procedures. No food or drink in the clinic areas. Keep hand pieces with projecting burs turned downward and towards the delivery system and out of the path of injury at chair side. Wipe debris from instruments using cotton rolls or damp gauze on tray, not held in hand; sharpen instruments using sterilized stones and only after sterilization and immediately prior to patient treatment; during treatment, transfer instruments using "safe zone" transfer techniques; use one handed recapping techniques described in this section during local anesthesia procedures.

Hazard Communication and Waste Management: Refer to Hazardous Management Plan

Sharps Management: Protocol for sharps management during local anesthesia and other procedures requiring needle recapping:

- A protect card should be placed on needle cap before use. Protect cards are located in the cart with the anesthetic carpules and needles.

- Needles may be recapped between injections.

- Never recap using two hands. Use one handed recapping: The cap may be placed on the clean tray and "scooped" up onto the needle and tapped into place. Avoid contaminating the needle during the scoop process.

- Alternatives include use of disposable or reusable devices to hold the cap during one handed recapping such as inserting the cap into the disposable foam tray, cassette cap holder or cardboard cap holder.

- Use hemostat or cotton pliers to remove used capped needles from syringes.

- All used anesthetic needles, broken anesthetic cartridges, used endodontic disposable files and other "sharps" or blades will be discarded in the red rigid sharps containers located in each operatory. Intact anesthetic cartridges may contain aspirated blood and may be disposed of in sharps containers.

- Safe handling of other "sharps": upon completion of patient treatment all disposable sharps will be segregated first and disposed into the rigid side red sharps disposal containers. (Scalpel blades; used endo files, orthodontic wires, etc.)

Hand Hygiene

Rationale:

Effective hand hygiene is the single most important measure for reducing the risk of transmitting pathogens. Hand hygiene includes methods to decontaminate hands, reduce soil load, and maintain skin barrier integrity. Transient flora which are most frequently implicated in healthcare acquired infections are also the most easily removed by routine hand washing. Hand hygiene is essential in addition to the correct use of gloves because gloves become porous or develop tears during procedures. Preferred methods of hand hygiene will depend on the type of procedure, degree of contamination and need for persistence of antimicrobial action.

Maintaining intact healthy skin is encouraged as intact skin is the best personal defense against infection. Hand hygiene using newer alcohol hand rubs with emollients will reduce some of the irritation associated with frequent hand cleansing. Use of lotions formulated for use in healthcare environments will be encouraged.

Frequency, Timing and Applicable Agent for Hand Hygiene:

- Bare hand touch of contaminated surface - hand wash with soap & water.

- When hands are visibly soiled* - hand wash with soap & water.

- Before leaving clinic area at end of shift or day- hand wash with soap & water.

- Before and after processing contaminated instruments - hand wash with soap & water.

- Before and after handling instruments in "clean" room - alcohol rub.

- Before handling sterilized packaged goods - alcohol rub.

*Alcohol (antiseptic) hand rubs are not to be used when hands are visibly dirty or contaminated with blood or other body soils.

When to perform hand hygiene	Recommended method and agent for hand hygiene
First entry of the day shift to clinic area	Hand wash w/ soap & water
Reentry to clinics after eating	Hand wash w/ soap & water
Immediately before donning gloves for patient treatment	Hand wash or alcohol rub
Immediately after removing gloves after patient treatment	Hand wash or alcohol rub
After removing gloves torn or punctured during treatment	Hand wash w/ soap & water

Correct Method for Routine Hand Asepsis Using Soap and Water:

- Using foot activated faucets, wet hands with cool to moderately warm water and dispense enough soap to create slight foam all over hands, between fingers and above wrists. Interlace fingers and include thumbs during hand washing. Wash for at least 15 seconds (the "Happy Birthday Song"). Rinse thoroughly and dry skin prior to gloving to reduce chapping.

- Selected soap will be a liquid product with antimicrobial ingredients dispensed from disposable containers.

Correct Method for Routine Hand Asepsis Using Alcohol Based Hand Rub:

- Hand hygiene using a waterless alcohol hand rub is effective for routine hand antisepsis throughout the treatment day between patients, before donning gloves, and after removing gloves.

- Dispense enough solution to keep hands moist with product while vigorously rubbing hands and fingers together for at least 10 - 15 seconds (Happy Birthday Song). Interlace fingers and include thumbs. Allow hands and forearms to dry before donning gloves. Do not rinse off after application.

- Selected product will demonstrate minimum 60% ethanol or isopropanol and emollient agents.

- Alcohol rubs should not be used for hand hygiene when visible soil or organic material is present on hands.

Surgical Hand Hygiene:

- Surgical hand hygiene will follow CDC guidelines using products with proven persistent antimicrobial properties for an extended 2 to 6 minute scrub. When the scrub time is less than the recommended 2 -6 minute hand washing should be combined with use of any approved pre-surgical hand prep solution such as Avagard.

Policy for Lotions:

- All students, staff and faculty are encouraged to monitor skin for sensitivities or possible allergic reactions to various soaps and materials. Use of lotions is encouraged to maintain skin condition. Only approved lotion products known to be compatible with healthcare procedures and glove materials should be used. It is discouraged to bring products from home for clinical use.

PERSONAL PROTECTIVE EQUIPMENT, ATTIRE AND PERSONAL HYGIENE

CU SDM guidelines for personal hygiene and appearance are intended to maintain asepsis in the clinic environment and protect clinicians from exposure to infectious agents. In addition, the correct use of protective attire will also reduce the unintended transfer of infectious agents to the home environment. The following guidelines apply as appropriate to all clinic personnel- male and female - including faculty, pre and post-doctoral students, international students, staff with patient contact, and any clinic employees who are likely to contact contaminated materials or surfaces. These guidelines must be followed in all patient treatment areas. (See References:)

Personal Appearance and Hygiene for Patient treatment Procedures:

- No food or drink in any patient care area including the clinics. Covered drinks are allowed in the simulation clinic and the technique lab at the discretion of the Infection Control and Life Safety Committee.

- Secure hair away from the face and restrain from entering the treatment field.

- Beards or mustaches will be covered by face mask or shield.

- Jewelry on fingers, hands, arms or ears must not interfere with the effective use of gloves and masks. Jewelry on the hands and arms is discouraged during clinical sessions.

- Nails must be clean and short. Artificial nails are known to harbor soils and microorganisms and are not permitted.

- Intact healthy skin is a key element of infection control for health care workers.

- Use lotions to maintain skin health, wash frequently and at appropriate times, and inspect skin frequently for cracks and injuries that could increase risk of infectious agent transmission.

- Shoes must be worn in patient treatment areas and must be clean and have solid closed toes.

- Neckties, scarves and necklaces should be covered by PPE during aerosol producing procedures.

- Scrubs must be clean.

- Designated CU Dental T shirts distributed through School of Dental Medicine are permissible alternative to scrub shirts on Fridays only.

Required PPE for Patient Contact:

Correctly worn masks, gloves, eyewear and gowns provide an important level of protection from infectious materials that may contact mucous membranes of eyes, mouth, nose and non-intact skin. The following barrier techniques will be practiced routinely in all clinics of the CU SDM including the simulation clinic (with the exception of disposable gowns).

Required PPE for Simulation Clinic:

Correctly worn masks, gloves and eyewear must be worn during all simulation clinic activities.

Required PPE for the Technique Lab:

Correctly worn eyewear must be worn during all technique lab activities.

Gloves:

Nitrile or Nonlatex Gloves will be used in the CU SDM and are a single use item, with a fresh pair to be used for each patient. Wear cuff of glove over cuff of lab coat or gown. Torn or compromised gloves will be replaced immediately and hands washed prior to regloving. Contaminated gloves must be removed when leaving the treatment cubicle and/ or clinic treatment area. Upon return to treatment area, hands must be decontaminated with soap and water wash or if no visible soils, use alcohol rub, then fresh gloves may be donned upon returning to patient treatment. Surfaces should not be touched with gloved hands during treatment sessions unless barrier protected.

Masks:

Selected masks will have an intermediate rating of 98 % particle filtration at .1 micron and must be worn for all patient treatment. The mask must cover the nose and mouth and be correctly adjusted to stay in place. The mask collects aerosols and contaminated material during treatment. It should not be worn under the chin between uses as this allows the contaminated outer surface to touch the face, mouth, etc. Masks become saturated over time and must be changed a minimum of every 60 minutes or more frequently for high aerosol procedures such as ultrasonic instrumentation. Student clinicians will wear a fresh mask for each patient.

Eyewear:

Protective eyewear must be worn during patient treatment and includes goggles, prescription eyewear, or face shields. (Face shields do not take the place of masks.) Protective eyewear including prescription glasses must have side-shields or eyewear "wraps" that offer side protection. Patients must also wear protective eye-wear during all procedures including screening exams. All eyewear for clinicians and patients must be cleaned between patients with soap and water or wipes and if visibly soiled with splatter, must be cleaned and disinfected.

Gowns and Lab Jackets:

Protective clothing must be worn over scrubs or street clothes during clinic patient treatment sessions and any tasks generating potentially infectious aerosols such as instrument processing. Note: Scrubs are considered street clothes and must be covered by protective gowns or jackets in the clinical setting. Protective gowns or lab coats are intended to limit the transfer of soils and contamination in two directions: from street clothes to patient treatment zones; and from aerosols and debris generated in the patient treatment zone that would otherwise be transmitted outside the facility, especially to home and family. Students will wear disposable gowns. Gowns and lab coats must be changed daily or more often if visibly soiled. Faculty and staff will wear approved clean lab coats or disposable gowns over scrubs during all clinic sessions when involved in patient care or while working in clinics where patient care is actively ongoing. A disposable gown must be worn by faculty and staff anytime they are engaged in patient care where there is the possibility of an aerosol and or spatter of debris. Lab coats must cover street clothing where aerosols are most likely to contaminate. Neckties are a known vector of contamination and should be covered if worn.

Restrictions and Removal of PPE:

Gowns, masks, and gloves must NOT be worn outside patient treatment areas. Gowns and lab coats should be removed prior to eating. Cloth lab coats should be turned inside out when hung up in non-treatment areas. Contaminated gowns may NOT be worn inside any of the laboratories. Appropriate containers will be provided for the collection of contaminated jackets/ laundry.

Recommended PPE for Decontamination of Dental Unit Treatment Operatory:

Gloves, masks, eyewear and gowns are required while cleaning and disinfecting environmental surfaces in treatment units. The type of glove (utility glove or regular glove) that must be worn should provide adequate hand protection during dental unit cleanup and for surface cleaning and disinfecting. Disinfectant chemicals may compromise the integrity of some glove products. There is also the risk of sharps exposures during treatment area cleanup.

Required PPE for Receiving and Processing Contaminated Instruments in Dispensary Areas and Central Processing:

Receiving and handling contaminated instruments, including those contained within cassettes, trays and baskets, is an exposure prone procedure. Heavy duty puncture resistant utility gloves, masks, protective eyewear and gowns must be worn when receiving and handling contaminated instruments, equipment and supplies.

PPE in Dental Laboratory Areas:

Protective eyewear must be worn in dental laboratories. Masks must also be worn when grinding, using rag wheels or any other procedures likely to produce dust and aerosols or when shields and dust collection devices are not installed. Gowns or lab coats used during patient treatment be removed prior to entering dental labs. Gowns must be removed if visibly soiled. Rag wheels and other items that are used on patient appliances must be cleaned and sterilized.

PPE for Oral Surgery Including Implant and Osseous Involved Procedures:

Sterile gloves will be worn by clinicians and assistants during all oral surgery and periodontal surgery procedures in addition to general PPE required for all patient contact.

Latex Exposure:

The CU SDM will use latex free products in all general clinics. Nitrile exam gloves are standard supply.

SHARPS/INSTRUMENT MANAGEMENT

Sharps Management:

Instrument Management, Processing and Decontamination

Decontamination is the entire process of cleaning, transporting, processing and sterilizing instruments, objects and devices to make them safe for reuse. Instrument and device decontamination protocols are based on the concept that effective sterilization requires instruments and devices that are completely clean because debris acts as a barrier to sterilant contact with surfaces

Classification of Items for Decontamination:

- Critical items include surgical instruments, scalers, etc. that penetrate soft tissue, bone or contact the bloodstream.

- Semi-critical items such as amalgam carriers, mouth mirrors, and film holders may enter the oral cavity, contact mucosa but do not penetrate soft tissues. All critical and semi-critical instruments and devices used for patient treatment will first be cleaned thoroughly, then heat sterilized or if not heat tolerant, at a minimum will be chemically disinfected in a high level disinfectant solution.

- Non-critical items contact only external intact skin and will be cleaned and disinfected with an intermediate level tuberculocidal disinfectant/ cleaner and will be covered with barriers. (Radiology tube head and collimator, curing lights, etc.)

Special note for semi-critical device exception: Phosphor plates for intra-oral radiology are barrier protected for intraoral use. Barriers are single use and discarded when plate images are processed.

Instrument Decontamination Process - Operatory Treatment Area:

- Instrument decontamination starts at the treatment area. Immediately upon dismissal of patient, student clinician and/or clinic assistant will prepare instruments for processing.

- Use recommended PPE - gown, eyewear, mask and appropriate gloves.

- Safely dispose of sharps first in the designated rigid containers including needles, anesthetic carpules if broken, used scalpel blades, discarded orthodontic wire, used endo files or burs that will be discarded.

- Remove and discard body tissue fragments or items soaked in blood or saliva to biohazard waste containers. Remove other trash and disposables from cassettes.

- Wipe cements and gross debris from cassette surface and instruments by wiping against damp gauze or cotton rolls on tray. (Never hold gauze in finger tips to remove debris from sharp instrument tips.)

- Make note of damaged or missing instruments and accessories. Attach tape to damaged instruments to identify them for replacement.

- Sort endo files or bur sets if used into holders and note if replacements needed.

- Wipe gross soils from surface of handpieces using damp paper towels with disinfect

- Student clinicians and assistants are jointly responsible for transport of contaminated instruments and equipment to dispensary area via equipment carts.

- Transport instrument cassettes to designated instrument cart and loose instruments to the dirty instrument receiving window. All items will be contained within cassettes or other holders. Do not allow instrument tips to protrude from cassettes or holders.

Instrument Decontamination - Dispensary receiving Area - General Protocols:

- Manual cleaning of instruments and equipment will be minimized. Cassettes, ultrasonics, trays, enzyme pre-cleaning spray, automated instrument washers, closed cart transport systems and centralized processing are all in use to reduce sharps exposure incidents during instrument decontamination.

- Dispensary/ "return" area clinical staff must wear gowns, heavy duty utility gloves, masks and protective eyewear while receiving and processing contaminated instruments.

- The receiving area of the dispensary will be organized and labeled to sustain a one way flow of items from dirty to clean.

- No food or beverages are allowed on counters, shelving, or carts in dispensary instrument cleaning area or supply storage area.

- Where possible, items used such as code scanner should be barrier protected to reduce cross contamination.

Ultrasonic Washers in Dispensary Areas:

- Cleaning solutions will be changed at least daily or more often based on soil load.

- Assistants will use drain baskets or file bur holders to insert and remove items in ultrasonic cleaners.

- Never insert hands into ultrasonic solution when filled with contaminated items.

- Ultrasonic chambers will be kept covered during operation to reduce aerosols.

- Ultrasonic devices will be labeled with type of solution and dilution ratio to meet OSHA labeling requirements for secondary containers.

- Do not overload ultrasonic. All items must be submerged for effective cleaning.

- Rinse items thoroughly after removal from ultrasonic solution.

- Monthly quality check of the effective function of ultrasonic using foil test or Sonochek.

High Level Gluteraldehyde Chemical Disinfectant in Dispensary Areas:

- Use will be eliminated where possible by use of disposable or heat tolerant devices.

- Where essential, use will be limited to semi critical items that are not heat tolerant.

- Solution tubs must be labeled with name of solution and dated for use and expiration according to manufacturer's directions for use life meeting OSHA labeling requirement for secondary containers.

- Solution will be kept covered.

- Items will be inserted and removed as a group. All items will be thoroughly rinsed with sterile water and packaged/ labeled for next use.

Decontamination of Handpieces and other devices attached to air and waterlines:

- High and low speed handpieces, contra-angles, prophylaxis angles, ultrasonic scaling tips, and air or water syringe tips are all cleaned and/or flushed for 30 seconds after each use. All handpieces, ultrasonic scaling tips are heat sterilized prior to re-use on next patient.

- Saliva ejector tips, high volume suction tips are disposable and discarded after use.

Steps for Receiving and Processing Contaminated Items in Dispensary Area:

- Scan bar codes.

- Open cassettes and check for missing or damaged items. Remove trash if present.

- Spray pre-cleaning enzyme foam on instruments.

- Clean endo file sets and bur sets in ultrasonic cleaning units. Rinse. Replace damaged or missing items for sets as labeled on "go-by" charts. Check for residual soil and re-clean as necessary. Package dried sets for heat sterilization in the dispensary area.

- Clean surfaces of handpieces, mats and compression rails; check for complete components, lubricate and bag for sterilization. All hand-pieces are sterilized between uses.

- Contaminated instruments will be transported to Central Sterile Processing inside cassettes and trays via closed case transport carts.

- As much as possible, contaminated items will be transported within 1 hour to Central Processing. All contaminated items will be transported in enclosed case carts. Since carts are loaded in dispensary area the outer surface is likely to be contaminated, clean exam gloves are recommended to handle case carts during transport.

- Case carts loaded with contaminated items must be accompanied during transfer. Case carts will not be left unattended in the elevators.

Sterilization Procedures in the dispensary areas:

- All items will be clean, dried and inspected for residual soils prior to sterilization.

- Items such as burs or jointed pliers may be sprayed with anti-corrosive lubricant agent prior to sterilization.

- Implantable devices processed in the clinical dispensary e.g. implant screws, pins, must be processed with a BI and released only after the BI result is received.

- All items are bagged for sterilization using medical grade paper/plastic self-seal pouches.

- An internal chemical indicator will be included inside every pouch.

- All critical and semi-critical heat tolerant items are heat/steam sterilized.

- All sterilizers in the dispensary areas are steam/heat sterilizers; gravity, prevac and or forced air Statim.

- Loading sterilizers: Improper loading is one of the most common causes of sterilization failure. DO NOT OVERLOAD sterilizer. All items must be loaded alternating paper to plastic.

- Do not load packages with paper side to paper side. Where possible load items on edges.

- All table top sterilizers in the department dispensaries are monitored: mechanical cycle settings and controls are observed for each cycle; internal and external chemical indicators are used with every pouch, and biological spore tests are processed daily for each sterilizer.

- Sterilization records will be kept a minimum of one year in the department. Older records will be labeled and bundled for storage at off-campus warehouse.

- Cycle parameters follow manufacturer's directions. Gravity Tuttnauer sterilizers operate at 250 degrees F for 30 minutes after reaching correct temperature and pressure. Pre-vac Lisa sterilizers run 273 degrees F for 4 minutes, 250 degrees F for 30 minutes and 273 degrees F for 18 minutes on an extended cycle

- Statim sterilizer will be operated at parameters recommended by the manufacturer.

- Items must be allowed to dry and cool before removing from sterilizer. Handling wet packs will cause contamination to "wick" inside packaging.

- Check chemical indicators on each package and from each load to verify process prior to use in clinics. Do not use instruments if chemical indicators are not changed.

- Handle and store packaged sterilized items carefully to keep packaging intact. Storage and use of sterile packaged goods is based on "event - related sterility": Contents of pouches are presumed to stay sterile as long as packaging is intact and not contaminated by moisture.

Centralized Instrument Decontamination Department:

Centralized instrument decontamination is used for the majority of instrumentation at CU SDM. The Central Sterile area is organized as follows:

- The area is physically divided with contaminated "dirty" room, clean room, and sterile room.

- All instrument processing flows from dirty to clean.

- Each area (dirty, clean and sterile) will be physically separated to reduce cross- contamination. Keep doors and transfer window shut between contaminated and clean zones.

- All case carts carrying contaminated items will be processed through a case cart cleaning cycle prior to entry into the "clean/sterile" side of Central Processing.

- No food or beverages in the instrument processing areas.

Contaminated Receiving Area Procedures:

- Contaminated (dirty receiving side) receives transport case carts from all department clinics except faculty practice.

- Personnel must wear full PPE: mask, protective eyewear, heavy duty utility gloves, decontamination gown over scrubs when receiving contaminated carts and items.

- PPE supplies will be available in the contaminated receiving area.

- Disposable elements of PPE will be discarded prior to leaving contaminated receiving area, hands washed and utility gloves washed and air dried.

- Contaminated PPE (masks, utility gloves and gowns used when receiving contaminated carts) MUST be removed prior to using office area.

- Ultrasonic instrument cleaner will be labeled for solution in use and recommended dilution. All items will be completely submerged during ultrasonic cycle. Solutions will be changed when visibly soiled or drained at the end of day/shift. Equipment automatically drains when turned off. Tank will be manually rinsed between uses. Ultrasonic function will be monitored monthly with foil test or Soni chek.

- Contaminated items are in cassettes or transport trays. Contaminated items are loaded int automatic washer disinfectors. Wash cycles regularly in use are enzyme prewash, rinse, main wash, thermal disinfecting rinse and final

lubrication/surface treatment cycle. All cycles are set as per the validated parameters listed by the manufacturer. Washers are tunnel style with loading on contaminated side and unloading on clean side.

- AxiUm process Tracking – Items are scanned in main DC from user, checked for trash, scanned into washer. Surgical kits, hygiene kits and surgical and cannulated are clean with ultrasonic then washer disinfector.

- Washer tested weekly and daily

Clean Room (Instrument Packaging):

- Clean dry instruments and cassettes are removed from washers on the "clean" side in the inspection and packaging room. Instruments and cassettes are thermally disinfected by washers.

- Cassettes are opened and inspected for broken or missing items and are checked for functionality. Residual trash, etc. removed if still present. Cassettes are closed and packaged for sterilization. Loose items are grouped according to procedure cards and bagged for sterilization.

- New instruments for replacements must be cleaned prior to storage in clean room.

- Technicians must wash or decontaminate hands with alcohol rub agent upon entering clean area. Hand jewelry, bracelets and artificial nails are sources of contamination and should be avoided. Hair should be restrained. Eye Protection and clean lab coats are required. Clean exam gloves may be used to maintain asepsis during instrument packaging.

- Sterilizers are loaded from the "clean" side and unloaded on the "sterile" side.

- Sterilizers will NOT be overloaded.

- All pouches must be loaded so that paper is next to plastic. Racks will be used to load pouches and cassettes on sides or edges.

- Pre Vac sterilizers provide dry packages at the end of the cycle. Sterile packs should be handled carefully to maintain intact packaging. Validation Testing: Bowie Dick test daily, chemical integrator is included in each kit, process challenge device in sterilizer with every load, spore test included in first load and in loads containing an implantable device.

- Implantable devices are quarantined until spore test result is obtained.

Sterile Room, Storage, and Quality Management:

- Central Processing technicians must wash hands and don clean lab coats prior to working in the area.

- All instruments including individual items and cassettes are packaged for sterilization. Items are not flash sterilized or sterilized unwrapped.

- All Central Processing sterilizers are pre-vacuum sterilizers with dedicated steam lines.

- All Central Processing sterilizers are monitored: mechanical control check, external chemical indicators on all pouched items, and chemical class V integrator in every load; daily Bowie-Dick vacuum draw tests for the main sterilizers in Central Processing; daily biological spore tests in the large main sterilizers. Biological indicators are incubated along with controls and records kept for each sterilizer.

- Storage of sterilized goods is based on "event related" sterility. Indefinite sterility is assumed for intact packaged items. Throughout processing, pouches will be monitored for intact packaging. If tears, pinholes or protruding items are noted at any point in processing, the entire package will be pulled for repackaging in a fresh pouch and re-sterilized.

- Dropped packages: Packaged items will be repackaged and re-sterilized if dropped on floor, even if packaging is intact, due to potential for cross contamination of external pouch surface on clinical treatment surfaces.

- All handpieces are surface cleaned and lubricated in the dispensaries, packaged and heat sterilized in upstairs sterilizers or transported for sterilization to Central Processing. Kits are stored in sterile storage or return to clinical dispensary. Instrumentation is released after reaching an internal temperature of 72 degrees F

Protocol for biological test failures:

The following protocol will be used for all sterilizers (table top, pre-vac, etc.).

- Identify the sterilizer associated with the failed biological test. Ensure that this equipment is not used for sterilization until basic parameters and retesting is completed.

- For tabletop sterilizer run on full load, use items are not needed immediately. For Statim sterilizer run on

  empty load. For sterilizer larger than 2 CUFT run on empty load.

- Verify that mechanical controls are set correctly and that recent chemical indicator tests run in that machine are changing appropriately.

- If mechanical controls are correct and chemical indicators are changing, immediately run a cycle with a biological spore test. Do not include items needing sterilization in this cycle.

- Determine if any oral surgery sets run in this sterilizer and recall for quarantine and reprocessing. Recall all appropriate instruments in the lot and identify the reason for the spore test failure. Items other than implants do not necessarily need to be recalled; however if possible all items that can be traced and especially surgery packs should be repackaged and reprocessed in functioning sterilizers.

- Remove the sterilizer from service The unit should pass three consecutive spore tests; return unit to service when test results show sterilization conditions are met.
- Review logs and records from interval since last negative BI and review procedures for sterilizer operations, including loading and how spore test was run. Identify if operator error.

- If second BI shows failure, keep sterilizer out of service until inspection and repairs are followed by three consecutive successful BI tests.

Processing and Sterilization Protocol for Implant Cases:

All implants are received certified sterilized by the manufacturer. Only the super periosteal components of implant systems may be cleaned and sterilized for use. These must be sterilized according to the manufacturer instructions.

Storage of Sterilized Items in Central Processing:

- All sterilized goods will be packaged. Items will not be unloaded from sterilizers until dry. Sterile packaged goods will be handled as little as possible. Packaging will be kept intact.

- Short term storage will occur on the "clean/sterile" side of Central Processing.

- Short term storage in departments and dispensaries will be on clean dry racks and bins in areas segregated from patient treatment and contaminated items. "Short term" is the period - usually less than one week elapsed - after sterilization and until items are requested for use.

- Storage will be based on "event related" sterility. All packages will be routinely inspected prior to use by clinicians for intact packaging prior to opening. Contents may be assumed to be sterile if packaging is intact. All instruments must be date stamp as this is critical in a process recall and stock rotation
- Annual Sharps Risk Assessment and Evaluation

On an annual basis screening and evaluation for safer dental devices will be completed.

(See APPENDIX -D for screening form and evaluation form)

Section VI

HOUSEKEEPING - ENVIRONMENTAL INFECTION CONTROL - DENTAL UNITS AND CLINICAL SURFACES

Basic principles used at CU SDM for environmental infection control will be based on classification of areas and surfaces as:

- Housekeeping - includes floors, walls, windows, blinds, sills, cabinets, sinks.

- Zone of aerosolization - patient unit chairs, stools, carts, computer screens.

- Clinical touch surfaces - areas likely to be touched with gloved hands during the course of patient treatment -keyboard, handpieces, air/water syringe controls, evacuation lines, light handles, chair back and controls, small equipment such as curing lights and ultrasonic scalers.

Facilities and equipment in place to reduce cross contamination:

- Smooth upholstery.

- Foot controls for patient chairs and faucets.

- Electronic paper-less record keeping.

- Unit dosing of supplies.

Barriers will be used on all clinical touch surfaces and especially those that cannot be removed and heat sterilized. Barriers are single use and will be changed between patients. It is not necessary to reclean and disinfect covered surfaces as long as barriers remain intact and in place. Barriers must be removed in a manner that avoids contaminating surfaces underneath.

Barrier protected surfaces include but are not limited to: patient chair back, delivery/docking arm for handpieces and evacuation lines, cart, handpiece controls, computer keyboard and mouse, light handles, operator stool adjustment, radiographic head, control panel.

Surface Cleaning and Disinfection:

- An EPA registered intermediate level disinfectant/cleaner will be used for all clinical treatment surfaces but especially clinical touch surfaces and adjacent countertops, and computer monitor screen cover. Disinfectants will be applied by wiping with towelettes. Sprays are not allowed in the clinics to reduce aerosols and protect electronic equipment.

- Disinfectant will be applied in the CDC recommended two step method: Clean surfaces first to remove soils. Apply disinfectant/cleaner thoroughly using sufficient wipes to clean all surfaces. Cleaning is critical to effective disinfection. Discard wipes. Reapply disinfectant with fresh wipes to completely cover surface with disinfectant. Allow total contact time of 10 minutes. If barriers are used, they should be replaced in between each patient after wiping down the surfaces.

Dental Unit Set up Step by Step:

- Personal items, backpacks, books, etc. from the treatment unit should be stored in student lockers.

- No food and drink should be consumed in clinical areas.

- Wash hands thoroughly with soap and water upon entering clinic and before touching any supplies or equipment. Wear clean gloves for set up after washing hands.

- Water bottles may be left on units. Rinsing and disinfecting bottles is not necessary as all water used during treatment is continuously treated through a centralized silver ion system on the first and second floor clinics. Water for third floor orthodontic clinic is treated from a centralized silver ion system. Treated water is then used in unit bottle systems. Bottles will be removed, disinfected and allowed to dry on a daily basis in 3rd floor Orthodontic department clinics.

- Wear disposable clinic gown, eyewear, mask and clean gloves.

- Check treatment area for general cleanliness including floors, countertops, and arms of unit. Use disinfectant and cleaner towelettes for spot cleaning. Remember- patients perceive infection control via visual assurance of a clean, neat treatment area.

Start of the Day:

- Disinfect clinical touch surfaces using the two step method: Clean first using an intermediate level tuberculocidal disinfectant with cleaning surfactants. Discard wipes or paper towels used for cleaning. Apply disinfectant -dispense fresh disinfectant towelettes sufficient to reapply disinfectant to all clinical contact surfaces, counter tops and adjacent areas in the zone of aerosolization. Disinfectant total contact time is 1 minute.

- Collect disposables and treatment items. Wipe off excess disinfectant if necessary and ensure that seating areas of chairs and stools are clean and dry.

- Place barriers over all clinical contact areas including: patient chair back, cart, keyboard, mouse, operator stool and height control, unit light handles and light switch, air/water handle, and controls for evacuation lines.

- Attach air /water tip, evacuation tips and handpieces. Place sterile bur in chuck of handpiece and run for 30 seconds. Recover handpieces if they will not be immediately used. (After handpiece and bur are used during treatment, return to holder with bur end down pointing towards delivery system)

- With clean bare hands collect disposable supplies, paper goods, biohazard bag, patient education and home care supplies, etc. Do not access supplies with gloved hands during patient treatment.

- Check chemical integrator to ensure it is completely changed, also check kit for completeness, if not complete exchange for new kit.

- Seat patient, place bib and protective eyewear for patient. After initial conversation and medical history update, wash hands (soap and water or alcohol rub), place clinician PPE starting with mask, then eyewear, gloves last.

Unit Clean-up or Unit Turn-over Step by Step between Patients:

- PPE -Students and clinical assistants will wear masks, eyewear, gowns and appropriate gloves during unit clean up.

- Sharps -Safely dispose of sharps first in the designated rigid containers. Remove and discard body tissue fragments or items soaked in blood or saliva to biohazard waste containers.

- Sort and remove other disposables and debris from cassette and discard in general trash. Ensure all instruments are return to the kit.

- Discard disposable gowns and large barriers in large trash bins located at sides of clinic areas. Small trash receptacle at unit is only for smaller non-biohazard trash. Do not allow gross debris or cements to dry on instruments. It is the joint responsibility of clinic assistants and students to start instrument decontamination as quickly as possible to avoid dried debris damaging instruments and cassettes. Wipe cements and gross debris from cassettes and instruments by wiping against damp gauze on a solid surface (Never use gauze in finger tips to remove debris from sharp instrument tips.)

- Check for damaged or missing instruments and accessories required for that instrument set. Separate endo files, holders and bur sets and note if replacements needed. If present, wipe gross soils from surface of hand pieces using damp paper towels. Contaminated instruments and equipment will be transported to dispensary area via carts within cassettes or solid side pans.

- Remove all surface barriers and place in general trash. Use wipes to clean the surfaces and then replace with new barriers.

- Turn off unit light. After unit light has cooled off, leave light cover in place and clean off with damp paper towels. If noticeable spatter cannot be removed or is inside cover notify a clinic assistant.

- Diluted evacuation line cleaner to suction at least one to two cups solution through each evacuation line of the unit must be done at start of day and as often as needed.

- Clean all clinical contact surfaces after last patient of day including surfaces covered by barriers.

- Use disinfectant/cleaner towelettes. Check all unit surfaces including countertops, unit arms, computer monitor screen cover, etc. for any visible soils, especially blood spatter.

- All visible soils must be cleaned and the same area disinfected using the two step method: clean first, discard towelettes, obtain fresh towelettes, reapply disinfectant, and allow 1 minute contact time.

- The upholstery of patient and clinician chairs, keyboards, and monitor covers may be cleaned with disinfectant wipes and then wiped off with plain paper towels dampened with water.

- If visible blood or other body soils are noted on upholstery or keyboards, the two step process should be used.

- Replace unit light directly over chair. Raise chair slightly to allow floor cleaning.

- Turn off unit control.

- Change unit suction trap weekly.

- If using utility gloves, Wash utility gloves with soap and water then remove and hang.

- Wash hands thoroughly with soap and water prior to leaving clinic.

Limiting Contamination via Aerosols and Consumable Supplies:

- Aerosols: All procedures will be performed to minimize the amount of splatter and aerosols by consistent use of high volume evacuation, proper patient positioning, pre-operative mouth rinses, rubber dam placement and effective use of PPE.

- Consumable supplies will be accessed with clean bare hands only. Where possible items will be unit dosed. When containers must be placed in the dental treatment area, containers will be barrier protected if they must be handled during patient care.

Water Lines and Evacuation Systems:

Rationale for water line monitoring and treatment:

- Dental unit waterlines can become colonized with microorganisms, creating complex slime layers (glycocalyx) and biofilm. Although cultured samples demonstrate limited pathogenic potential, Pseudomonas aeroginosa, Legionella species and other potentially pathogenic species have been isolated from some water lines. Further the CDC states: "Although no epidemiologic evidence indicates a public health problem, the presence of substantial numbers of pathogens in dental unit waterlines generates concern. Exposing patients or dental health care workers to water of undetermined microbiological quality, despite the lack of documented adverse health effects, is inconsistent with accepted infection control principles." The American Public Health Association and American Water Works Association have set limits for heterotrophic bacteria in public water supplies not to exceed 500 cfulml.

- CU SDM uses a centralized Sterisil PureLine50 wall mounted, point-of-entry purification system connected to incoming municipal water supplies. This system provides treated water for all clinics, autoclaves and drinking water dispensers. The system filters contaminates in the source water using prefiltering and automated reverse osmosis (RO) filtration. Water is further disinfected using UV irradiation.   Water dispensed for autoclave use is filtered through additional deionization to reduce total dissolved solids. Sterisil Corporation maintains the filters and ionizing cartridges and sends water samples for testing to a third party. Verification logs will be maintained in duplicate by Sterisil and CU SDM Clinical Manager.

- Procedures: Discharge water and air for a minimum of 20 - 30 seconds after each patient, from any device connected to the dental water system that enters the patient's mouth (e.g. handpieces, ultrasonic scalers, air/water syringes). ADEC unit antiretraction mechanisms are engineered to eliminate "suck-back" into water delivery lines.

- Maintenance for ADEC unit evacuation lines and solids filters: Evacuation lines will be cleaned at least weekly with approved solution by clinic assistants.

LAUNDRY
Clinic Coats and Gowns:

The School of Dental Medicine provides protective gowns for all students, staff, faculty and volunteers. Student and faculty clinic gowns are available in the clinics. Coats must be changed daily or more often when visibly soiled. Used coats should be handled carefully to avoid skin contact with patient's body fluids. Coats should be placed in the laundry bins on each clinical floor. A professional laundry service is responsible for cleaning the laundry. A gown must be worn during patient care by all students. A gown must be worn by Faculty and staff during patient care if there is an aerosol or spatter of debris that may occur.

EQUIPMENT MANAGEMENT

Equipment must be disinfectant and cleaned as listed above during preset-up, during patient treatment and after treatment. Equipment maintenance should be done only on equipment that has been decontaminated in the appropriate manner .This same decontamination of equipment must also take place prior to shipment of the item. If areas remain contaminated due to an inability to effectively disinfect, those areas must be indicated by attachment of a Biohazard sticker. All vendors must perform quality checks on all applicable equipment and provide timely reporting to ensure timely follow-up is completed as necessary.

Eye Wash /Eye Safety:

All dental clinical areas and support services have eye wash systems connected to the water system. Users must know the location and how to operate and use them as described below.

- Turn on cold water side of faucet (use of hot water may cause scalding or other injury).

- Pull knob on Eye Station unit forward to activate the eye wash. Water pressure will hold the eye wash in operation, thus leaving the user's hands free.

- To return to normal faucet operation, push knob back to original position. When the faucet is turned off, the knob will return to original position automatically.

Maintenance:

- Periodic cleaning of the eye wash aerators is advisable to assure proper water flow.

- Keep plastic float-off covers on outlet heads when the unit is not in use.

- The Eye wash unit, like all emergency eye wash and shower should be tested at least weekly by dispensary staff and quarterly maintained by facilities department.

Section VII

POST EXPOSURE MANAGEMENT AND PROPHYLAXIS PROTOCOL

How exposures may occur: Occupational exposure to potentially infectious agents may occur through percutaneous injury (needle stick, cut, "poke" with contaminated instrument); or through splash/ aerosolization/spill of potentially infectious blood, saliva, tissues or other body fluids with mucous membranes of the eye, mouth, nose or non-intact exposed skin.

Immediate Action, Step-by-Step Protocol for Post Exposure Management:
If a student, staff, faculty or patient experiences an exposure to infectious agents, immediate action is necessary. DO NOT DELAY.

- Stop the task or procedure as quickly and safely as possible.

If involved in patient care, do not dismiss the patient.

- Students will immediately inform the attending or supervising faculty. Staff or faculty must promptly inform the department supervisor and or clinic manager.

- Supervising faculty should assist to temporize/stabilize the dental procedure in progress and reassure patient.

- Injured person should immediately cleanse wound or puncture sites using soap and water. Squeezing the wound is not recommended. Antiseptics are not recommended. Do not use dilute bleach solutions on skin wounds!

- Report incident immediately or within 24 hours. Obtain occurrence form and post exposure form from Clinic Manager. Forms are available on each floor /department. Complete the short information portion of form and take with you to Infectious Disease Clinic (IDC). Contact phone # for PEPLine is included on form.

- If known source patient, supervising clinical faculty will assist student clinician in discussion and request for baseline testing with source patient.

- Report to Infectious Disease Clinic within 2 hours of exposure.

- Injured person takes Post Exposure form with completed information portion, and source patient to the Infectious Disease group on the 7th floor of the Anschutz Outpatient Pavilion, 720-848.0191 (Clinic Hours: 8:00am-4:30pm). If unknown source patient or patient refuses consent, injured student, staff or faculty will immediately proceed to the clinic for testing and advisement.

- If an incident should happen outside of these hours, injured person and source patient should go to the Emergency Room on the Anschutz Medical Campus.

- If source patient is willing to be tested but cannot go to Infectious Disease Clinic, alternative for testing source patient as recommended by IDC - "Draw blood in 2 Serum separator tubes (Gold Tops) immediately". Bring blood with you to clinic. Include patient name, SSN, DOB, home address."

- Occurrence form must be filed with Clinic Manager within 24 hours of incident.

- Use of PEPLine: PEPLine is a confidential objective and reliable source of information to help assess degree of infection risk and recommended post exposure procedures based on that assessment. Use of PEPLine is recommended for reassurance of injured persons and faculty or health care providers involved in their care or counseling. PEPLine is NOT a substitute for prompt, timely post exposure testing and counseling.

- **Contact PEPLine at 1-888-448-4911 (24/7) for confidential guidance on infection risk based on parameters of exposure.**

Infectious Disease Clinic Hours:	
Monday, Tuesday, Wednesday	8:00am-4:00pm
Thursday	9:00 am -4:00pm
Friday	8:00am- 4:00pm

The School of Dental Medicine places a priority on exposure prevention including education; continuous assessment of exposure risk; wearing personal protective attire and equipment including consistent use of gloves, masks, gowns, and appropriate eyewear; using passive engineering controls to limit sharps injuries; and work practice controls incorporated into Standard Operating Procedures. Please see the Clinic Policy and Procedure Manual 7.7.2, 7.7.3, and 7.7.4 which outline the School's *Exposure Control Program: Exposure Prevention* (APPENDIX - A).

There are four exposure management scenarios:

1. Students, staff, faculty and patients injured by a sharps instrument and/or exposed to body fluids in one of the School of Dental Medicine's Anschutz Medical Center clinics (Procedure A).

2. Students, staff, faculty and patients injured by a sharps instrument and/or exposed to body fluids in one of the ACTS sites or on the mobile van, and are within a 90 minute drive from campus (Procedure B).

3. Students, staff, faculty and patients injured by a sharps instrument and/or exposed to body fluids in one of the ACTS sites or on the mobile van, and are not within a 90 minute drive from campus (Procedure C).

4. Students, staff, faculty and patients injured by a sharps instrument and/or exposed to body fluids in Children's Hospital clinics should follow the protocol in that specific location.(Procedure D)

Students, staff, faculty and patients injured by a sharps instrument and/or exposed to body fluids in one of the School of Dental Medicine's clinics should seek immediate testing and treatment from the Infectious Disease Clinic located on the 7th floor of the Anschutz Outpatient Pavilion, part of the University of Colorado Hospital (see Procedure A) or from the University of Colorado Hospital's Emergency Room if after 4:30 PM or weekends.

If you are seeing patients at one of the ACTS sites or on the mobile van, and are within a 90 minute drive from campus, you should follow Procedure B and use a sharps injury kit (see Procedure B) if necessary.

If the injury/exposure occurs more than 90 minutes from campus, follow the ACTS site protocols for their employees (see Procedure C).

If the injury/exposure occurs at the Children's hospital clinics follow Procedure D.

WORKER'S COMPENSATION REPORTING

1. Workmen's compensation covers sharps injuries for students, staff, and paid faculty, unless the injury happens to a student who is practicing on another student. In this case, the costs associated with the injury will be charged to the student's personal health insurance.

2. All patient testing will be paid for by the University of Colorado School of Dental Medicine.

3. All faculty, students, resident, and staff will be provided written notice of this policy and procedures.

Procedures:

Post Exposure Management and Prophylaxis for Injuries that Occur at the School of Dental Medicine's Anschutz Medical Center Clinics:

If a student, patient, faculty or staff experiences an exposure to infectious agents, immediate action is necessary. **DO NOT DELAY. Report to the Infectious Disease Clinic or University of Colorado Hospital's Emergency Room for exposure risk assessment and blood draw within 90 minutes of exposure.**

1. Stop the task or procedure as quickly and safely as possible.

2. If not involved in patient care (working in lab), inform coordinator and Office of Clinical Operations.

3. If involved in patient care (working in clinic), do not dismiss the patient.

4. Student/Resident should immediately inform the attending or supervising faculty and coordinator. If staff injured, immediately inform faculty and your supervisor.

5. Supervising faculty should assist to complete/temporize/stabilize the dental procedure in progress and reassure patient.

6. Injured person should immediately cleanse wound or puncture sites using soap and water. Squeezing the wound is not recommended. Antiseptics are not recommended. Do not use diluted bleach solutions on skin wounds.

7. If known source patient, the supervising clinical faculty will assist student clinician in discussion and request for baseline testing of the patient.

8. Student/Resident or faculty must promptly inform the clinic manager, clinic coordinator or department supervisor. Obtain "Post Exposure Management Report Form" (Form A: Green Form) from clinic manager or clinic coordinator. Complete the form and bring a copy of it with you to the Infectious Disease Clinic or Emergency Room. Contact phone number for PEPLine is included on the form.

9. Use of PEPLine is NOT a substitute for prompt post exposure testing and counseling.

10. Report to Infectious Disease Clinic within 2 hours of exposure. Injured person takes Post Exposure Management Report Form and source patient to the Infectious Disease Clinic on the 7th floor of the Anschutz Outpatient Pavilion, 720-848-0191, Clinic Hours: 8:00am – 4:00pm. If unknown source patient or patient refuses to be tested, injured student, staff or faculty will immediately proceed to the clinic for testing and advisement.

11. If an incident should happen outside of the Infectious Disease Clinic hours of operation, injured person and source patient should go to the Emergency Room on the Anschutz Medical Campus.

12. Submit the Post Exposure Management Report Form to the Office of Clinical Operations immediately or within 24 hours.

13. If source patient is willing to be tested but cannot go to the Infectious Disease Clinic, alternative for testing source patient as recommended by IDC - "Draw 2 red tops immediately. Bring blood with you to the Infectious Disease Clinic. Include patient names, SSN, DOB, home address."

14. Following your visit to the Infectious Disease Clinic, you will need to file a worker's compensation claim online. See reporting instructions later in this policy.

15. Following the initial visit to the Infectious Disease Clinic, Emergency Room or other physician, the exposed individual should follow all recommendations including follow-up to assure that no risk of infectious disease transmission exists.

Post Exposure Management and Prophylaxis for injuries that occur at the School of Dental Medicine's ACTS sites or other clinical rotation sites within a 90 minute drive to the Anschutz Medical Campus:

1. If the exposure occurs within a 90-minute drive of the Anschutz Medical Campus:

2. Stop the task or procedure as quickly and safely as possible.

3. Do not dismiss the patient.

4. Student/Resident will immediately inform the attending or supervising faculty and clinic manager.

5. Supervising faculty should assist to temporize/stabilize the dental procedure in progress and reassure patient.

6. Injured person should immediately cleanse wound or puncture sites using soap and water. Squeezing the wound is not recommended. Antiseptics are not recommended. Do not use diluted bleach solutions on skin wounds.

7. The supervising clinical faculty will assist student clinician in discussion and request for baseline testing

8. Student/Resident or faculty must promptly inform the clinic manager, clinic coordinator, department supervisor, and ACTS director. Obtain "Post Exposure Management Report Form" (Green Form) from clinic manager or clinic coordinator. Complete the form and bring a copy of it with you to the Infectious Disease Clinic or Emergency Room. Contact phone number for PEPLine is included on the form.

9. Use of PEPLine is NOT a substitute for prompt post exposure testing and counseling.

10. Report to Infectious Disease Clinic within 90 minutes of exposure with the source patient. Injured person takes Post Exposure Management Report Form and source patient to the Infectious Disease Clinic on the 7th floor of the Anschutz Outpatient Pavilion, 720-848-0191, Clinic Hours: 8:30am – 4:30pm. If unknown source patient or patient refuses consent, injured student, staff or faculty will immediately proceed to the clinic for testing and advisement.

11. If an incident should happen outside of the Infectious Disease Clinic hours of operation, injured person and source patient should go to the Emergency Room on the Anschutz Medical Campus.

12. **If the source patient will not come to campus, it is important to have their blood drawn using the Sharps Injury Kits that are available at each of the ACTS sites for your use. See description below.**

13. Student must report the injury to the Office of Clinical Operations within 24 hours: phone

14. (303) 724-7110; and online with worker's compensation. See reporting instructions later in this policy.

15. Submit the *Post Exposure Management Report Form* to the Office of Clinical Operations within 24 hours of the occurrence.

16. Following your visit to the Infectious Disease Clinic, you will need to file a worker's compensation claim online. See reporting instructions later in this policy.

17. Following the initial visit to the Infectious Disease Clinic, Emergency Room or other physician, the exposed individual should follow all recommendations including follow-up to assure that no risk of infectious disease transmission exists.

<u>Sharps Injury Kits:</u>

The bags containing the Sharps Injury Kit will be stored in the medical refrigerator at the ACTS dental clinic. Before doing anything, read the protocol which is included in the kit. Have the person drawing the source patient's blood complete the form to include the source patient's name, location, date/time of draw, and name of the provider who ordered the draw.

The kits consist of a red, canvas, biohazard-marked, leak resistant zipper bag. Inside will be two SSTs ("gold top" blood vials needed for rapid HIV testing at UCH). The vials are plastic and should be sealed in leak-proof disposable sample bags and then placed inside reusable crush-resistant tubes and placed inside the red bag along with two gel cool-packs.

The student will transport the bag to UCH (either to the Infectious Disease Clinic or the Emergency Department) for rapid testing. Bring the red bag back to the School of Dental Medicine for re-stocking, and then return it to the clinic where it was used.

Post Exposure Management and Prophylaxis for injuries that occur at the School of Dental Medicine's ACTS sites or other clinical rotation sites more than a 90 minute drive to the Anschutz Medical Campus:

1. If the exposure occurs at a location more than 90-minutes away:

2. The source patient blood samples should be processed according to the ACTS site policy regarding sharps injuries and body fluid exposure.

3. The student should seek immediate care from the provider designated in the ACTS site's own clinical protocol.

4. All follow-up care is to be done at one of the University's employee health locations.

5. Students must report injury to the Office of Clinical Operations within 24 hours: phone 303-724-7110; and online with worker's compensation. See reporting instructions later in this policy.

Post Exposure Management and Prophylaxis for Injuries that Occurs at the Children's Hospital of Colorado and Children's Network of Care Sites

If you sustain a work-related injury immediately notify your supervisor/ faculty and contact

Occupational Health Services (OHS) as soon as possible through your employer and complete their required paperwork. If after hours, and the injury involves a life threatening, limb threatening, or is an eye threatening injury, go to Emergency Department and they will assess your injury and refer you for treatment. If you sustain a Blood Borne Pathogen Exposure during business hours report immediately to OHS. If it is after hours, immediately report to the emergency Department. They will provide immediate treatment and counseling. Follow-up will be through your employer's Risk Management Department. Network of Care sites have site specific protocols.

Follow-up procedure is as follows:

1. Report to Occupational Health Services (or Emergency Department when OHS is closed) as soon as possible (within 1-2 hours) after exposure. Time is critical if antiviral prophylaxis is to be most effective for an HIV positive exposure.

2. You can expect to be treated in a confidential manner and be given priority in your care.

3. If you are not a CHCO employee, CHCO will do the initial evaluation, lab work, and intervention (as needed). Thereafter, follow up will be at your place of employment (e.g., University Hospital employees at university Occupational Health Department).

4. If you are a CU employee file a claim via the University Risk Management website at: www.cu.edu/risk

Coverage:
The costs associate with post exposure testing for CU SDM employees (paid faculty, staff, residents, and students) and the source patient are covered by worker's compensation when the injury is related to direct patient care. If the injury happens to a student when working on another student, or when the injury is not due to direct patient care, the student must submit the costs of testing and treatment through their personal health insurance.

Reporting:
The student should work with their clinic manager/coordinator/designated front-line reporter, to complete the required forms and PSN report. The required forms and reports include:

1. *Post Exposure Management Report Form* (Form A: Green Form) (within 24 hours)

2. Workmen's Compensation online Needlestick or Bodily Fluid Exposure Form (Form B) within 4 days of injury. See APPENDIX - B for Reporting Protocols.

3. PSN Report (within 24 hours)

Follow-up
Appropriate follow–up with ID clinic at assigned intervals including 6 weeks follow-up visit must be completed and Director of Quality and Patient Safety and Program Assistant should be notified after completion of follow-up. The 3 months and 6 months follow-up visit can be completed at any nearby clinic such as the health-one clinic and SDM Director of Quality or Designee must be notified. Director of Quality will conduct a root cause analysis on each exposure and educate the DHCW as necessary.

WORKER'S COMPENSATION REPORTING PROTOCOLS

Needlestick & Body Fluid Exposure:
Prompt treatment is essential because, in some cases, post exposure treatment may be recommended and it should be started as soon as possible.

On-line Resource Information:
CDC's Exposure to Blood, http://www.cdc.gov/hai/

Mountain Plains AIDS Education & Training Center's PEP Steps , http://www.mpaetc.org/default.asp

Students, Non-Employees, Volunteers, and Others Should Seek Immediate Treatment.
Contact your personal healthcare provider for guidance. The closest campus facilities that may treat Students include the following.

Anschutz Medical Campus
University of Colorado Hospital: Infectious Disease Clinic at Anschutz Outpatient Pavilion, 1637 Aurora Court, 7th floor, between 8:00 AM and 4:00 PM Monday-Friday, or the Emergency Department after hours.

Denver Campus
Health Center at Auraria Plaza Building, Suite #150, between 8:00AM and 5:00 PM Monday-Thursday, Friday 8:00 AM and 3:00 PM (303-556-2525)

Boulder Campus
CU Boulder Students: Wardenburg Health Center, 18th and Broadway, between 8:00 AM and 5:00 PM Monday-Friday (303-492-5432).

UCCS Campus
UCCS Students: The Student Health Center is located in the Parking Garage Offices which are on the East side of the structure on ground level. Entrance is through the Dept. of Public Safety, Parking Division, Room #109. (719-255-4444).

Reporting:

- Report the injury immediately to your University representative (supervisor, Division/Department Chair, preceptor, faculty)

- You must report a needlestick/exposure within 4 days of the injury/exposure on the URM website using the needlestick form.

Medical Bill Payment:

- Submit bills to your health insurance for payment.

- Contact URM for assistance with any unpaid medical bills.

Employees:

(Faculty, staff, paid student workers, residents, fellows, students in internships, clinical rotations or practicums) Employees are covered by CU workers' compensation should seek immediate treatment.

Emergency or After Hours Medical Treatment

Anschutz Medical Campus

University of Colorado Hospital: Infectious Disease Clinic at Anschutz Outpatient Pavilion, 1637 Aurora Court, 7th floor, between 8:00 AM and 4:00 PM Monday-Friday, or the Emergency Department after hours.

Boulder Campus

Arbor, WorkWell or Concentra

UCCS Campus

Concentra or CCOM

Clinical Off-Campus Exposures

University of Colorado Hospital - Go to the Infectious Disease Clinic at Anschutz Outpatient Pavilion, 1637 Aurora Court, 7th floor, between 8:00 AM and 4:00 PM Monday-Friday, or the Emergency Department after hours.

Children's Hospital Colorado – Go to Employee Health Services, 13123 East 16th Avenue, B260, between 8:00 AM and 4:00 PM Monday – Friday, or the Emergency Department after hours.

Denver Health Medical Center - Go to the Occupational Health and Safety Center (corner of 6th Avenue and Bannock, 4th Floor) between 8:00 AM - 3:30 PM Monday through Friday or the Emergency Department after hours.

Other Hospitals, Clinics or Laboratories Off-Campus - Follow the off-campus facility's Bloodborne Pathogen Policy for initial handling of exposures and source patient testing. If after hours go to the nearest emergency room or facility or for non-emergency or follow-up medical care for your workers' comp injury, go to one of the CU Designated Medical Providers.

Non-Emergency and Follow up Care:

- Designated Medical Providers: For non-emergency or follow-up medical care for work related injury/illness, go to one of the CU Designated Medical Providers (Concentra, HealthOne, Arbor, WorkWell, and CCOM). Their contact information is on the URM website on the workers' compensation information page.

- If injury is after hours or while traveling, go to the nearest urgent care facility or medical emergency room, then contact University Risk Management 888-812-9601 or 303-860-5682 for further instructions.

Reporting:

Report the injury/illness immediately to your supervisor. Interns and off-campus students and employees should also report the injury/illness to their off-campus supervisor (hospital, clinical rotation or employer supervisor).

- You must file a worker's compensation claim form within 4 days of the injury/exposure. Report the incident on the URM website using the in-network needlestick form if reporting using the CU internet system and out-of-network form if using another internet system.

- If you have completed a report at the hospital or clinic where the incident occurred, the off-campus clinical facilities or you can fax or email their incident report form directly to 303-860-5680 or urm@cu.edu in lieu of completing the CU on-line form.

Medical Bill Payment

Request that all bills from medical providers be sent to:

University Risk Management | 1800 Grant Street, Suite 700 | Denver, CO 80203

Phone: 303-860-5682 or 888-812-9601 | Fax : 303-860-5680

Questions:

Additional current information and guidance is on the URM website on the workers' compensation information page.

Please direct any workers' compensation questions to University Risk Management 303-860-5682/888-812-9601.

DHCW/PERSONNEL HEALTH CONSIDERATION

Immunizations and infectious disease screening policies:

Immunizations are a significant and cost-effective preventive strategy and will be reviewed on an individual and confidential basis at the time of hire and as new evidence becomes available regarding newly applicable immunization programs. All students, faculty and staff who have direct or indirect contact with patient's blood and/or saliva should be immunized with hepatitis B vaccine or show serological evidence of immunity (anti-HBs) to hepatitis B virus infection. Those who receive the vaccine series are recommended to be serologically tested according to current recommendations (6 weeks to 6 months after the third injection) for antibody immune status.

Students:

Hepatitis B vaccination or evidence of serological immunity (anti HBs) is required for students prior to clinical contact with patients and for post-graduate students prior to initial clinical activity. A baseline tuberculin skin test (TST) and/or chest x-ray is also required. Other required immunizations include measles, mumps and rubella (MMR), tetanus / diphtheria and polio and Hepatitis A. Annual influenza vaccination is required. Student health records are confidential and are maintained separately from academic records.

Faculty and Staff:

It is required that all faculty and staff with direct or indirect contact with patients and who may then be potentially exposed to infectious blood or other body fluids be immunized with hepatitis B vaccine or show serological evidence of immunity (anti-HBs). Hepatitis B vaccinations will be offered to employees at no charge. Current published protocols will be followed for the schedule of vaccination and recommended follow-up testing for seroconversion. Declination of vaccination for hepatitis B must be documented in writing and a record kept in confidential employee health record files. Staff and faculty with direct patient contact will be encouraged to consult with their physicians and obtain other immunizations recommended for prevention of transmissible infectious diseases: annual influenza vaccination, Hepatitis A vaccination, measles, mumps, rubella (MMR) and varicella (chicken pox). Immunization and declination records will be kept confidential. It is recommended that all faculty and staff whose duties include direct patient contact, obtain a baseline tuberculin skin test (TST) using the two step method.

Potentially Infectious Medical Conditions and Related work Restrictions:

Reporting Requirements for Suspected Communicable Disease: Any CU SDM staff, faculty, or student including all undergraduate or post graduate students, who is aware or has reason to believe that she/he has a potentially communicable disease including those listed below, is responsible for reporting the information promptly to the Department chair and/ or Clinic Manager who will report to the Sr. Associate Dean of Clinical Affairs and Professional Practice. It is recommended to obtain medical evaluation and advice for such conditions as part of the determination for work restrictions. All personnel health reports will be handled in a confidential manner. Using appropriate medical guidance, the Dean shall make final determinations regarding restrictions, modifications of duties and assignments. Further, all students, staff and faculty are ethically and professionally responsible to monitor their own health conditions regarding their ability to provide safe care and minimize the risk of disease transmission.

Work Restrictions:

The CU SDM will use as the basis of illness related work restrictions, the recommendations listed in the CDC Guidelines for Infection Control in Dental Health-Care Settings, 2003 (See APPENDIX - B).

Recommendations regarding HIV infection or Hepatitis B e antigenemia when duties and assignments include patient contact during potentially invasive procedures:

Any CU SDM student, staff or faculty member who knows or has reason to believe that she/he has such diagnosis which may compromise the ability to safely treat patients or work in a clinical setting, shall report this information immediately to her/his department Chair who will report to the Dean. All such reports will be handled in a confidential manner. Health care workers and students with infections shall not be subject to discrimination in employment practices. As per current recommendations, persons with acute or chronic Hepatitis B (e antigenemia) or those identified as HIV positive should not perform exposure prone invasive procedures until counsel from an expert review panel has been sought. All records and review procedures are confidential

Recommended Composition of Expert Panel:

1. An infectious disease specialist with expertise in infectious disease transmission.

2. The individual's personal physician.

3. A CU SDM faculty member familiar with the individual's clinical activities and/or job functions.

4. A state or local health care official.

5. An attorney familiar with anti-discrimination and civil rights issues in the workplace.

6. A member of the CU SDM Clinic Operations Committee.

Factors for Expert Panel review:

1. Current health status of the individual.

2. Scope of clinical tasks and assignments.

3. Degree of clinical or job skill level of the individual.

4. Risks posed by infection and current applicable laws and regulations.

Students, faculty and staff who believe they may be at risk of HIV or HCV should seek testing and counseling. Mandatory prescreening or testing is not required at this time.

Recommendations regarding active tuberculosis:
A chronic productive cough (3 weeks or more), bloody sputum, night sweats, fatigue, fever and continuing weight loss are together indicative of possible active tuberculosis. Any CU SDM student, staff, or faculty including office, administrative and support staff with this group of symptoms should be promptly evaluated for TB and not return to work until a diagnosis of TB has been excluded or until the individual is on therapy and a qualified physician's determination is made that the individual is not infectious. All health care records and reports related to such conditions will be kept confidential.

Work Restrictions for other communicable diseases:
Students, faculty and staff should be restricted from patient contact during active stages of the following conditions: Conjunctivitis (pink eye), active diarrhea, Hepatitis A, Herpes simplex and herpetic whitlow, measles, meningococcal infection, mumps, lice, pertussis, rubella, staphylococcus aureus with skin lesions, tuberculosis active, varicella (chicken pox), zoster (shingles with open lesions in potential contact areas), febrile respiratory infections with active cough, sneezing, and mucous drainage. Training will include references so that students, faculty and staff may appropriately recognize active stages of communicable disease and thus effectively self-monitor their ability to attend the clinic environment and provide safe treatment.

Record Keeping and Confidentiality:
Health status and records of staff, student and faculty will be monitored as they pertain to infection control protocols. This includes relevant medical evaluations, screenings and results, immunizations, exposures and post exposure management. The related records shall be kept confidential and in accordance with HIPAA compliance.

Management of Patients with Infectious Diseases:
It will be the policy of the CU SDM to follow Standard Precautions, treating all patients as potentially infectious. Infection Control policies are procedure based, not patient based. Faculty and students will exercise professional judgment in situations where patients present with obvious active symptoms of highly contagious infectious conditions such as uncontrolled coughing, active open lesions in areas likely to be contacted during treatment, etc. When possible, such patients should be counseled and treatment deferred.

Medical History:
A thorough medical history must be obtained from each patient and signed by the patient or responsible party prior to initiating care at CU SDM. Faculty and student clinicians are required to review and update the history at subsequent dental visits. Medical histories must also be obtained and reviewed prior to clinical practice with student partners. In all cases, confidentiality and management of medical histories will meet HIPAA guidelines.

TUBERCULOSIS CONTROL PLAN FOR TREATMENT OF PROSPECTIVE PATIENTS SUSPECTED OF ACTIVE TUBERCULOSIS:

- CU SDM will not routinely treat known or suspected active TB patients, and will routinely screen for TB symptoms, defer elective treatment until a qualified health care professional provides evidence of treatment and tests indicate a non-infectious status; and refer such patients with emergency dental treatment needs to appropriate care settings.

- Patients screened with potential TB infections must be promptly provided with masks and isolated from the general patient population until referral arrangements are concluded.

- DHCP who have contact with patients should have a baseline TST, preferably by using a two-step test at the beginning of employment. The facility's level of TB risk will determine the need for routine follow-up TST.

- While taking patients' initial medical histories and at periodic updates, dental DHCP should routinely ask all patients whether they have a history of TB disease or symptoms indicative of TB.

- Patients with a medical history or symptoms indicative of undiagnosed active TB should be referred promptly for medical evaluation to determine possible infectiousness. Such patients should not remain in the dental-care facility any longer than required to evaluate their dental condition and arrange a referral. While in the dental health-care facility, the patient should be isolated from other patients and DHCP, wear a surgical mask when not being evaluated, or be instructed to cover their mouth and nose when coughing or sneezing. After patient leaves, cleaning and disinfecting of the area must be completed.

- Elective dental treatment should be deferred until a physician confirms that a patient does not have infectious TB, or if the patient is diagnosed with active TB disease, until confirmed the patient is no longer infectious.

- If urgent dental care is provided for a patient who has, or is suspected of having active TB disease, the care should be provided in a facility (e.g., hospital) that provides air-borne infection isolation (i.e., using such engineering controls as TB isolation rooms, negatively pressured relative to the corridors, with air either exhausted to the outside or HEPA-filtered if recirculation is necessary). Standard surgical face masks do not protect against TB transmission; DHCP should use respiratory protection (e.g., fit- tested, disposable N-95 respirators).

- Any DHCP with a persistent cough (i.e., lasting >3 weeks), especially in the presence of other signs or symptoms compatible with active TB (e.g., weight loss, night sweats, fatigue, bloody sputum, anorexia, or fever), should be evaluated promptly. The DHCP should not return to the workplace until a diagnosis of TB has been excluded or the DHCP is on therapy and a physician has determined that the DHCP is noninfectious.

Section VIII

INFECTION CONTROL PROCEDURES FOR RADIOLOGY

The CU SDM Radiographic procedures are completely digital. No chemical processing takes place at the school in conjunction with patient care.

Infection Control Procedures during Radiographic Exposures:

- All dental health care personnel including staff, students and faculty will wear standard clinical personal protective equipment including clean gloves, mask, eyewear and clinic coat or gown during radiographic procedures.

- A fresh barrier (chair sox) will be used on chair and surfaces of radiographic exposure equipment including the tube head and chair back. All areas likely to be touched during adjustment of the equipment must be covered. The control panel will also be covered with an adhesive barrier. It is the responsibility of the clinician taking the exposures to assure that fresh barriers are in place and that upon completion, contaminated barriers are discarded. All barriers must be changed between patients.

- Any surfaces not covered by barriers during the radiographic procedure that become contaminated should be cleaned and disinfected using the standard two step wipe, discard, re- wipe procedure.

- Lead aprons must be placed carefully to reduce the need for touching during the procedure. If a lead apron must be touched or otherwise becomes contaminated between intraoral film placements, it must be cleaned and disinfected using the standard two-step wipe, discard, re- wipe procedure.

- Phosphor sensor plates used for intraoral imaging will be inserted into single use disposable protective covers. Sensor plates are arranged on a clean disinfected template prior to exposure and collected in a disposable holder upon removal from the oral cavity. The template will be thoroughly cleaned and disinfected prior to re-use using the standard two-step protocol.

- All intraoral positioning devices are either disposable or heat sterilizable. Positioning devices should be rinsed off by student clinician prior to returning to Central receiving area. Devices will then be packaged and sterilized by staff.

Infection Control during Processing

- Exposed phosphor sensor plates covered by disposable barriers are collected in a disposable cup and transported by clinicians to the image processing area. Covers are discarded onto a paper towel as sensor plates are inserted into the digital image transfer equipment. Clinicians will use gloves to remove contaminated sensor covers.

- The image processing unit should not be touched during this process. If surfaces are accidentally contaminated during image processing, they must be disinfected prior to next use.

- Extraoral image processing will utilize barriers over bite positioning devices.

DENTAL LABORATORY ASEPSIS

All impressions, appliances, wax rims, bite/ jaw registrations or other materials that have been placed in the patient's mouth is a potential source of cross contamination. Also lab items such as burs, polishing wheels, points, pumice pans, lab knives can transfer contamination from case to case. Therefore, CU SDM dental laboratory infection control will be based on the "clean" lab concept. Impressions, appliances, wax rims, bite/ jaw registrations or other materials that have been placed in the patient's mouth will be disinfected in the clinic area BEFORE transporting such materials into any lab area including the first floor production lab. If dental prosthetic devices require adjustment or polishing that cannot be completed chair side, such items must be rinsed off and disinfected prior to entering the lab area.

Procedures for Disinfecting Impressions and Prosthetic Items.

- An intermediate level water based disinfectant- ready to use -with squirt top dispenser, and baggies will be supplied at each treatment unit. When it is anticipated that impressions or appliances will need to be disinfected, have disinfectant and several baggies out on counter ready for use on paper towel. All usual clinic PPE should be worn - clean gloves, mask, eyewear and gown.

- Upon removal of impressions, appliances, etc. from patient's mouth, gently rinse off blood, saliva or other soils. If necessary obtain denture brush to remove debris from appliances. Shake gently to remove excess water. Place item

inside baggie, squirt sufficient disinfectant onto item inside baggie to ensure complete coverage of all surfaces. Close baggie, allow 10 minute contact time. Remove gloves, wash hands.

- Rinse item gently to remove traces of disinfectant. Wash hands.

- Transport disinfected impressions, device, etc. inside clean baggie to lab area with bare hands. Do not transport contaminated items into labs or attempt to disinfect inside lab. Student and faculty clinicians must discard gloves and disinfect hands PRIOR to entering lab areas. Contaminated gowns must also be removed if visibly soiled with blood or if going to lab area that is not immediately adjacent to clinic.

- Before returning appliances and restorative items from lab to patient: re-clean item with denture brush. Make sure to remove any excess dust, polishing materials, etc. Rinse, Disinfect in clinic area using same protocol in fresh baggie. Rinse thoroughly prior to returning to patient.

DO NOT WEAR GOWNS OR MASK to first floor in-house lab.

PPE and Related Safety Issues for Lab Areas:

Many lab activities produce spatter or aerosol. Wear safety eyewear and mask. Secure hair away from face and check for loose clothing when working with rotary devices. Use built-in device to suction lab dust. Use built in plastic face screens. Wash hands after leaving lab and before re-gloving for patient contact.

Cleaning and disinfecting lab equipment:

- All heat tolerant semi-critical items (used inside the mouth) must be cleaned and heat sterilized between uses: e.g. metal impression trays, face bow forks, burs for chairside adjustment / polishing. Facebow ear-pieces should be cleaned and disinfected between uses.

- Shade guides must be single use disposable, barrier protected, or cleaned and disinfected between uses.

- Articulators will be cleaned and disinfected or barrier protected between uses (posterior posts & incisal pins may be barrier protected).

- Polishing lathe: Use unit dose fresh pumice, clean disposable tray and clean sterile rag wheel.

- Clean up splatters and spills immediately.

- A sharps container will be kept in each lab for disposal of contaminated sharps (e.g. Blades, broken lab knives, orthodontic wire from intra oral procedures, etc.).

All appliances, prosthetic devices received from internal or external lab production for delivery to the patient must be disinfected prior to try-in if not clearly labeled as disinfected from the lab.

Rinse disinfectant off before inserting intra-orally.

Adjustment or Polishing of Appliances, Prosthetic Devices, and Restorative Items in the Lab:

- If items require polishing or adjustments in the lab area after insertion in the patient's mouth, they MUST be cleaned and disinfected before going into any lab area. Clean with denture brush at chairside, rinse, disinfect in clinic, discard gloves, and wash hands.

- Before returning appliances and restorative items from lab to patient: re-clean item with denture brush. Make sure to remove any excess dust, polishing materials, etc. Rinse. Disinfect in clinic area. Rinse thoroughly prior to returning to patient.

All items sent to outside lab facilities will be clearly labeled as disinfected & type of disinfectant used.

INFECTION CONTROL PROTOCOLS FOR ORAL SURGICAL PROCEDURES

Procedures conducted at CU SDM include implants, biopsy, resection, excision, periodontal surgery and implants.

- Hand hygiene for surgical procedures will follow CDC guidelines using antimicrobial hand soap with an extended technique for a minimum of two minutes. In addition a pre-surgical hand prep solution may be used as deemed appropriate.

- All members of the surgical team involved in patient care will wear sterile surgical gloves. If gloves become torn or otherwise compromised, they will be immediately (as soon as feasible) discarded, surgical hand hygiene performed and fresh sterile gloves donned.

- Only sterile saline will be used for irrigant or handpiece coolant.

- A surgical irrigating apparatus will be used. Tubing and components are single use disposable or autoclaved/ sterile.

Implants will be used that are delivered sealed and certified sterile from the manufacturer.

Section IX

WASTE MANAGEMENT

Protocols meet regulatory requirements and guidelines of the CDC, OSHA, Federal EPA, and Colorado State Dental Law, Rules and Regulations for regulated medical waste.

Handling Major Spills of Blood or Other Potentially Infective Materials Such as Vomitus:

Person(s) handling spills of potentially infective material must don PPE for standard precautions including mask, eyewear, and gown. Use utility gloves over exam gloves if sharp items may be encountered in spill clean-up. Spills will be contained as quickly as possible with dry absorbent material. If spill contains blood, treat with intermediate level (TB kill) disinfectant for 10 minute contact time, then spill may be wiped up and disposed of as regular trash.

Disposable Sharps:

As described in dental unit post treatment clean-up, segregate and discard contaminated sharps including blades, needles, anesthetic cartridges with aspirated blood, files, burs, used orthodontic wire and bands and broken metal instruments into the rigid red biohazard sharps containers provided at every dental treatment unit. Sharps should be discarded first before any other unit clean-up. Containers will not be overfilled, maintained upright, replaced routinely and collected with other regulated bio hazardous waste for pick-up. Containers must be closed prior to moving from area of use. Containers may not be reopened, emptied or re-used. Environmental Services/ Housekeeping will not handle sharps or medical waste bags. Housekeeping will report the presence of any regulated or sharps waste that may be found in regular trash to the Clinic Manager for that floor. The Clinic Manager will identify the source and schedule a meeting for corrective action. If found after hours, it is reported to the Environmental Services supervisor who will report it to the SDM Facilities Director

Other Waste:

Other regulated non-sharp medical waste such as saturated bloody gauze will be collected into heavy duty marked biohazard red bags. Red bags and contents may not be placed in regular trash. Red bags will be collected for pick up with other regulated medical waste.

Liquid blood and body fluids will be evacuated during the course of treatment and disposed through the evacuation and sanitary sewer system.

Handling of Biopsy Specimens:

- Extracted teeth may be given to the patient upon request (1). No special container or handling is required when returned to the patient.

- OSHA considers extracted teeth to be potentially infectious material that should be disposed of as regulated medical waste in biohazard bags (2). Extracted teeth will be collected for disposal as medical waste unless saved for educational or research purposes.

- Extracted teeth collected for educational or research purposes can be handled in one of the following ways:

  1. Clean and remove all blood and tissue. Keep moist with saline or plain water and place in the biohazard labeled container with tooth storage solution supplied by the research labs, keep the container tightly closed. There is no need to separate teeth containing amalgam from those which do not contain amalgam. This container is labeled as biohazard and is refreshed on a regular basis. Notify the research labs (contact information is on the container) if the collection container is more than 50 % full for replacement. The teeth must be in the tooth storage solution for at least 24 hours prior to handling.

  2. Clean and remove all blood and tissue. Keep moist with saline or plain water. Immerse teeth in 10% formalin in a labeled plastic container with a secure lid for at least 7 days (3-5). Use biohazard label with "FORMALIN" marked on it.

  3. Clean and remove all blood and tissue. Keep moist with saline or plain water. Autoclave teeth WITHOUT AMALGAM for 40 minutes (3-5).

- When using extracted teeth in educational or research activities, students must still use standard biohazard precautions as the best simulation of clinical practice.

- Keep the teeth in a well-constructed container with a secure lid to prevent leakage during transport (6).

- Label the container with the biohazard symbol (7).

References

1- US Department of Labor, Occupational Safety and Health Administration. Enforcement procedures for the Occupational exposure to bloodborne pathogens CPL 2-2.69; November 27, 2001.

2- US Department of Labor, Occupational Safety and Health Administration. 29 CFR Part 1910.1030. Occupational exposure to bloddborne pathogens; final rule.

3- Chandki R et al. (2013) A Comparison of different methods for disinfection or sterilization of extracted human teeth to be used for dental education purposes. WJD 1;29-31.

4- Dominici JT et al. (2001) Disinfection/sterilization of extracted teeth for dental use. JDE 65;1278-80.

5- Tate WH, White RR (1991) Disinfection of human teeth for educational purposes. JDE 55;583-5.

6- CDC Recommendations for using extracted teeth in educational settings (Last updated July 2013) http://www.cdc.gov/oralhealth/infectioncontrol/faq/extracted_teeth.htm

7- ADA Guidelines for handling of extracted teeth (November 2003). www.ada.org.

Section X
ENFORCEMENT, ACCOUNTABILITY AND REMEDIATION

Violation Reporting Procedure/ Speaking up for Safety:

All DHCW are encouraged to report violations pertaining to infection control and safety policies by using any of the below methods:

- Reporting to their immediate supervisor or Director of Quality and Safety or Sr. Associate Dean of Clinics and Professional Practice

- Completing the Safety Violation Reporting form and submitting it to the Director of Quality and Safety

DHCW compliance with this policy will be reflected in comprehensive grade scores (for students) and other applicable performance evaluations (Staff and Faculty).

Students

- Students who score between 90-100 points will not receive any corrective action and the scores will be included in the comprehensive care grades

- Students who score between 75-90 points will be educated and counseled through feedback and reminders.

- Students who score less than 75 points will receive any or all of the below corrective actions

    o Counseling with Team Leaders/Department Chairs

    o Counseling with Director of Quality and Safety and complete assigned task/ assignment (e.g. written report on specific infection control issue).

    o Written citation in student's file

    o Comprehensive care course grade reduction

    o Counseling and corrective action with Sr. Associate Dean of Clinical Affairs and Professional Practice and Department Chairs

Staff

- Staff who score between 90-100 points will not receive any corrective action and the scores will be included in the performance evaluations

- Staff who score between 75-90 points will be educated through feedback and reminders and may include a verbal warning and meeting with supervisor

- Staff who score less than 75 points will receive any of the below corrective actions

    o Written warning that could lead up to disciplinary action including potential termination;

Faculty

Faculty who are non-compliant and violate the infection control policy will receive any or all of the following corrective action:

- Education and reminders from their Department Chair, Director of Quality and Safety and Sr. Associate Dean Clinics and Professional Practice.

- A remediation letter from department Chair with a copy to Director of Quality and Patient Safety and Sr. Associate Dean Clinics and Professional Practice; letter placed in their file;

- Written charges may be brought before the Faculty governance committee and if warranted a referral will be made for Peer review for investigation.

- A Written warning could lead up to disciplinary action including potential termination.

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

APPENDIX - A

PEP FORM
University of Colorado School of Dental Medicine - Post Exposure Management Report Form:
A body fluid exposure occurs when a person has been exposed to another person's body fluids. These include needle, instrument, and bur or file sticks and splashes to eyes, mouth or open skin (cuts). This Policy applies to students, faculty, staff, and patients.

REPORT TO INFECTIOUS DISEASE CLINIC WITHIN 2 HOURS OF EXPOSURE.

Take a copy of this form with you.

Step by Step Process:
- If with a patient, stop treatment process as quickly and safely as possible. Avoid alarming patient with inappropriate remarks.

- DO NOT DISMISS PATIENT.

- Wash wound immediately with soap and warm water. Squeezing the wound is not recommended.

- DO NOT use antiseptics on the wound. If eye is exposed, irrigate with one liter normal saline.

- Immediately notify supervisor, or for students- the supervising faculty.

- Stabilize treatment in progress and assure patient is comfortable.

- Obtain a copy of this form, available on every floor and in every department. Complete information below

- Supervisors must notify clinic floor or department manager within 24 hours of incident. Clinic manager must notify Clinical Affairs and Infection Control Officer.

- If known source patient, fill out information below- pt. name, DOB, SSN, home address and phone.

- If source patient consents, injured person takes this form and source patient and proceeds immediately to: Infectious Disease Clinic, Anschutz Outpatient Pavilion, 7TH floor

- Phone- 720-848-0191 Hours: (8-4 p m. M-W & Fri; 9-4 p.m. Th).

- If ID clinic closed or after hours please go to the Emergency room of the Anschutz Medical Campus.

- If patient cannot go to ID clinic, alternative is to draw 2 red tops blood. Injured person then brings source patient blood and patient information with them to ID clinic.

- Injured person will have blood drawn at ID clinic for baseline testing: HIV 1 / 2 AB, Hepatitis BsAB titer, and an ALT.

- PEPLine: 1-888-448-4911 (24/7).The Post exposure Protocol Hot line is helpful for counseling regarding level of risk and follow up recommendations.(PEPLine is NOT a substitute for prompt post exposure testing.)

School of Dental Medicine

SDM POST –EXPOSURE MANAGEMENT REPORT FORM
Name of injured person   Student   Staff   Faculty   (circle)
Injured person's normal duties *I* job description:
Time & Date Injury Occurred: Time *I* Date Reported: -----------
Location of exposure on injured person (e.g., "right index finger")
Hep. B vaccination: Yes   No   Full Series? Yes   No   Post Titer Done?   Yes   No
HBV antibody status if known:
Tetanus vaccination: Yes   No   Date of last Tetanus vaccination: -------
Clinic/department where injury occurred: Supervisor:
GENERAL EXPOSURE INCIDENT INFORMATION
Is injury sharps related?   Yes   No   Type of device: (circle)   blade   needle/ gauge   bur   endo file   instrument
Clinic/department where exposure occurred:
Procedure or task in progress:
How incident occurred :
Describe the injury (depth of wound, gauge of needle):
If fluid injected and volume of infectious material injected:
Mucous membrane exposure?   Where?
SOURCE PATIENT INFORMATION
Source Unknown?   Yes   (if unknown, skip this section)
Source Patient Name :
SSN:
DOB:
Phone:
Home Address :
From chart and medical history, list any known infectious disease status including HBV, HIV, HCV, etc.
Was there exposure of source patient to HCW body fluids during course of exposure incident? Yes   No
(For example: Did student nick self with contaminated needle, then proceed with injection.)
If Yes, describe injury to source patient:
FOLLOW-UP
Written Opinion received from Infectious Disease Clinic within 15 days: Yes   No
Copy of Written Opinion filed in employee confidential medical record: Yes   No
Copy provided to employee *I* student: Yes   No
COMMENTS:
Note: If written opinion not received, check with ID clinic and injured person. OSHA requires the employer and the worker both receive copies. Copy of written opinion must be kept in employee's confidential medical record. Report must only contain documentation that employee was informed of evaluation results and need for follow-up; and whether HBV vaccine was indicated and if received. All other findings or diagnoses remain confidential and not included in written report.

APPENDIX - B
EMPLOYEE EXPOSURE CATEGORY

Use this sheet to identify the categories for all employees with regard to their risk of exposure to human blood, bodily fluids, other potentially infectious materials (OPIM), and other sources of bloodborne pathogens.

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Dept/Division:_____ Department Head:_____

Completed by:_____ Title:_____ Phone:_____ Date: __

Exposure Category I: All employees are at risk of exposure to human blood and OPIM

Exposure Category II: Some employees are at risk of exposure to human blood and

Exposure Category III-Employees are unlikely to be at risk

Employee Name	UCD Employee Job Classification Title (e.g. Dental Assistant, housekeeper, etc.)	Exposure Category	Comments (Hep B vaccinated – Y Not Hep B vaccinated –

Form 1030-2

BLOODBORNE PATHOGEN EXPOSURE CATEGORY ASSESSMENT SHEET

Identify the tasks and protective equipment/barriers for employees determined to be at risk of exposure to human blood, OPIM and other sources of bloodborne pathogens.

Dept./Division:_____ Department Head:

Completed by:_____ Title: _____ Phone: Date:_____

Exposure Category I: - All employees are at risk of exposure to human blood and OPIM

Exposure Category II: - Some employees are at risk of exposure to human blood and OPIM

			Infectious Materials			Exposed Body Parts						Contamination of Clothing					
						Hands			Face			Soiling			Saturation		
						Gloves			Mask/Goggles			Labcoat/Gowns			Impervious coveralls		
Employee Name	Exposure Cat.	Tasks	Human	Other	None	Req.	Avail	None	Req	Avail	None	Req	Avail	None	Req	Avail	None

EXCLUSION CRITERIA FOR POST-EXPOSURE PROPHYLAXIS

- Known prior diagnosis of infection with HIV.

- Renal insufficiency with a creatinine greater than three times normal.

- Hepatic insufficiency with an SGOT, alkaline phosphatase or total bilirubin greater than three times normal.

- Known endogenous or drug-induced immunosuppression.

- Known bone marrow dysfunction: hemoglobin < 10 gms/dl, granulocyte count < 1500/mm3, or platelets < 100,000.

- Treatment with myelosuppressive/nephrotoxic/hepatotoxic drugs within two weeks prior to or concurrent with starting therapy.

- Pregnancy precludes treatment with 3TC or Indinavir.

MANAGEMENT OF INFECTED HEALTHCARE PROVIDERS

Recommendations for Managing Healthcare Providers Infected with Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), and/or Human Immunodeficiency Virus (HIV)

Virus, circulating viral burden	Categories of clinical activities[a]	Recommendation	Testing
HBV $<10^4$ GE/mL	Categories I, II, and III	No restrictions	Twice per year
$>=10^4$ GE/mL	Categories I and II	No restrictions	NA
$>=10^4$ GE/mL	Category III	Restricted	NA
$<10^4$ GE/mL	Categories I, II, and III	No restrictions	Twice per year
$>=10^4$ GE/mL	Categories I and II	No restrictions	NA
$>=10^4$ GE/mL	Category III	Restricted[c]	NA
$< 5x10^2$ GE/mL	Categories I, II, and III	No restrictions	Twice per year
$>=5x10^2$ GE/mL	Categories I and II	No restrictions	NA
$>=5x10^2$	Category III	Restricted	NA

Disease/problem	Work restriction	Duration
Conjunctivitis	Restrict from patient contact and contact with patient environment.	Until no Discharge
Cytomegalovirus infection	No restriction	
Diarrheal disease	Restrict from patient contact, contact with patient's environment, and food-handling.	Until symptoms resolve
Enteroviral infection	Restrict from care of infants, neonates, and immunocompromised patients and their environments.	Until symptoms resolve
Hepatitis A	Restrict from patient contact, contact with patient environment, and food-handling.	Until 7 days after onset of jaundice
Hepatitis B	No restriction, refer to local regulations. Standard precautions should always be followed.	
Hepatitis C	No restrictions on professional activity. † HCV-positive health-care personnel should follow aseptic technique and standard precautions.	
Herpes simplex (hands)	Restrict from patient contact and contact with patient's environment.	Until lesions heal
Herpes simplex (orofacial)	Evaluate need to restrict from care of patients that are at high risk.	
Human immunodeficiency virus; personnel who perform exposure-prone procedures	Do not perform exposure-prone invasive procedures until counsel from an expert review panel has been sought; panel should review and recommend procedures that personnel can perform, taking into account specific procedures as well as skill and technique. Standard precautions should always be observed..	
Measles (active)	Exclude from duty	Until 7 days after the rash appears.
Measles (post-exposure of susceptible personnel)	Exclude from duty	From fifth day after first exposure through twenty-first day after last exposure or 4 days after rash appears
Meningococcal infection	Exclude from duty	Until 24 hours after start of effective therapy
Mumps (active)	Exclude from duty	Until 9 days after onset of parotitis
Mumps (post-exposure of susceptible personnel)	Exclude from duty	From twelfth day after first exposure through twenty-sixth day after last exposure, or until 9 days after onset of parotitis

Pediculosis	Restrict from patient contact	Until treated and observed to be free of adult and immature lice
Pertussis (active)	Exclude from duty	From beginning of catarrhal stage through third week after onset of paroxysms, or until 5 days after start of effective antibiotic therapy
Pertussis (post-exposure-asymptomatic personnel)	No restriction; prophylaxis recommended	
Pertussis (post-exposure-symptomatic personnel)	Exclude from duty	Until 5 days after start of effective antibiotic therapy
Rubella (active)	Exclude from duty	Until 5 days after rash appears
Rubella (post-exposure-susceptible personnel)	Exclude from duty	From seventh day after first exposure through twenty-first day after last exposure
Staphylococcus aureus infection (active, draining skin lesions)	Restrict from contact with patients and patient's environment or food handling.	Until lesions have resolved
Staphylococcus aureus infection (Carrier state)	No restriction unless personnel are epidemiologically linked to transmission of the organism.	
Streptococcal infection Group A	Restrict from patient care, contact with patient's environment and food-handling.	Until 24 hours after adequate treatment started
Tuberculosis (active)	Exclude from duty	Until proven noninfectious
Tuberculosis (PPD converter)	No restriction	
Varicella (active)	Exclude from duty	Until all lesions dry and crust
Varicella (post-exposure-susceptible personnel)	Exclude from duty	From tenth day after first exposure through twenty-first (twenty-eight day if Varicella-zoster immune globulin [VZIG] administered) after last exposure
Zoster (localized, in healthy person)	Cover lesions, restrict from care of patients§ at high risk.	Until all lesions dry and crust
Zoster (generalized or localized in immunosuppressed person)	Restrict from patient contact	Until all lesions dry and crust
Zoster (post-exposure-susceptible personnel)	Restrict from patient contact	From tenth day after first exposure through twenty-first day (twenty-eight day if VZIG administered) after last exposure; or, if varicella occurs, when lesions crust and dry
Viral respiratory illness, acute febrile	Consider excluding from the care of patients at high risk¶ or contact with such patients' environments during community outbreak of respiratory syncytial virus and influenza.	Until symptoms resolve

APPENDIX - C

UNIVERSITY OF COLORADO SCHOOL OF DENTAL MEDICINE DENTAL UNIT INFECTION CONTROL AND SAFETY REFERENCE

SET UP/ START OF SESSION Total Points =20	Points
Personal items are removed and stored separately from treatment area or confined using a plastic cover/barrier	1
Wash hands with soap and water for 15 sec	3
Cubicle is neat and orderly; Barriers are present and checked	2
Attach water/tip, evacuation tips and handpieces; Sterile bur in handpiece runs for 30 sec.	2
Attire: Hair is confined appropriately or off face .Jewelry on wrists, fingers and arms should be minimal and not perforate PPE (Gloves, Gown)	5
Solid closed toe shoes. No artificial nails. Natural nails clean , length less quarter of an inch, no chipped polish	
Student checked chemical indicator- steris strip upon opening cassette to ensure proper sterilization	5
Cassette checked before providing care to ensure all necessary instruments are available and in order	1
Water ortho clinic only – bottles need to be removed, disinfected and dried on a daily basis	1

DURING SESSION Total Points = 35	
Hand washing: at least 15 sec rubbing and enough drying before gloves are worn Alcohol rub may be used between patients if hands are not soiled	3
Gown worn and donned properly	2
Mask correctly worn covers nose and mouth, stays in place. Mask changed for each patient and changed every when soiled.	4
Eyewear worn correctly. Patient is wearing appropriate eyewear.	3
Gloves- cuff is worn over lab coat cuff. Gloves replaced if torn or compromised (hand wash with soap and water)	4
Surfaces without barriers are not touched with gloved hands	2
PPE changed as necessary and if soiled	2
Protect card on needle cap is present	5
Single scoop-one hand recapping technique is used	5
Handpieces with projected burs face away or towards delivery system	5

END OF SESSION Total Points=45	
Sharps removed from cassette and disposed in sharps container	5
Ensure that the Sharps container is not full prior to disposing sharps.	3
Appropriate PPE for cleaning- gloves, gown, mask, eyewear	3
Discharge water and air for a minimum of 20 - 30 seconds after each patient from any device connected to the dental water system that enters the patient's mouth (e.g. handpieces, ultrasonic scalers, air/water syringes).	5
Cassette checks for instrument damage, dispose single use items in cassette.	1
If present debris is removed with damp gauze on tray not finger tips	3
Unused disposable supplies removed (gauze/cotton rolls). Unused clean barriers removed and placed in trash	2
Contaminated barriers and supplies removed. Equipment and supplies returned to the dispensary	2
All surfaces are cleaned using 2 step disinfectant with 10 min contact time if visibly soiled or barrier wipe method if not visibly soiled	5
Barriers changed and surfaces must be wiped in between patients	3
Equipment used for vital signs wiped and cleaned between pts	2
Clinic gown disposed properly in trash (not left in the cubicle)	2
No Visible dust or dirt on equipment, cubicle. Sink and surrounding counter not left with wax, alginate and/or stone	2
Patient chair was raised to an upright position [DO NOT raise the chair to the highest position]	1
No food and drink present in cubicle	1
Multi dose vials appropriately used	2
Wash hands end of Session.	3

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

APPENDIX -D

DENTAL SAFETY SYRINGES AND NEEDLES SCREENING FOR SAFETY

This form collects the opinions and observations of dental healthcare personnel who screen a safer dental device to determine its acceptability for use in a clinical setting. Do not use a safer device on a patient during this initial screening phase.

Date:_____

Product: Name, brand, company:

_____

Your position or title:

_____

Your occupation or specialty:

_____

Clinical Considerations	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
1. The device permits the exchange of cartridges during treatment on the same patient.	1	2	3
2. The weight and size of device is acceptable.	1	2	3
3. I have a clear view of the cartridge contents when aspirating.	1	2	3
4. size and configuration of the syringe or needle permits a clear view of the injection site and needle tip.	1	2	3
5. No excessive force is required to activate or control the plunger.	1	2	3
6. size and configuration of the syringe or needle permits use in all mouth sizes and access to all areas of the mouth.	1	2	3
7. The device permits multiple injections on the same patient.	__No	__Yes	
8. The device is capable of aspiration before injection.	__No	__Yes	
9. The needle is compatible with a reusable syringe. [For safety needles without syringes only.	__No	__Yes	
Does the product meet the needs of your clinical practice based on the above criteria?	__No	__Yes	
10. The worker's hands can remain behind the sharp during activation of the safety feature.	1	2	3
Safety Feature Considerations			
11. The safety feature can be activated with one hand.	1	2	3
12. The safety feature is integrated into the syringe or needle.	1	2	3
13. The safety feature provides a temporary means of protecting the needle between injections.	1	2	3

14. A visible or audible cue provides evidence of safety feature activation.   1   2   3

15. The safety feature is easy to recognize and use.   __No   __Yes

16. Once activated, the safety feature permanently isolates the needle tip and cannot be purposefully or accidentally deactivated under normal use conditions.   __No   __Yes

17. The safety feature activates by itself.   __No   __Yes

General Product/Manufacture Considerations

18. The manufacturer can provide the device in needed quantities.   1   2   3

19. A full range of needle sizes and lengths is available.   1   2   3

20. The company provides free samples for in-use evaluation.   1   2   3

21. The company has a history of responsiveness to problems   1   2   3

Practical Considerations

22. The device is packaged conveniently.   1   2   3

23. The device is easy to remove aseptically from the package.   1   2   3

24. Instructions are included in the packaging.   1   2   3

25. Instructions are easy to follow and complete.   1   2   3

26. Instructions are provided in more than one form (paper, videotape, Web site, or computer disk).   1   2   3

27. Use of the safety device will not increase the volume of sharps waste.   1   2   3

28. The shape and size of available sharps containers will accommodate disposal of this device.   1   2   3

29. This is a single use, disposable device.   __No   __Yes

30. The device should be considered for further clinical evaluation.   __No   __Yes

BLOODBORNE PATHOGEN EXPOSURE CONTROL PLAN
ANNUAL REVIEW

REVIEW CONDUCTED ON: _____

REVIEWED/REVISED BY:

1)_____
Dean

2) _____
Associate Dean of Clinical Affairs

3) _____
Director of Quality and Patient Safety

4) _____
Infection Control Officer/Faculty

ADDITION OR REVISION OF JOB CLASSIFICATIONS, TASKS OR PROCEDURES?

_____   _____
(NO)   (YES)

If yes, list job classification and addition or revision to tasks or procedures:

Annual In-Service Conducted On: _____

Annual In-Service Conducted By :_____

Annual Sharps Evaluation Conducted on: _____

References:

- Curriculum and standards from the American Dental Association (ADA).

- Protocols cited in the OSHA Rules: BloodBorne Pathogen Standard; Needle Safety Act.

- CDC Guidelines for Infection Control in Dental Health Care Settings, 2003

- Implementation guidelines from The Organization for Safety and Asepsis Procedures (OSAP)

- University of Colorado Blood Borne Pathogen Plan

Patient Treatment
Areas.pdf

- School of Dental Medicine Patient Treatment Areas.

9.7   Strategic Quality Management and Patient Safety Plan

Title: Quality Management and Patient Safety Program
Source: Office of the Sr. Associate Dean of Clinics and Professional Practice
Prepared by: Director of Quality and Patient Safety, Quality Management and Patient Safety
                Committee, Sr. Director of Institutional Effectiveness, Sr. Associate Dean of Clinics and
                Professional Practice

Effective Date: May 20, 2015

Table of Contents

SECTION I: INTRODUCTION

Mission

- The University of Colorado School of Dental Medicine (CUSDM), a collaborative partner on the Anschutz Medical Campus, is a diverse teaching, clinical care, and research community that innovates, creates and engages for the health of local and global communities.

Vision

- By 2020, CUSDM will be recognized for the quality workforce it prepares, the discoveries it makes, and the patient and community engagement performed that enhances the health and wellness of Colorado and the world.

Purpose

- The SDM is committed to the well-being of our patients; they are the number one focus of our performance improvement work, patient safety efforts and student education.
- The SDM Quality Program serves as the foundation for the improvement work, implementation and maintenance of both short-term and longer term, strategic goals that are generally included in the SDM Standards of Care. The program encompasses the inter-related functions, and processes of clinical, governance, operational and support services. See Appendix 1 SDM Standards of Care.
- The SDM's Quality Program is used to guide and advance quality and performance outcomes as a means to improve the quality of oral health and patient care, institutional quality and patient safety, student and resident education and training.
- The SDM's Quality Program focuses on identifying, prioritizing, tracking, measuring and evaluating opportunities to improve the quality care or components of care that are critical to patient safety, operational efficiency, academic excellence and community need. Performance improvement methodologies are partnered with a consensus-building process. The program includes on-going prospective initiatives, retrospective attention to adverse patient events and near misses through a post-event review or root cause analysis, and prospective analysis of a system or processes using a failure modes effect analysis.

Scope, Responsibility and Authority

- The SDM consists of approximately 115,000 gross square feet with 80,000 Assignable Square Feet (ASF) of clinical education space. The facility contains clinical practice, clinical support, learning laboratory and clinical simulation spaces. The SDMs Scope of Service includes general dentistry, endodontics, orthodontics, periodontics, prosthodontics, surgery, radiology and specialized areas for care of the adolescent and special needs patients. The school supports the preclinical and clinical education of approximately 400 dental and international dental students annually as well as post graduate training for residents and postgraduate students in general dentistry, orthodontics, and periodontics. In addition, simulation areas enable students to practice on simulated patients. The school also supports the clinical practice of general dental and specialty faculty.
- The combined activity of the clinics in the school result in approximately 80,000 patient visits annually with an expectation of continued growth. These patient visits are in support of our educational mission and service to the people of Colorado.

- The SDM Quality Program is a collaborative effort of the SDM faculty, staff and division leadership. The Quality and Patient Safety program apples to all departments, services and practitioners, as well as students and residents throughout the SDM.
- The ultimate responsibility for performance improvement and patient safety efforts rests with the Sr. Associate Dean for Clinics and Professional Practice. The authority and responsibility for the day-to-day operations and performance improvement activity is delegated to the SDM Quality Management and Patient Safety Committee.

Leaders

For the purposes of this plan, leadership is defined as faculty, staff, student, resident and every person providing and supporting care in the SDM. Performance improvement and patient safety requires the involvement of all members of the health care team and must be multi-disciplinary.

The first step in improving an organization's performance and in developing a culture of safety is dedication by leadership to patient safety and quality and the effort that is required to achieve it. The SDM leaders make patient safety and quality core strategies and utilize continuous performance improvement principles to accomplish our mission, vision and goals. It is the job of leadership to set the direction, and build the foundation and ensure the tools, accountabilities and resources needed are available. Leaders provide the oversight for implementation of an integrated patient safety program throughout the organization.

It is the responsibility of every faculty, staff, student, resident and every person providing and supporting care in the SDM to ensure an environment where care is safe, effective and centered on patients' needs. Leaders play a major role in creating an environment where staff feel safe and free to engage in patient safety and performance improvement and understand it is their responsibility to not only report quality and safety occurrences and concerns, but to understand that they are empowered to "stop the line" if necessary to ensure the "right thing is done." The SDM is in the process of beginning to use a Just Culture method to evaluate occurrences, safety events or adverse patient outcomes in relation to personnel involvement. See also SECTION IX: SDM OCCURRENCE (EVENT) REPORTING PROCESSES

SECTION II: COMMITMENT TO QUALITY

Organizational excellence is one of the University of Colorado School of Dental Medicine's (SDM) top priorities and is a recognized essential step to reach our vision of preparing a quality workforce, make significant discoveries and performing patient care and community engagement that improves the quality of oral health, and enhances the health and wellness of Colorado and our global partners.

The Quality Plan is our roadmap to excellence and follows the six "Aims for Improvement" as outlined by the Institute of Medicine (IOM) 2001 report titled, "Crossing the Quality chasm: A New Health System for the 21st Century". The SDM Quality Program primarily focuses on these key AIMS:

- Provide care that is patient-centered and evidence based while meeting the clinical educational objectives of our students and residents;
- Provide care that is safe, predictable, reliable and meets regulatory standards;
- Provide care and services that add patient value, conserve resources and avoid waste.
- Clinical and operational staff and teams must be led by leaders who value and promote quality and patient safety improvements.

The Quality Program focuses on the six domains of quality by providing the right dental care for every person, every time by ensuring care is:

- *Safe* – avoiding injuries to patients and dental health care workers.
- *Effective* – providing services based on best scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse, respectively).
- *Patient-centered* – providing care that is respectful of and responsive to individual patient preferences, physical and language needs, and cultural values; ensuring that an informed patient guides all clinic care.
- *Timely* – reducing waits and harmful delays for both those who receive and those who give care.
- *Efficient* – avoiding waste, including waste of time, equipment, supplies, ideas and energy.
- *Equitable* – providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, age, sexual orientation, and geographical location, cultural and socioeconomic status.

We are committed to consistently delivering the highest quality of care through disciplined performance and a regular re-examination of needs and desires of our patients. We primarily use the Model for Healthcare Improvement (IHI) from the Institute of Healthcare Improvement to accomplish this work. Other quality improvement related resources that are used include Agency for Healthcare Research and Quality (AHRQ), the National Quality Forum (NQF) and the American Dental Association (ADA), among others.

The SDM has adopted the ADA model for evaluating how safe and well dental procedures are performed, how appropriate was the treatment, how responsive was the care to the patient's needs, and how thorough was the documentation. The ADA model includes:

- Select aspects of dental care to be evaluated;
- Establish criteria for quality dental care and make these characteristics of quality the standard for review;
- Compare the care that has actually been given with the criteria;
- Make a judgment of quality based on the results of the comparison;
- Act on the results of the evaluation to correct any deficiencies;
- Close the Loop: Assure that actions have favorable impact on the delivery of care by improving the system.

SECTION III: SDM QUALITY AIMS

AIM 1: Patient-Centered Care

Patient-centered care requires an unwavering focus on patients' needs and expectations. Patient-centered care is

- Care that is coordinated, informed and rounded in respectful interactions with care providers that are consistent with the patient's values, expectations and care decisions.
- Efficient through appropriate use of resources at the least expense to the patient, provider and care setting.
- Timely care delivery that is prompt and provided without delay to mitigate any harm to a patient.
- Evidence-based while meeting the clinical educational objectives of our students and residents.

Patient-centered care requires regular re-examination of the "Voice of the Customer" through patient surveys and complaints/grievances tracking and review to gain ongoing feedback and insight about the effectiveness of processes that are critical to the patient's care and patient's satisfaction.

AIM 2: Safe, Reliable, Predictable and Regulatory Compliant

Patient care must be safe, reliable and must meet regulatory standards. Aspects of this Quality Program AIM are

- Delivery of care in a manner that minimizes any risk of harm to a patient.
- Delivering the right care to the right person at the right time.
- Effective and reliable patient care through use of evidence-based practices that produce better outcomes than its alternatives.
- Continuous and credible regulatory and accreditation self-assessments against standards and regulations with timely creation of plans of correction and on-going monitoring.

As stated earlier, it is a core operational responsibility for every person providing and supporting care in the SDM to ensure that the environment and practices are safe. This engagement includes personal accountability for participation in patient safety and error reduction efforts. The SDM is in the process of beginning to use a Just Culture method to evaluate occurrences, safety events or adverse patient outcomes in relation to personnel involvement.

AIM 3: Value-Driven

Health care systems must provide patient care and services that add patient value, conserve resources and avoid waste.

- Resource utilization decisions, particularly in terms of additional new resources, should be evaluated as to the value added to the patient.
- Focus process improvement efforts toward eliminating non-value added steps and waste with the goal of reducing cycle times and reducing cost. Other performance improvement systems best used for reducing waste are Six Sigma or LEAN methodologies. In addition, benchmarking one improvement effort against an external organization, especially one with a Best Practice can help gauge improvement successes.

AIM 4: Effective Leadership and Direction

To achieve quality and safety objectives and to maintain the successes, personnel and teams must be well led by clinical and operational leaders with a bias towards action.

- Leaders set direction, align and coordinate strategic priorities, key initiatives and improvement activities.
- Leaders build the foundation by enabling execution through hiring, mentoring and retaining competent, quality-driven key leaders.
- Governance and operating values must support quality and a culture of safety.
- Leaders must be quality driven by effectively identifying issues, allocating resources, ensuring accountability and leading the deployment or execution of operational processes to maintain quality or accomplish needed changes.

By aligning and coordinating improvement activities, key initiatives and strategic priorities, staff are able to focus efforts on improving the aspects of care and service that are most important to patients and their families. Alignment of personal goals and strategic goals also creates a process where personnel are committed to organization-wide goals.

The leadership team must align all improvement activities with the strategic AIMS for the organization and identify gaps in activities and infrastructure that would be barriers to reaching goals.

- Clarify accountability for processes and outcomes throughout the organization.
- Build the infrastructure for regular review and alignment of new and on-going initiatives through data collection, analysis and reporting structures.
- Create and publish a SDM-wide view of how key improvement activities and strategies throughout the organization align with strategic goals and AIMS.
- Create reward and recognition systems for attainment of goals aligned with the strategic AIMS, assuring that the systems contribute to gain for the whole organization.

SECTION IV: QUALITY PROGRAM STRUCTURE

Quality and Patient Safety Committee

The SDM Quality and Patient Safety Committee (Quality Committee) is responsible for guiding and advancing quality and performance outcomes as a means to improve the quality of oral health and patient care, institutional quality and patient safety, and student and resident education and training. Additionally, the Quality Committee is responsible to create a culture and environment that fosters excellence in quality and service through commitment to the principles and practices of continuous performance improvement by all staff, faculty and students and to create a culture of safety. This committee is the central coordinating body for all performance improvement and patient safety activities within the SDM.
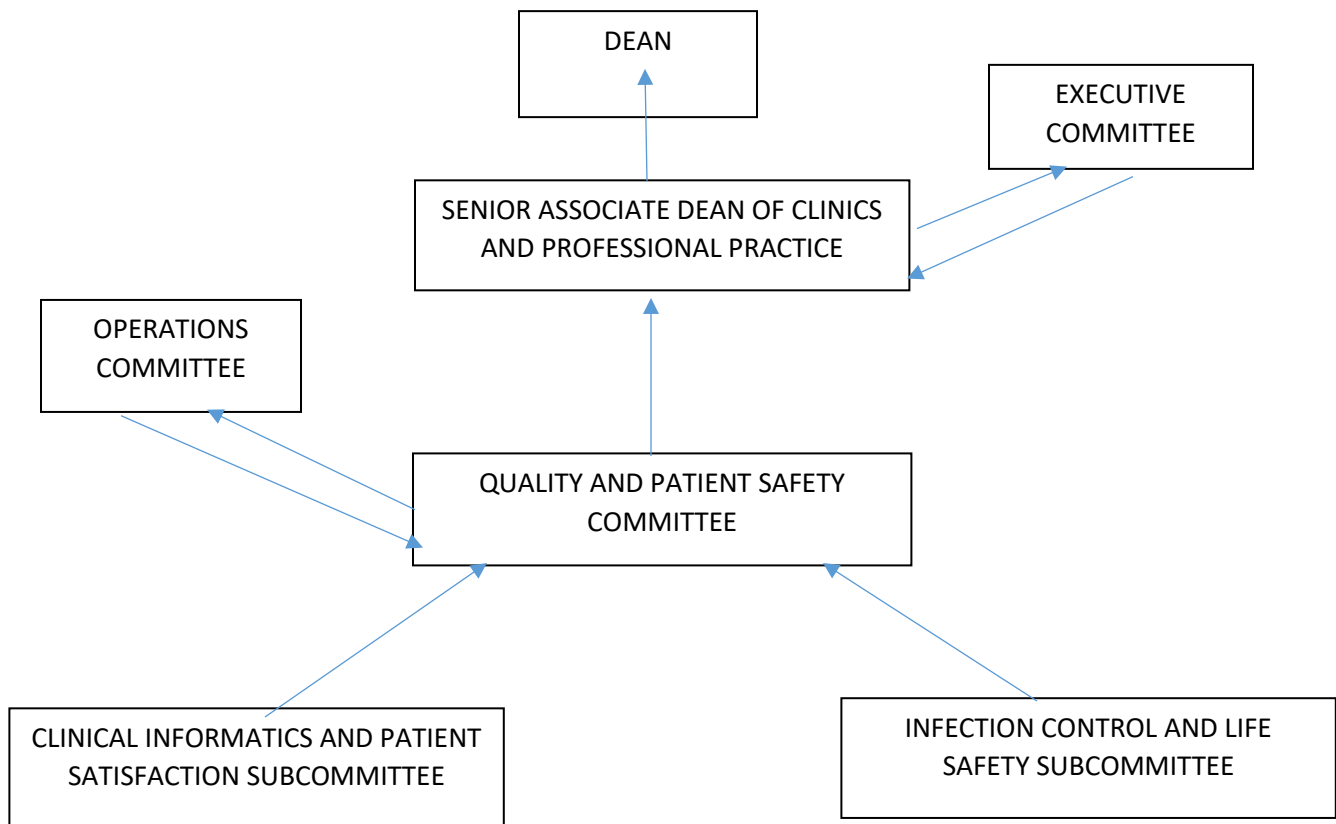
The outcomes of dental care will be assessed by committee members who provide recommendations to the appropriate committees especially with regard to clinical practice or professional behavior concerns.

Reporting Responsibility

The Quality Committee will report its findings to the Operations Committee and the Executive Committee through the Quality Committee chairperson. The Quality Committee will report barriers including resource needs as well as successes and opportunities for celebration to the Operations and Executive Committees. The Quality Committee will be responsible for follow-up and implementation of any recommendations from the Operations or Executive Committee(s).

At times, the Quality Committee may need to report additional information to the Sr. Associate Dean of Clinics and Professional practice outside of the regularly scheduled committee calendar in order to remedy a patient care or operations issue.

Reporting Structure

```
                          ┌──────────────┐                    ┌──────────────┐
                          │     DEAN     │                    │  EXECUTIVE   │
                          └──────────────┘                    │  COMMITTEE   │
                                 ↑                             └──────────────┘
              ┌──────────────────────────────────┐                  ↑
              │  SENIOR ASSOCIATE DEAN OF CLINICS │ ←───────────────┘
              │  AND PROFESSIONAL PRACTICE        │
              └──────────────────────────────────┘
                                 ↑
   ┌──────────────┐     ┌──────────────────────────┐
   │  OPERATIONS  │ ←── │ QUALITY AND PATIENT SAFETY│
   │  COMMITTEE   │     │         COMMITTEE         │
   └──────────────┘     └──────────────────────────┘
                          ↑                    ↑
   ┌──────────────────────────┐     ┌──────────────────────────┐
   │ CLINICAL INFORMATICS AND │     │ INFECTION CONTROL AND LIFE│
   │ PATIENT SATISFACTION      │     │ SAFETY SUBCOMMITTEE       │
   │ SUBCOMMITTEE             │     └──────────────────────────┘
   └──────────────────────────┘
```

Membership

New members and the chairperson will be appointed by the Sr. Associate Dean of Clinics and Professional Practice. The chairperson(s) will be appointed by the Dean, SDM.

Membership includes representation from both leadership, staff and student levels. Membership includes the following multi-disciplinary personnel.

- Senior Associate Dean Clinics and Professional Practice
- Director of Quality and Patient Safety
- Chair, Division of Oral Maxillofacial Surgery
- Chair, Department of Restorative Dentistry
- Senior Associate Dean Academic Affairs
- Program Director, General Practice Residency
- Director of Faculty Practice
- Associate Dean of Budgets, Finance, and Strategic Projects
- Associate Professor Restorative Dentistry
- Sr. Director of Institutional Effectiveness and External Relations
- Director of Procurement, Facilities Management and Clinical Support Operations
- Director of Information Technology
- Director of Clinical Operations and Patient Advocacy
- Business Manager

- Human Resources
- Student representative(s)

Oversight

The Quality and Patient Safety Committee works with and oversees performance improvement, patient safety and key quality related functions for the areas listed here. The Committee, at times will work with other areas or SDM functions not identified by this listing. And, the Quality Committee will work with external consultants, auditors or inspectors, among others. Committee oversight includes maintenance of policies and procedures by the local owners along with compliance. Policy and procedure oversight may include review and directing SDM Standards of Care efforts or evidence-based guideline development.

- Management and implementation of the Quality and Patient Safety Plan and Program
- Standards of Care goals, definitions, metrics, applicability
- Evaluation of quality metrics related to dental care and dental outcomes
- Occurrence reporting (Safety Intelligence System) data analysis and information
- Provision of dental care (Quality and Patient Safety needs)
- Dental outcomes research
- Governance and leadership related to Clinics and Professional Practice
- Accreditation and licensure
- Patient satisfaction including complaints and grievances
- Service Excellence and Service Recovery
- Patient Rights and access to care
- Patient language, race and ethnicity considerations
- Organizational ethics
- HIPAA, patient privacy and confidentiality
- Infection prevention, sterilization and other infection control areas
- Sedation
- Medication management including prescription orders
- Urgent care, Emergency care and after school hours
- Clinical informatics, medical records and other documentation management including Axium
- Life safety, Facilities and physical environment
- Emergency management
- Environmental management including hazardous waste and security management
- Supply and equipment management; standardization
- Radiation safety
- Laboratory safety and inspections
- Occupational health, worker's compensation
- Human Resources, employee competencies and employee health
- Inter-professional Quality and Safety curriculum

Subcommittees

The SDM Quality and Patient Safety Committee has two subcommittees: Infection Control and Life Safety Subcommittee and Patient Satisfaction and Clinical Informatics Subcommittee. These subcommittees manage performance improvement and patient safety work at a more granular or local level within their respective disciplines and in so doing, they help support organization-wide efforts.

These are working committees; these committees are responsible to create, implement, monitor and assess performance improvement related to the Standards of Care.

Membership for each subcommittee will be identified by the Quality and Patient Safety Committee and will include representation from dental faculty, leadership, staff and students. Please see the charter for each subcommittee for information about purpose or charge of committee, membership, scope, accountability, functions and goals.

SECTION V: QUALITY PROCESS

Identification

Quality improvement activities will be identified through:

- Annual or as needed internal gap analysis of current organizational needs
- Annual or as needed assessment or reassessment of projects or initiatives
- Review of the Standards of Care definitions, goals, metrics and applicability
- Departmental advisement
- Patient Safety or Risk Management findings
- Regulatory requirements
- Operational or business related needs that will improve patient safety, quality of care or access

Prioritization

A strong commitment to continuous performance improvement typically produces many opportunities. As a result, it is necessary to have a defined, criteria-based process for prioritization of projects, Standards of Care work, and the ability to adjust priorities in response to unusual or urgent events. The Quality Program gives priority consideration to the school's strategic goals and high volume, high risk, problem-prone areas or low volume areas. Decisions with regard to prioritization of projects are made at the Quality Committee. The organization's priority setting is sensitive to emerging needs such as those identified through data collection and assessment, unanticipated adverse occurrences affecting patients and students, changing regulatory requirements, significant patient and staff needs, changes in the environment of care or changes in the community.

Methodology

The SDM primarily uses the tools and methodology as published by the Institute of Healthcare Improvement: IHI Model for Healthcare Improvement. This model is based on a PDCA methodology (Plan, Do, Check, Act) and is the appropriate tool when planning improvement efforts among various departments or when coordination of teams is required. See Appendix 2. The more basic PDCA model methodology may be used when a Rapid Cycle Improvement technique is appropriate. See Appendix 3. At times the SDM may use LEAN Process Improvement methodology. LEAN focuses on eliminating non-value added steps and waste with the goal of reducing cycle times, improving performance and reducing cost.

Measurement

The focus of the Quality and Patient Safety Program is to document the outcomes of care, treatment and services we provide and identify opportunities for improvement. Outcomes-based performance is

measured according to criteria developed by divisional faculty that help ensure the validity and reliability of the results. Measurement objectives include:

- To identify and develop evidence-based oral health care performance measures and measurement resources.
- To advance the effectiveness and scientific basis of clinical performance measurement and improvement.
- To foster and support professional accountability, transparency and value in oral health care.

Process measures (and outcomes measures) may use either methodology mentioned in the previous section. All performance improvement efforts require measurable baseline data and on-going measurable data. Data is used to evaluate and demonstrate performance over time. Anecdotal evidence, although helpful in identifying potential opportunities for improvement, does not allow for comparison over time. Aggregation and analyses transform data into information that can be used to plan, change or monitor care.

Measurement criteria include:

- The measure can identify the events it was intended to identify.
- The measure has a documented numerator and denominator statement or description of the population to which the measure is applicable.
- The measure has defined data elements and allowable values.
- The measure can detect changes in performance over time.
- The measure allows for comparison over time within the organization or between the organization and other entities (may require risk adjustment).
- The data intended for collection are available.
- Results can be reported in a way that is useful to the organization and other interested stakeholders.

Indicators

The improvement project or Standard of Care should address key indicators of performance improvement or quality control monitors, taking into consideration high volume, high risk, or high cost issues and dimensions of performance. Indicators are generally classified into three types: Benchmarking, Required (by regulation or accreditation) and SDM/Department Specific. There are no specific requirements for a total number of indicators. As such, an indicator development worksheet should be used to define the plan for monitoring, including the numerator and denominator, the goal and acceptable upper and lower control limits, data collection methodology, and the reporting structure. Such deliberate analysis of indicators and measurements are useful in the IHI Model for Healthcare Improvement. However, a single indicator may fulfill the obligation for several categories.

Performance is compared against industry standards, internal benchmarks, comparable external organizations and best practices in order to determine patterns and trends. Information from data analyses, process review and performance improvement efforts are used to make changes that improve performance, increase safety and reduce risk of an adverse event occurring.

Performance Improvement Teams

Performance Improvement Teams (PIT) are convened when a specific SDM-wide or interdepartmental opportunity is identified. The purpose of a Performance Improvement Team (PIT) is to conduct the aspects of performance improvement with a system-wide approach. The team will provide Quality and Patient Safety Committee with progress reports, routinely.

Communication

The leader's role is to ensure communication and implementation of quality, safety or other information that is pushed out from the Quality Committee. There are several venues that are used to communicate information to students, staff, and faculty such as student and resident education, Teams communications, staff meetings, and Clinic Managers meetings among others. The leader must also initiate improvements through coaching and direct support.

The functional process associated with the Quality Program is based on a continuous feedback loop with information coming from multiple constituents such patients, students, faculty, residents, staff and other related activities or persons. The Quality Committee and Faculty Committee assure feedback is reviewed, aggregated, analyzed and recommendations are reviewed to determine if further action is necessary.

SECTION VI: USING STANDARDS OF CARE AND OUTCOMES TO DRIVE PERFORMANCE

The SDM's Value Proposition is to provide superior clinical outcomes and quality care and education with an approach which is disciplined, patient-centered and transparent. The SDM leadership is responsible for assuring that key business strategies are aligned with the vision, mission, values, goals and customer expectations. Standards of Care and goals are set which facilitate improvement efforts and appropriate resource allocations.

Outcomes measures are used to assess the quality of our clinical practice, patient outcomes and education of our students. We divided our outcome metrics into three domains: Institutional Effectiveness and Safety, Clinical Education and Patient Care and Meaningful Use.

SECTION VII: ACHIEVING AND SUSTAINING PERFORMANCE IMPROVEMENT

Once performance improvement objectives or changes have been integrated into everyday operations, it becomes necessary to perform regularly assessment to ensure that the change is sustained. Often, it is necessary to continue random audits at increasing time intervals; for example, audit the process at 6 months and again at 1 year post implementation.

The final step is to celebrate successful improvements. Leaders should celebrate the small successes embedded within the work with the teams in addition to the final celebrations.

Reporting

Summaries of performance improvement and patient safety activities will be submitted at least quarterly to the Quality Committee according to requirements set forth by regulatory or accrediting bodies or by SDM requirement. The Quality Committee will continue to review data and monitor compliance of the action plans and timelines as necessary. The Quality Committee oversees ongoing performance monitoring to ensure maintenance of achieved improvements.

Quality Committee findings will be reviewed at least quarterly by the Operations and Executive Committees. Education and training needs will be determined based on Quality Committee findings and training conducted as needed. The Quality Committee will maintain a training schedule.

SECTION VIII: PATIENT SAFETY

Patient Safety is a primary component of the Quality and Patient Safety Program. As such, the purpose, scope, responsibility, authority, structure, internal reporting requirements, membership and oversight among other elements are the same as those outlined previously for the Quality section of this document. The goal for reporting occurrences or safety events is to recognize and evaluate events that lead to, or have the potential to lead to, adverse patient outcomes and/or unsafe conditions.

Leadership and management are responsible for fostering a safe environment by integrating patient safety priorities into the design and redesign of all relevant processes, function, and services. The patient safety policy of SDM describes an environment that promotes the safety of patients, employees, volunteers, and visitors by providing a climate whereby the reporting of errors, near-misses and unsafe conditions is encouraged and in some cases required. The SDM embraces a non-punitive culture for the reporting of unsafe events, both for patient and non-patient events; the SDM is in process of adopting a Just Culture methodology when reviewing the human factors of events.

A post-event review (PER) or Root Cause Analysis (RCA) will be conducted after serious safety events or near misses; action items will be identified and completed by local owners or driven by SDM leadership for system-wide management. A failure mode effects analysis may be performed to prospectively review new processes or those that are high-volume, high-risk. The Quality and Patient Safety Committee may at times review specific events. The committee will be primarily focused on action items and status to completion in addition to any review and performance improvement work at the departmental level.

An organizational focus on patient safety includes various other entities who access or influence the care of our patients some of which include: licensing, regulatory or accrediting bodies, vendors, insurers, training institutions, educators, professional associations, and the public at large.

SECTION IX: SDM OCCURRENCE (EVENT) REPORTING AND REVIEW PROCESSES

http://sdm-psn/datix/live/index.php?action=login

Reporting

When a patient safety event occurs, the involved staff or student will notify the attending faculty and facilitate appropriate care and treatment. A factual description of the event, the patient's response, and treatment provided should be documented in the patient's medical record. The attending faculty has the primary responsibility for communicating unanticipated outcomes to the patient and family. See also Section X: DISCLOSURE OF UNANTICIPATED ADVERSE OUTCOMES.

DO NOT FILE A COPY OF THE OCCURRENCE REPORT OR REFERENCE THE OCCURRENCE REPORT IN THE PATIENT'S MEDICAL RECORD. DO NOT DOCUMENT ANY CONVERSATIONS WITH QUALITY and PATIENT SAFETY MANAGEMENT OR RISK MANAGEMENT IN THE MEDICAL RECORD. These conversations will be documented in the occurrence reporting system. The occurrence report is used to improve patient care or to improve systems

or processes that affect patient care and student education. The patient medical record is used to document specific elements of patient care.

In addition to attending faculty notification, any event resulting in harm should be immediately communicated to the clinic manager or appropriate supervisor. **IF THE EVENT RESULTED IN A HOSPITAL ADMISSION OR A PATIENT DEATH OR NEUROLOGICAL DAMAGE, CALL RISK MANAGEMENT AT 303-724-0455 AND THE SR. ASSOCIATE DEAN OF CLINICS AND PROFESSIONAL PRACTICE AT 303-724-6976, IMMEDIATELY. YOU SHOULD ALSO NOTIFY THE DIRECTOR OF QUALITY AND PATIENT SAFETY AT 303-817-3673 AS SOON AS POSSIBLE.** There are some adverse patient events that are reportable to the State of Colorado. The University of Colorado Risk Manager will analyze the event and extenuating circumstances and will determine whether to report an event to the State of Colorado.

Everyone has a responsibility to report occurrences, near misses and other unsafe conditions right away. The SDM requires the reporting of events that have direct involvement of patients. These events could include those that touched the patient or individual, but did not cause harm. Occurrences involving visitors, staff, faculty or the facility should be reported, as well. Also, the SDM expects that "near miss" occurrences will be reported. A "near miss" occurrence is one that did not reach the patient or individual and that, if it had, would have caused harm or had the potential to cause harm. Any injury to faculty, staff, students or residents must be reported for Worker's Compensation purposes and must be reported immediately. Refer to Policy 9.6 SDM Infection Prevention and Exposure Control Plan for more information.

An event can be reported anonymously to the Director of Quality & Patient Safety. The reporter should input the occurrence into the Safety Intelligence system or the Director of Quality & Patient Safety may enter the information. Also, the event can be reported to the person's supervisor, manager, coordinator or faculty. The person in the leadership position will be responsible for recording the event in the Safety Intelligence reporting system and responsible to report the event to the Director of Quality and Patient Safety. Events should be reported as closely to the time of occurrence as possible, and should not be longer than 24 to 48 hours. The person closest to the event should be the one to report.

Reporters should use the Safety Intelligence occurrence reporting module to document and report occurrences. Reporting directly into the Safety Intelligence module allows for real-time review, planning for post-event reviews or root cause analyses, as indicated. Event reporting helps to document specific conditions present at the time of the event.

Review, Analysis and Reporting of Safety Events

The Director of Quality & Patient Safety coordinates the review process of safety events or occurrences within 72 hours; however, managers, supervisors and other designated leadership are responsible to evaluate the occurrence, provide immediate intervention or remedial action as indicated and document in the occurrence report. They will also be responsible for participating in corrective actions and performance improvement activities. These actions may vary from simple education to complex system improvements, depending on the harm severity, scope and trend of the occurrences.

The Director of Quality and Patient Safety is responsible for reviewing the event and closing it when all needed information is present. The Director of Quality and Patient Safety is responsible for data management and analysis. The data and analysis of events will be used to assist local leadership, faculty, and Quality and Patient Safety Committee to drive improvement in patient care and student education.

Aggregate data may indicate a trend that could be used to facilitate process improvement, reduce risk and minimize or eliminate adverse outcomes of care.

The Director of Quality & Patient Safety will provide reports to the appropriate committees quarterly.

SECTION X: DISCLOSURE OF UNANTICIPATED ADVERSE OUTCOMES

It is the policy of the SDM to provide patients with appropriate and necessary information about all outcomes of care, treatment, and services, including unanticipated outcomes. An unanticipated outcome of care is an outcome that was not planned or expected in advance as being a desired outcome of care, treatment or service including those that:

- Result in a significant change in the patient's condition including temporary harm.
- Require a significant re-treatment.
- Create the need for unforeseen intervention.
- Result in permanent harm to the patient.
- Result in hospitalization.
- Result in death.

The attending faculty has the primary responsibility for ensuring that the unanticipated outcome is disclosed to the patient. Care providers and students will promptly notify their supervising faculty or department chair of any unanticipated outcome of care. Other clinical staff will notify their immediate supervisor and the attending faculty of all unanticipated outcomes. The involved providers will report the unanticipated outcome immediately to the Sr. Associate Dean of Clinics and Professional Practices and to Risk Management. The Director of Quality and Patient should also be notified. When multiple specialties or departments are involved in an unanticipated outcome, the attending faculty should contact the Sr. Dean for Clinics and Professional Practice to discuss next steps.

When an unanticipated outcome occurs, disclosure of the outcome to the patient should take place as soon as practical after the unanticipated outcome is identified and in a manner the attending faculty believes represents high quality, compassionate patient care. The patient should be stabilized and/or able to comprehend the information, unless it is determined that the patient's family/guardian should be informed. The responsible care providers, the Patient Advocate, or Risk manager will provide ongoing information to the patient's guardian as necessary or as it becomes available. The Sr. Associate Dean of Clinics and Professional Practices and the Director of Quality and Patient Safety should be kept informed.

Disclosure should take place in a setting that supports the patient's right to information, dignity and confidentiality. Risk Management is available to help any provider prepare for a disclosure discussion with a patient and to provide resource material and support.

At times, faculty, students and staff involved in a serious safety event may need counseling or access to support services to help them internally process the event.

SECTION XI: LEVELS OF HARM (HARM SCALE)

Patient safety events are categorized by Levels of Harm. The Levels of Harm are based on the severity of the event and any extenuating circumstances. The Safety Intelligence reporting system uses the following Levels of Harm scale:

- Unsafe condition, Harm scale #1

- Near Miss, Harm Scale #2
- Patient experienced no harm, physical or otherwise, Harm Scale #3
- Patient experienced emotional distress or inconvenience, Harm Scale #4
- Patient needed additional treatment, Harm Scale #5
- Patient experienced temporary harm, Harm Scale #6
- Patient experience permanent harm, Harm Scale #7
- Patient experienced severe permanent harm, Harm Scale #8
- Patient death, Harm Scale #9

SECTION XII: PROFESSIONAL RISK MANAGEMENT AND PATIENT SAFETY

The SDM and its Quality Committee work collaboratively with the University of Colorado Risk Management department to help identify and evaluate risk of loss from patient care activities including measures of potential frequency and severity of risk. The Risk Management department advises the SDM on actions to take to address, mitigate or eliminate risk. Risk management is an integral part of the SDM Quality and Patient Safety Program as required by Colorado Revised Statute 25-3-109. Under this statute, any individual who, in good faith and within the scope of their functions participates in reporting, provides information, opinion; or any other medical staff, administrative or governing body committee that evaluates quality of care issues or as part of the internal Risk Management, is immune under the statute from suit in any civil action based on such functions, if brought against a health care provider or person to whom the quality information pertains. In no event shall this immunity apply to any intentional act of omission in the provision of care.

SECTION XIII: COMPLAINTS AND GRIEVANCE MODULE

The SDM uses the Safety Intelligence module to enter complaints and grievances. Patient notification, steps to resolution and communications can be tracked. The data is analyzed and used to improve patient satisfaction or applicable systems issues.

SECTION XIV: CONFIDENTIALITY

All activities described in the Program and any other activities or investigations conducted by or on behalf of the University of Colorado School of Dental Medicine and its medical practitioners or staff to identify, evaluate, or reduce the risk of patient injury or to improve the quality of patient care including resource utilization and access to care shall be considered *performance improvement activities.*

All records, reports, and other information used to conduct performance improvement activities or produced as a result of performance improvement activities, including without limitation, all written or verbal communications by or provided to persons, committees or the University leadership for the performance of quality improvement activities; occurrence, incident and notification reports; complaints; responses to complaints; witness interview; correspondence; minutes, records, or transcriptions of meetings, interview, or other proceedings; recommendations; decisions or other results of performance improvement activities and any other items or documents generated by or for performance improvement activities, shall be considered *performance improvement information.*

All performance improvement activities and all performance improvement information shall be subject to the privileges and immunities of Colorado Revised Statute §25-3-109 or other corresponding provisions of any subsequent federal or state statute providing protection for performance improvement activities, and shall be strictly confidential to the greatest extent provided by law. The Colorado Department of

Public Health and Environment (CDPHE) and other regulatory or accrediting agencies may access the information if authorized the statute. Any person who participates in good faith in any performance improvement activity, including without limitation, any activity described in the Program or Plan or the reporting, collection, evaluation or use of information for performance improvement activities, shall be immune from suit to the greatest extent provided by law, including without limitation , as set forth in Colorado Revised Statute §25-3-109 or the corresponding provision of any subsequent federal or state statute providing protection for performance improvement activities.

In order to assure the confidentiality of performance improvement activities and information, the following procedures will be implemented by the Quality Committee:

- Patient information and individual health care providers or support services will be de-identified in accordance with HIPAA Privacy Standards and identified by a number or code and not by name.
- All performance improvement information will be maintained in confidential files in a secure location in accordance with applicable State and Federal Law, including HIPAA Privacy and Security Standards.
- Appropriate committee meeting discussions or minutes where performance improvement activities are conducted or performance improvement information is discussed, will be kept confidential.
- Other measures as directed by the Quality Committee or other oversight committees.

All Faculty, staff and others involved in the SDM Quality Committee information whether a volunteer or a vendor will be responsible for maintaining the confidentiality and security of data and information relating to Performance Improvement activities. However, each person having access to data/information is accountable for recognizing his/her responsibility for confidentiality and legal penalties for unauthorized disclosure. Problems relating to the confidentiality and security of data/information will be brought to the immediate attention of the Sr. Associate Dean for Clinics and Professional Practice or the Sr. Associate Dean of Finance who also serves as the Corporate Compliance Officer for the SDM.

SECTION XV: RELATIONSHIP TO PROFESSIONAL REVIEW ACTIVITIES

In the event a performance improvement investigation or other activity raises a concern with respect to the professional conduct or appropriateness or quality of care provided by an individual practitioner, information related to such conduct of care shall be provided to the appropriate professional review committee pursuant to the applicable policies of the SDM and the Medical Professional Faculty. Information provided to the professional review committee shall be confidential professional review information and shall be subject to all privileges that attach to such information.

SECTION XVI: APPROVAL

The Quality and Patient Safety Program is developed by the Director of Quality and Patient Safety and the Sr. Associate Dean of Clinics and Professional Practice. The Program is then presented to the Quality and Patient Safety Committee for final modifications and approval. The Quality and Patient Safety Program is forwarded to the Operations Committee as determined by the Sr. Associate Dean of Clinics and Professional Practice.

SECTION XVII: EVALUATION

The Quality and Patient Safety Committee will evaluate the Quality and Patient Safety Program annually, taking into consideration purpose, objectives, scope, effectiveness, areas demonstrating improvement and those needing improvement. This evaluation will include the Standards of Care. The evaluation may be presented to the Operations Committee as determined by the Sr. Associate Dean of Clinics and Professional Practice. The Program and Plan for the following year will incorporate findings from the annual evaluation in order to prioritize processes for improvement and on-going work.

GLOSSARY

Adverse event: An untoward, undesirable, and usually unanticipated event, such as death or serious injury of a patient, an employee, or a visitor in a health care organization. Incidents such as patient falls or improper administration of medications are also considered adverse events even if there is not permanent effect on the patient.

Disclosure: Providing information to the patient or patient's family or guardians regarding a sentinel event, occurrence or substantive near miss occurrence.

Hazardous Condition: Any set of circumstances (exclusive of the disease or condition for which the patient is being treated), which significantly increases the likelihood of a serious adverse outcome.

Near Miss: Any process variation which either did not reach the patient or did not affect the outcome, for which a recurrence carries a significant chance of a serious adverse outcome.

Non-punitive Culture: Encourages personal accountability, provides a safe place to report errors, and seeks to learn from mistakes to improve the overall safety of the system.

Occurrence: An unintended act, either of omission or commission, or an act that does not achieve its intended outcome.

Personal Accountability: The individual involved in the occurrence (potential or actual), will participate in reporting the occurrence, determining what went wrong, identifying a solution, participating in discussions about the occurrence and taking an active part in improving the system.

Prevention: A future-oriented process that improves performance and productivity; a philosophy of never-ending improvement.

Punitive or Disciplinary Action: The recording of a reported medical/health care occurrence in an employee's permanent record for use during the evaluation process for promotion, salary increase, or references. The requirement of an individual to undergo continuing education, competency training or assessment, or an individual educational plan is not defined as punitive or disciplinary action.

Re-design: Changing a process to create a more effective or safer environment.

Reportable Event: A suspected or actual variation in a health care delivery process where the patient/visitor is affected.

Risk Management: The prediction of risk of injury, avoidance, and control of exposure to prevent any other risks and the minimization of malpractice loss.

Sentinel Event: An unexpected occurrence involving death or serious physical or psychological injury, or risk thereof. Serious injury specifically includes a loss of limb or function. The phrase "or risk thereof" includes any process variation for which a recurrence would carry a significant chance of a serious adverse outcome.

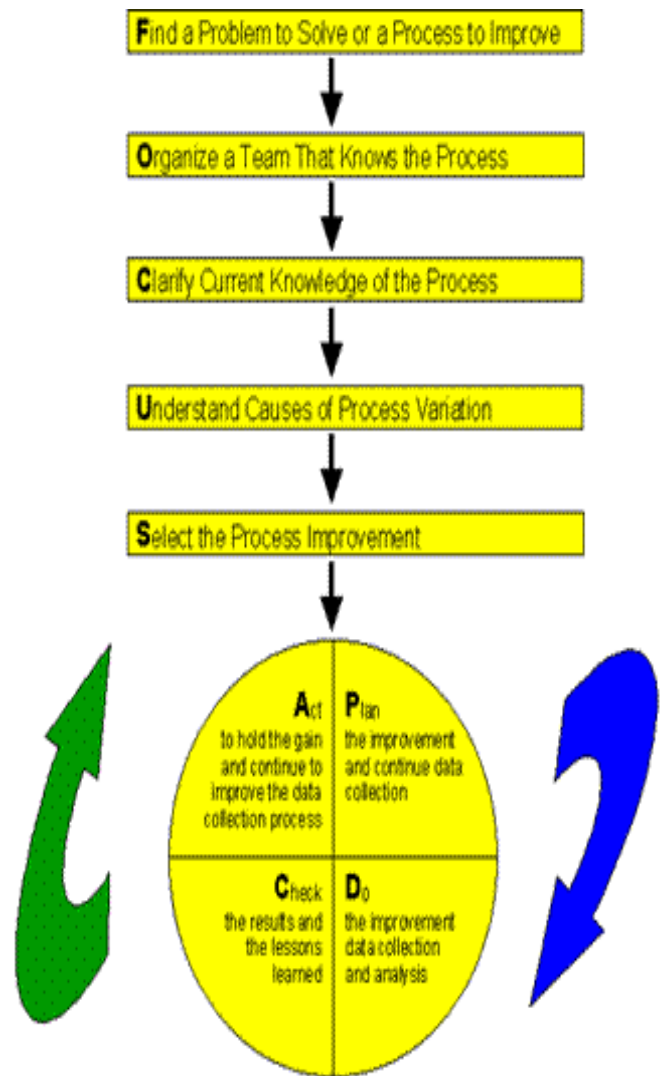**School of Dental Medicine**
UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

APPENDIX 1

School of Dental Medicine
UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

STANDARDS OF CARE

1. We ensure that patients are good candidates for care in our educational Comprehensive Care Program setting by providing a screening exam to determine if the patient's dental care needs are within the scope of the student clinics.
2. We recognize the diversity of our patients and their individual needs.
3. We provide our patients with an Informed Consent to Treat document and allow time for questions to be asked and answered.
4. We maintain a complete electronic health record for each patient that includes a health history that is updated once per year.
5. We maintain and store patients' Protected Health Information (PHI) securely in accordance with the Health Insurance Portability and Accountability Act (HIPAA).
6. We will ensure that our patients are fully informed of the costs of their treatment by providing an individualized treatment plan to every comprehensive care patient.
7. Emergency dental services are available at the CU School of Dental Medicine five days a week during clinic hours with call coverage available after hours.
8. We provide patients with access to care that occurs in a timely fashion based on their specific treatment needs.
9. We prepare faculty, staff, and students to provide care in the event a patient has a medical emergency in the clinics.
10. We follow up-to-date instrument and patient care safety standards.
11. We will ensure that patients are evaluated on a yearly basis to assess for any new oral disease or conditions including cavities.
12. We will ensure that patients receive preventative care.
13. We will ensure that patients receive appropriate follow-up care.
14. We will ensure that patients receive lasting care.
15. We are committed to patient satisfaction. We take each patient concern seriously and will work with our patients to find solutions.

APPENDIX 2

Focus PDCA model Use when coordinating various departments, teams or subject matter experts is required.

Find a Problem to Solve or a Process to Improve

Organize a Team That Knows the Process

Clarify Current Knowledge of the Process

Understand Causes of Process Variation

Select the Process Improvement

Act
to hold the gain and continue to improve the data collection process

Plan
the improvement and continue data collection

Check
the results and the lessons learned

Do
the improvement data collection and analysis

APPROACH PROBLEM SOLVING MODEL

APPENDIX 3

Rapid Cycle Model of Improvement

Plan for changes to
Bring about improvement
Cause & Effect diagrams
Pareto analysis
Brainstorming
Flowcharting

Do Changes on a small scale
first to trial them
Implement change
Experiment design
Conflict resolution
On-Job training

P — Plan
D — Do
A — Act
C — Check
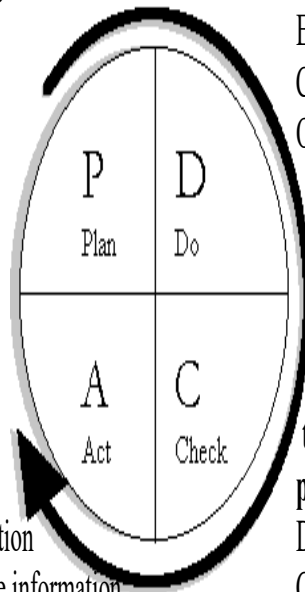
Act to get the
Greatest benefit
from changes
Process mapping
Process standardization
Controlled reference information
Formal training

Check to see if the
changes are working and
to investigate selected
processes
Data analysis
Control charts
Key performance Indicators

9.8   Patient Transport Policy

Title: Patient Transport
Source: Institutional Quality and Patient Safety Committee
Effective Date: April 28, 2016

INTRODUCTION:

The University of Colorado School of Dental Medicine coordinates transportation for patients by the most appropriate and safest method.

PURPOSE:

There are times when patients of the School of Dental Medicine (SDM) need transportation to other locations on the Anschutz Medical Campus, or very rarely to locations off campus. This policy provides guidance, direction and uniformity in handling patient transportation needs. These criteria may also apply to visitors or other non-patients who need transportation.

POLICY:

Methods of Transportation

Methods of transportation available on the Anschutz Medical Campus include:

1. University of Colorado Courtesy Shuttle (van or golf cart); Circulator Service
2. University of Colorado <u>Hospital</u> Courtesy Shuttle (van or golf cart)
3. University of Colorado Intercampus Shuttle Bus
4. University of Colorado Security Patrol
5. University of Colorado Campus Police
6. City of Aurora Police
7. Emergency Medical Services (EMS) (911)
8. Other (map posted at School of Dental Medicine front desk)
   a. Private car
   b. Taxi; Light Rail
   c. Walking

More information regarding shuttle services, public transportation, and parking and campus maps can be found at

   http://www.ucdenver.edu/about/departments/FacilitiesManagement/ParkingMaps/Pages/Parking Maps.aspx

Criteria Determining Method of Transport

Patients must be transported by the safest method possible considering emergency medical conditions, medical history, mental cognition, security issues, and specific reason for transport. The patient's student, resident, faculty or Faculty Practice provider should accompany the patient to the University of Colorado Hospital Emergency Department, the University of Colorado Infectious Disease Department, or other location, as appropriate. For example, patients transported by private vehicle, public transportation or law

enforcement would not be accompanied by an SDM representative. In these cases, the SDM representative (student, resident, faculty provider) should follow-up on patient's care and/or status within 24 hours; record the follow-up in the contact notes of the patient's electronic health record

At times, there is a delay in the arrival of the patient's transportation. This delay can occur when the patient's private vehicle transportation (friend or family member) is late in picking up the patient or when public transportation is delayed i.e. Access-a-Ride, public bus, taxi, among others. If the delay will extend past SDM normal hours of operation i.e. 5 p.m. M-F, the patient's student or resident should wait with the patient until their transportation arrives or until a different means of transportation can be arranged. In these circumstances, it is important that a second SDM representative be present while the student/resident waits with the patient. In other words, there should be two SDM representatives waiting with a patient if the delay extends after normal operating hours. Both of the two SDM representatives should be BLS certified. Having two SDM representatives present while the patient waits protects the patient, SDM representative and the School from claims of inappropriate behavior or situations and provides an additional SDM respondent to emergency events.

Delays in patient transportation, SDM persons waiting with the patient, final transportation means, and time of pick-up are to be documented in the contact notes section of the patient's electronic health record

Emergency Medical Reasons

Patients being transported (transferred to a higher level of care) for emergency medical reasons must always be transported by EMS (911). By transferring patients with an emergency condition via EMS, the School of Dental Medicine (SDM) is assured that intra-transport emergencies will be managed and that hand-off communication between the SDM doctors, the EMS personnel and the receiving facility emergency providers (University of Colorado Emergency Department) is accomplished. The SDM attending faculty may contact the receiving facility and conduct a verbal hand-off communication via telephone. For more information on Medical Emergency Response, see policy 9.2 Medical Emergency Response Policy and Procedure. Patient transfer including the method of transport, reason for transfer and location of transfer are to be documented in the patient's electronic health record. The student, resident or faculty provider will follow-up on the patient's care and/or status within 24 hours.

Non-emergent Medical Reasons

Patients who are being referred non-emergently to a higher level of care (urgent care or to an emergency center at the order or request of the patient's provider, for example) or who are being referred to the patient's primary care provider's office/clinic for medical reasons that are non-emergent may be transported by EMS (911) or by the patient's own "responsible adult" driver and private car at the discretion of the attending faculty. They may be allowed to drive themselves or take public transportation also at the discretion of the attending faculty. The patient may elect to use EMS (911). The student, resident, or faculty provider should contact the receiving facility or receiving provider and conduct a verbal hand-off. The student, resident or faculty provider will follow-up on the patient's care and/or status within 24 hours.

A "responsible adult" is a person who is able to access (EMS) emergency medical services by calling 911 or who is able to arrange other transportation to a medical facility in the case of an emergency. A responsible adult must be able to provide or obtain appropriate after procedure care.

Patients being referred for non-emergent medical conditions who elect to go to a University of Colorado Hospital service may be transported by the University of Colorado Courtesy Shuttle (van or golf cart)

Circulator Service or by the University of Colorado Hospital Shuttle (van or golf cart). It is important to note that the University of Colorado Courtesy Shuttle and/or the University of Colorado Hospital Shuttle are not staffed appropriately to assist patients with medical needs. Patient referral or transfer for non-emergent medical reasons are to be documented in the contact notes section of the patient's electronic health record and will include the method of transport, reason for transfer and location of transfer

Campus-wide emergency situations including severe weather, emergency operations procedures or at the discretion of the SDM Senior Associate Dean of Clinics and Professional Services or other Attending Faculty may take precedent over the non-emergent transportation methods listed above.

Additional Prohibitions

Patients must never be transported in a car owned or operated by a staff member, faculty, student or resident of the School of Dental Medicine (SDM). (Exception: if an SDM staff, faculty, student or resident is identified at the beginning of the appointment as the "responsible adult" for the patient i.e. family member of the patient, then that person would be allowed to transport the patient in a car owned or operated by the SDM person.)

Staff, faculty, students and residents of the School of Dental Medicine must never transport a patient in a car owned or operated by the patient or the patient's responsible adult. (Exception: if an SDM staff, faculty, student or resident is identified at the beginning of the appointment as the "responsible adult" for the patient, then that person would be allowed to operate the patient's car.)

Patient transportation in a car owned by an SDM staff member, faculty or student operated by the patient or the patient's responsible adult is also prohibited, even if the SDM staff member, faculty or student has automobile liability insurance. (Exception: patient is related to or an approved driver of the SDM person's vehicle.)

Documentation of patient transport in any of the above three scenarios must be entered in the contact notes section of the patient's electronic health record. This documentation will include the method of transport, reason for transport and location. The name, contact information and relationship between the patient, the patient's responsible adult and the SDM representation will also be documented in the electronic health record.

Courtesy Transportation

The University of Colorado Courtesy Shuttle (van or golf cart) Circulator Service may be used to transport a patient as a courtesy or in the course of a diagnostic evaluation. For example, the patient asks for a ride back to their parking space or the patient needs to go to the University Hospital Outpatient Pavilion Infectious Disease Department for phlebotomy in the case of a blood born pathogen exposure or to the Department of Radiology in the case of a swallowed object. The Courtesy Shuttle service may be requested by either the patient or the SDM. The University of Colorado <u>Hospital</u> Courtesy Shuttle (van or golf cart) operates similarly. However, the Hospital shuttle generally transports Hospital patients to the SDM from the Hospital and may not accommodate a ride from SDM back to the Hospital.

Transportation by Law Enforcement

The University of Colorado Anschutz Campus has access to two law enforcement agencies and Campus Security. Law enforcement officers may transport patients to a higher level of care at their discretion, for example in circumstances where EMS is unavailable. Generally, law enforcement officers will transport

patients with emergent conditions to the University of Colorado Hospital; they may transfer patients to other suitable locations, either on or off campus, also at their discretion. To access or request their services, the SDM will call 911or 4-4444. Transportation of patients by Law Enforcement to another level of care or location are to be recorded in the contact notes section of the patient's electronic health record along with the reason for the transfer. The student, resident or faculty provider should follow-up on the patient's condition and/or status within 24 hours.

Other Forms of Transportation

Other forms of transportation listed are used by the public to access the campus. The University of Colorado Intercampus Shuttle Bus is available to associates of the University of Colorado, the Veterans Administration Hospital or National Jewish Hospital to commute between campuses.

REVIEW AND APPROVAL:

The SDM Patient Transport policy is vetted by members of the Institutional Quality and Patient Safety Committee and the Sr. Associate Dean for Clinics and Professional Practice. Final approval of the SDM Patient Transport policy is conducted by the SDM Operations Committee, Faculty Senate and SDM Executive Committee. The SDM Patient Transport policy will be reviewed on an annual basis or sooner, as needed.

9.9   Use of Lasers

Title: Use of Lasers
Source: Facilities, Quality & Patient Safety, and Clinical Operations
Effective Date: February 2017; revised February 2019

INTRODUCTION:

The term LASER is the acronym for Light Amplification by Stimulated Emission of Radiation. Lasers produce high intensity light beams that can cause significant eye damage and body burns, among other environmental hazards such as fire.

A laser emits a narrow beam of light that is directional. It is operated by using mirrors to reflect light from the laser medium back into itself, increasing in strength. A partially transparent mirror on one end allows some of the light to leave, creating a laser beam that is monochromatic: one color or wavelength. Ordinary light, for example from a light bulb, is emitted in many directions. Also, laser light is coherent, meaning that it is in phase in space and time. Based on these three properties, laser light is more hazardous than ordinary light.

The School of Dental Medicine (SDM) uses Class 4 lasers (high power) of various wavelengths, primarily in the infrared spectrum for therapeutic applications in dental care and treatment. The School also uses Class 2 lasers for dental caries detection and Class 1 laser pointers.

PURPOSE:

This policy outlines the hazards, precautions, work practice controls and engineering controls that must be recognized and followed for the safe operation of lasers in dental care and treatment. SDM provides safe and effective laser care and treatment through compliance with applicable federal, state and local laws and adherence to American National Standards Institute standards (ANSI Z136.1 and Z136.3). SDM follows University of Colorado Environmental Health and Safety (EHS) policies and recommendations.

DEFINITIONS:

ANSI: The American National Standards Institute is a private non-profit organization that oversees the development of voluntary consensus standards for products, service, processes, systems, and personnel in the United States.

Different substances are used by different types of lasers to product laser light. The substances are:

CO_2: Carbon Dioxide gas

Er, Cr: YSGG: Erbium, Chromium: Yttrium Scandium Gallium Garnet, a rare earth coated crystal

Er:YAG: Erbium: Yttrium-Aluminum Garnet, a rare earth coated crystal

GaAIAs: Gallium-Aluminum-Arsenide – a semi-conductor chip

InGaAsP: Indium-Gallium-Arsenide-Phosphide – a semi-conductor chip

HeNe: Helium-Neon gas

Nd:YAG: Neodymium: Yttrium Aluminum Garnet, a rare earth coated crystal

LASER: The term LASER is the acronym for Light Amplification by Stimulated Emission of Radiation. Lasers produce high intensity light beams that can cause significant eye damage and body burns, among other environmental hazards such as fire.

Laser Generated Airborne Contaminants (LGAC): Biological materials that are released when human tissue is heated create a smoke plume or "laser plume". These biological materials, that may be infectious, combined with other chemicals or particles released during laser use are considered LGAC. Inhalation of LGAC can be hazardous. High volume evacuation should always be used close to the working area when removing tissue or killing bacteria.

Laser Treatment Control Area (LTCA): Generally, a laser treatment control area is the location where the laser is used and where beam-related exposures can occur to the eyes or skin. For SDM, the entire patient care/treatment area is considered an LTCA. Laser protective eyewear must be worn in the LTCA and other precautions must be followed as described later in this policy.

Maximum Permissable Exposure (MPE): The MPE is the maximum level of laser radiation that a human can be exposed to without adverse biological effects to the eyes or skin. ANSI provides maximum permissible exposure limits for eye and skin exposure to laser beams. The MPE is determined by four factors: wavelength of the laser, power of the laser, duration of the exposure and proximity to tissues.

Nominal Hazard Zone (NHZ): The nominal hazard zone is the area inside which the level of direct, reflected or scattered laser radiation during normal operation exceeds the MPE. The MPE is at an acceptable level for human exposure OUTSIDE of the NHZ. The nominal hazard zone differs with each type of laser. The entire LTCA or patient care/treatment area is to be considered a nominal hazard zone (NHZ) that requires appropriate protective eyewear and other beam or non-beam hazard prevention strategies.

Nominal Ocular Hazard Distance (NOHD): The nominal ocular hazard distance is the distance from the laser beyond which the MPE of the laser is not exceeded. In other words, the NOHD is the line or distance from the laser where the MPE becomes acceptable for human exposure.

Optical Density (OD): The OD of laser protective eyewear is a measure of its capacity to filter light; the higher the OD, the less light is transmitted to the eye. The filters are wavelength specific.

SCOPE:

This policy applies to any individual: faculty, resident, dental hygienist in a limited capacity and dental assistant who is working with laser systems for SDM. Vendors, manufacturers and service representatives for any laser system will follow this policy unless more stringent rules govern their work.

POLICY:

Indications

Lasers may be used for removal or sculpting of hard or soft tissue, bacterial reduction, or for photobiomodulation (PBM). Lasers are used throughout the school, primarily in the Orthodontics, Graduate Periodontics and the General Practice Residency clinics. Class 2 lasers are used for caries detection. Class 1 and 2 laser pointers are used in classroom and presentation settings.

Note: Electromagnetic radiation generated by healthcare laser systems could interfere with sensitive electronic equipment such as cardiac pacemakers.

Clinicians

Only a dentist may use a laser capable of the removal of hard and/or soft tissue in the treatment of a dental patient and/or may use a Class 2 laser for dental caries detection. A licensee or School of Dental Medicine (SDM) resident who is a laser user or who supervises a laser user must first successfully complete training that covers a minimum of laser physics, safety, and appropriate use, to include a hands on component, prior to utilizing the laser pursuant to Rule XXIV Use of Lasers, Colorado Dental Board.

Dental hygienists, while practicing at the School of Dental Medicine and per Rule XXIV Use of Lasers, Colorado Board of Dental Medicine, may only use a laser under the direct or indirect supervision of a dentist, and must be within the dental hygiene scope of practice.

Dental assistants may provide patient care support and basic laser equipment support during procedures.

Training

Training for Colorado licensees must be obtained through a course provided or recognized by any of the following organizations (or a successor organization):

Approved organizations per the Colorado Dental Board are

- A Commission on Dental Accreditation (CODA) accredited institution
- The American Dental Association (ADA) Continuing Education Recognition Program (CERP)
- The Academy of General Dentistry (AGD) Program Approval for Continuing Education (PACE)
- The American Medical Association (AMA)

Note: The requirements of Rule XXIV do not apply to the use of non-adjustable laser units for purposes of diagnosis and curing (Class 2 lasers).

All members of the laser team including dental assistants will be trained in laser physics, general laser safety, and appropriate use. See below for a listing of specific safety related training elements. Training will include use of lasers in a clinical setting, understanding of the biologic and physical properties of laser-tissue interaction and operational characteristics of the equipment. Dentists, residents and hygienists must complete training and instruction in the methods and techniques of laser procedures applicable to their discipline.

A licensee (faculty member) who is a laser user or supervises a laser user must first successfully complete training that covers a minimum of eight (8) hours of laser physics, safety, and appropriate use, to include a hands on component, prior to utilizing the laser. A licensee must also complete live and interactive training that addresses operation of the specific laser(s) utilized in the practice. A licensee must complete the SkillSoft, "Laser Safety Training" web-based module, annually.

The University of Colorado School of Dental Medicine is a CODA (Commission on Dental Accreditation) accredited institution and as such, provides training and education in the use of lasers to Orthodontic, Graduate Periodontics, General Practice faculty, residents and staff, and other applicable groups as determined by the school.

Annual laser safety training, using the SkillSoft, "Laser Safety Training" web-based module, will be completed by residents, dental assistants and other applicable staff. Any other training per manufacturer's or vendor's instructions or per SDM policy will be completed.

Due to the hazardous nature of Class 3B (medium power) and Class 4 lasers (high power), any person who routinely works with or is potentially exposed to Class 3B or Class 4 lasers is required to be trained on the following safety elements. SDM training will include these elements as the school uses Class 4 lasers.

- Warning against misuse of lasers
- Fundamentals of laser operation
- Bio-effects of laser radiation on the eye and skin
- Significance of specular and diffuse reflections
- Non-beam hazards of lasers

- Laser and laser system classifications
- Control measures
- Overall responsibilities of management and employees
- Medical surveillance practices
- Application of other federal, state and local regulatory safety and health requirements
- BLS training per SDM policy

As required by CODA and SDM policies, documentation of all training records must be maintained. It is the responsibility of each licensee, resident, hygienist, dental assistant or any other trainee to keep their SkillSoft "Laser Safety Training" or other required training up-to-date. Certificates of completion are available through the SkillSoft program; the SkillSoft system tracks compliance. Laser users, assistants and others who work with lasers must maintain documentation of any other training required by SDM faculty or the laser manufacturer, vendor or supplier.

The training documentation may be maintained at the department level. At times, the Laser Safety Officer or the University of Colorado Environmental Health and Safety (EHS) may request copies of training certificates.

A licensee (faculty) who uses a laser must maintain evidence of training. Upon request of the Colorado Dental Board, the licensee must submit evidence of such training. SDM may require evidence of laser training to be maintained as part of the faculty member's credentials file.

Department Policies and Procedures

Each department that uses lasers is responsible for written procedures, clinical policies and any didactic or hands-on training materials and instruction; materials must be in compliance with ANSI Z136.1 and Z136.3. Additional safety requirements that are not included in this policy must be brought to the attention of the Laser Safety Officer, Sr. Associate Dean of Clinics and Professional Practice, the Institutional Quality Committee or University EHS.

Documentation

Usage Documentation (Electronic Health Record): The patient's electronic health record will include the following information related to laser use, recorded in the Laser Use template note (axiUm electronic health record).

1. Patient name and second identifier (DOB or electronic health record number)
2. Date and time (time in ehr) of laser use
3. Laser system (laser) used including type and wavelength
4. Model, serial number or other identifying number
5. Laser settings: mode (continuous wave or pulse); power setting or energy per pulse
6. Size of fiber, tip, or aperature of tip
7. Time in use and/or total number of pulses

8. Procedure attempted/performed (with details to include hard or soft tissue removal) and comments
9. Local anesthesia used, if any
10. Faculty and Resident (as applicable)
11. Problems or issues encountered and any comments

Patient Care

Patient Consent: The SDM Surgical Consent is used to document laser procedures and patient consent to treat. The SDM Surgical Consent includes information about laser use, as applicable. Informed consent is conducted by the resident or faculty with the patient or the patient's guardian. When a laser is used for caries detection a specific consent is not necessary.

Patient Safety: The faculty or resident performing the laser procedure will review the patient's electronic health record for any previous laser treatment.

Note: Electromagnetic radiation generated by healthcare laser systems could interfere with sensitive electronic equipment such as cardiac pacemakers.

Patient Care Instructions: There are no patient care instructions specific to laser use. Pre-and post-procedure patient care instructions will be provided and applicable to the clinical procedure(s) performed.

Equipment

A Health Care Laser System (HCLS) consists of a laser, a delivery system to direct the output, a power supply, mechanical housing with interlocks, and associated liquids, gases, or rare earth containing solid crystals for the operation of the laser.

There are several types of lasers categorized based on the material used to create the laser light. These include, solid-state lasers, gas lasers e.g.carbon dioxide (CO_2) or argon, excimer lasers, dye lasers, semiconductor or diode lasers and rare earth coated crystals such as Erbium and Nd:YAG lasers. Some of the SDM lasers require compressed air.

The American National Standards Institute (ANSI) classifies lasers into four categories based on hazard levels; that is, the ability of the laser beam to cause biological damage to the eyes or skin during use including maintenance and repair or to create an environmental hazard such as fire. Manufacturers are required to use these classifications to assess the hazards of their laser products and to apply warning labels specific to the laser. The Laser Hazard Classifications are listed here.

- Class 1 Laser: cannot emit radiation at known hazard levels and are generally exempt from radiation hazard controls during operation and maintenance (but maybe not during service). A Class 1 Laser is not capable of emitting laser radiation at levels above the Maximum Permissible Exposure (MPE) or the maximum level of laser radiation that a human can be exposed to without adverse biological effects to the eyes or skin.

- Class 2 Laser: divided into two categories, Class 2 and 2M lasers, are low-powered, visible lasers with an average radiant power at or below 1 milliwat (mW). Limited exposure controls are required. Training is not required by ANSI or University EHS. A Class 2 Laser emits laser light for which the blink reflexes will limit exposure to no more than 0.25 seconds; eye injury could result if the blink reflex is intentionally suppressed. An eye examination is not required for Class 2 lasers.

- Class 3R Laser: can cause eye damage from both direct and indirect mirror-like reflection (specular reflection), if the eye is focused and stable. A Class 3R laser is considered safe if handled carefully, with restricted beam viewing. With a class 3R laser, the MPE can be exceeded, but with a low risk of injury.

- Class 3B Laser: has the ability to cause eye damage from either direct viewing or by specular reflection whether the eye is stable and focused or not. They do not cause eye damage from a diffused (dispersed or spread-out) reflection. Class 3B lasers can cause fires.

- Class 4 Laser: is a significant hazard to both eyes and skin from either a direct beam or diffused reflective radiation. Class 4 Lasers can pose a fire hazard by igniting combustible materials, among other non-beam hazards. And, unlike the other hazard classifications, Class 4 lasers can produce Laser Generated Air Contaminants (LGAC).

The SDM uses Class 4 lasers of various wavelengths, primarily in the Infrared spectrum. We also use Class 2 lasers and Class 1 laser pointers. See SDM Laser Inventory.

Service and maintenance is performed by the manufacturer, vendor or supplier on an as needed basis or as recommended. Management of service and maintenance occurs at the department-level and is tracked by the SDM Facilities Management department.Written documentation of service, maintenance or installation should be provided. Service representatives or vendors must comply with EHS requirements and SDM policies and procedures. Service providers or vendors may be required to show proof of training prior to working under the SDM Laser Program.

All lasers brought into SDM for use, trial, research, training, etc. will be inspected by the Laser Safety Officer. The State of Colorado licensee using the laser is responsible for notifying the Laser Safety Officer of any new laser or any significant repairs to current lasers. Furthermore, it is the responsibility of the licensee to ensure that appropriate wavelength-specific eyewear is available in sufficient number to provide protection for all who will be present during laser operation; the eyewear must be in good condition. If the laser will remain at SDM, be stored at SDM or used for patient care, the laser must be added to the SDM Facilities Management biomedical database. These requirements apply to lasers that are purchased, rented, leased, borrowed or donated or used at SDM in any way. The Laser Safety Officer along with the Dean of Clinics have the authority to prohibit the use of such laser until safety conditions are remedied.

All manufacturer's recommendations and safety requirements will be followed during use or storage. Documentation of the manufacturer's recommendations for storage conditions,

appropriate cleaning and shelf life should be maintained with the laser system and readily available for review by anyone.

The laser should be permanently marked with the wavelength and OD for each wavelength such that the corresponding eyewear can be obtained. Eyewear should also be marked with the applicable wavelength protection.

Quality Control

The faculty member (licensee) or resident (laser user) is required to ensure completion of all quality control including documentation, as directed by the manufacturer, vendor or supplier and any other required documentation, including completion of the Laser template note. The licensed health care professional is responsible to ensure that all safety measures are in place, that the operative field is safe for patient care and that all Federal, State, and other regulations and licensure requirements are followed.

Quality control is performed per manufacturer, vendor or supplier instructions and is documented. In addition to any quality control procedures, the laser will undergo a pre-procedure check prior to use. The pre-procedure check will include inspecting the system for damage (including frayed wires) and bloodborne pathogen contamination.

Safety Considerations and Requirements

Accidents can occur at almost any state of laser operation. One of the most common occurrences with laser use is unanticipated eye exposure.(Note: special care must be taken during alignment procedures to protect against unanticipated eye exposure.) All persons in the laser use area must wear laser protective eyewear. See the Personal Protective Equipment section of this policy. Laser protective eyewear must include side shields or goggles with side shields that have the OD (optical density) appropriate to the laser beam wavelength.

Other biological accidents include skin exposure and inhalation of LGAC (laser generated air contaminants). The most common environmental hazard is fire resulting from ignition of flammable materials.

IT IS IMPORTANT NOT TO RESIST YOUR NATURAL REACTION TO LOOK AWAY FROM THE LASER WHEN IT IS DIRECTED INTO YOUR EYES OR WHEN COLLATERAL (reflected or dispersed light) RADIATION IS VISIBLE.

Lasers must only be used in areas designated as a Laser Treatment Controlled Area (LTCA). An LTCA must be enclosed and constructed in such a way as to eliminate the risk of exposure to diffuse laser light by persons not wearing proper protective eyewear. The SDM Laser Treatment Controlled Area is generally the location of the patient care/treatment.

Surgical fires may occur when using a laser around flammable materials or oxygen (patients receiving supplemental oxygen). During any laser procedure, an open container of water or

saline should be available and ready to use to douse a surgical fire, in addition to the air water syringe used during dental procedures, wet gauze and fire-retardant materials should be used in the dental operative field. The location of the nearest fire extinguisher must be known by all persons involved in laser procedures for each LTCA.

Beam-related Hazards: Damage to Skin and Eyes

Damage to the skin and eyes are the most common types of laser injuries. These injuries are usually heat-related in that laser energy is absorbed by tissue in the form of localized, intense heating. The magnitude of tissue damage depends on the energy of the beam, the wavelength of light, the length of time that the tissue is irradiated, and the sensitivity of the tissue. Laser beams can also cause damage to tissues through mechanical shock waves and photochemical effects.

Eye Exposure

Eye exposure is the primary biological hazard associated w/laser radiation. The cornea, lens, and retina are susceptible to damage by laser radiation including diffuse radiation (light) that is reflected off a lens or other object. A laser beam can be of sufficient power that the light emitted is of greater intensity than that viewed when looking directly at the sun.

Eye exposure can be caused by not wearing available eye protection or using improper eye protection for the wavelength, improper methods of handling power (for dental lasers the voltage cannot be varied), altering the beam path, inserting reflective objects (dental mirrors) into the beam path, accidentally turning on the power supply without proper eye or skin protection or accidentally entering the LTCA.

SDM recommends that laser operators or individuals who work in areas where there may be exposure to laser radiation from a Class 3B or Class 4 laser, undergo a baseline eye examination. The eye examination should include a review of ocular history and tests of visual acuity and the central (macular) visual field. An eye exam is recommended when an individual ceases working w/lasers.

If there is a radiation exposure or suspected exposure, a post-trauma eye exam will be performed and compared to the baseline eye exam to assess damage. The post-trauma eye exam should be completed within 48 hours or less to provide the most acute assessment. For lasers operating in the retinal hazard region (400 to 1400 nm), examinations should be performed by an ophthalmologist. (SDM uses lasers within this wavelength range.) The exam should include ocular history review, tests for visual acuity, macular function, contrast sensitivity and an examination of the ocular fundus using an ophthalmoscope. Complete and accurate records of any medical surveillance examinations, including specific test results, should be maintained for a period of 30 years after the employee terminates employment.

Injured SDM faculty, staff, students or residents will notify SDM Human Resources and SDM Risk Management to coordinate workers' compensation. Complete the on-line University Workers Compensation report within 4 days of the occurrence. If a bloodborne pathogen

exposure occurs follow the protocol outlined in the SDM Exposure Control Plan. 9.6 SDM Infection Prevention and Exposure Control Plan.

Skin Exposure

Skin exposure is generally associated with exposure to high power lasers, particulary ultraviolet lasers. The School of Dental Medicine does not use ultraviolet lasers. Pre-existing conditions that could result in increased dermatological injury from laser radiation should be identified and noted in the individual's health record.

Non-Beam Hazards

Class 4 lasers present hazards that do not result from direct human exposure to a laser beam. These non-beam hazards consist of physical hazards, chemical hazards, and biological hazards.

- Physical hazards include electrical, explosion, fire, mechanical, noise and radiation.
- Chemical hazards include compressed gases, cryogenic liquids, laser dyes, laser generated air contaminants (LGAC), and solvents.
- Biological hazards include laser generated air contaminants (LGAC) and infectious materials.

The non-beam hazards that are most applicable to the SDM are fire, electrical, compressed gases, and biohazardous air contaminants composed of infectious materials and other particulate matter. Fires, although unlikely in a dental care environment, may be caused by non-flame retardant materials in close proximity to the laser beam; the laser beam creates a localized, thermal area that ignites the object or materials. Electrical hazards most often occur during laser set-up and servicing when protective housings are removed exposing active components. Compressed gases can pose risks based on gas storage, containment and room exhaust ventilation. The School uses piped medical gases at the dental care unit. Biohazard air contaminants (infectious materials and other particulate matter) are produced during clinical procedures; there is a plume generated by vaporizing or aerosolizing tissues and/or pathogens. The plume is evacuated via high speed suction.

The School of Dental Medicine Emergency Response Plan will be used to guide the response to any environmentally based non-beam laser hazard or incident. 2.6 Emergency Response Plan (Fire, Active Shooter, Tornadoes, Bomb Threat, Others).

Non-beam hazards may be life-threatening and require specific control measures. For Class 4 lasers, beam-related and non-beam control measures must be outlined in policy and made available for use and reference by the operator, assistants, any individual who may be exposed to laser radiation (light) and maintenance or service personnel.

Control Measures
There are three categories of control measures that are used to reduce hazardous laser radiation exposure to the eyes and skin and that are intended to protect individuals and the laser

environment from other non-beam hazards associated with the normal operation, set-up and maintenance of laser systems. In addition to the three control measures listed here, there are mandatory controls, general mandatory controls and entryway controls for Class 4 laser-controlled areas that are required for the use of Class 4 lasers. (Mandatory controls, general mandatory controls and entryway controls for Class 4 laser-controlled areas are discussed at the end of this section.)

- Engineering controls
- Administrative controls
- Personal Protective Equipment (PPE)

Engineering Controls

Engineering controls are design features or devices that are applied to a laser or its environment and are intended to reduce laser hazards. These are considered the most effective type of control. Examples include, warning labels or signage, protective housing, enclosed beam paths, and beam stops.

Warning labels and signage

During use of a laser, the area is considered a laser control area (LTCA) and requires posting of a warning or danger sign applicable to the level of laser hazard. Class 4 lasers used in dental treatment that "could result in death or serious injury", require posting of a WARNING sign. For Class 4 lasers that "will result in death or serious injury" a DANGER sign will be posted. For an area that is being used as a temporary laser control area, a NOTICE sign in addition to the applicable WARNING or DANGER sign will be posted at the exterior boundary of the controlled area. A NOTICE sign in addition to the applicable WARNING or DANGER sign is required when service or maintenance is in progress and is posted at the exterior boundary of the controlled area. Class 2 lasers do not require specific signage.

See examples of laser use signage.

Administrative Controls

Procedures, policies, training and other information provided to personnel for the purpose of reducing the risk of laser hazards are Administrative controls. See also the SDM Emergency Response Plan for actions to take if an environmental incident occurs. 2.6 Emergency Response Plan (Fire, Active Shooter, Tornados, Bomb Threat, Others).

Personal Protective Equipment (PPE)

Personal Protective Equipment (PPE) is required to protect individuals against biological laser hazards. Required PPE for patient care at the SDM are disposable gowns, gloves, masks and appropriate eyewear. Laser-protective eyewear must be worn during laser procedures by all individuals in attendance including the patient and any visitors or family members present.

Laser-protective eyewear must be appropriate to the laser beam wavelength and must incorporate lenses that either absorb or reflect specific wavelengths of laser light and must have side shields or goggles. Eyewear must be of an optical density (OD) that does not impair the vision significantly, yet it must be capable of reducing radiation. The Optical Density of eyewear is a measure of its capacity to filter light; the higher the OD, the less light is transmitted to the eye. Do not use eyewear designed to filter short wavelengths of laser light with lasers that produce longer wavelengths and vice versa. It is also important to choose eyewear that is comfortable to wear in order to promote compliance with wearing laser-protective eyewear. Laser protective eyewear should be available outside of the LTCA in case there is a need to enter the laser treatment area, emergently.

Compare the eyewear specifications documented on the laser to ensure that the eyewear to be used is compatible with that laser. The laser should be permanently marked with the wavelength and OD for each wavelength such that the corresponding eyewear can be obtained. Periodic cleaning of the laser eyewear should be performed in accordance with manufacturer's recommendations while avoiding damage to the absorbing and reflecting surfaces. Eyewear should be inspected for pitting, crackling, discoloration or other damage of the lens material, light leaks and coating damage, and wear or damage to the frame and straps, prior to wearing and periodically. Damaged eyewear must be taken out of service and reported to the Laser Safety Officer.

Disposable gowns (worn over lab coats or in lieu of lab coats), masks and gloves provide a barrier of protection to preventing cross-contamination of infectious agents between the patient and healthcare providers. Masks must be worn to protect from inhaling laser generated air contaminants (LGAC) and other infectious materials. When performing laser procedures on patients infected with viruses such as hepatitis or HIV (human immunodeficiency virus), the smoke plume is assumed to be infectious and appropriate precautions and suction must be used to eliminate the laser plume.

Mandatory Controls

The following are mandatory controls for Class 4 lasers as established by the American National Standards Institute (ANSI).

- Direct supervision by a person knowledgeable in laser safety.
- Beam stop of an appropriate material used to terminate all potentially hazardous beams in an emergency. SDM lasers have an obvious on/off switch.
- Appropriate laser-protective eyewear for all personnel in the laser-controlled area.
- An activation warning system such as an alarm, warning light or verbal warning to indicate a beam-related emergency or non-beam environmental emergency. SDM uses a verbal warning.

General Mandatory Controls and Entryway Controls for Class 4 laser-controlled areas

Class 4 laser use requires these additional safety controls.

- The beam path of the laser must be well-defined and located and secured above or below eye level for any standing or seated position. For dental treatments, the laser delivery tip must be controlled by the operator to avoid eye exposure and all persons present must be wearing appropriate laser protective eyewear including the patient.
- The laser operator is responsible for selecting the appropriate wattage, mode and other settings for each procedure.
- When using a CO_2 laser, in particular, diffuse reflecting materials must be used near the beam, where appropriate. Any highly reflective items or surfaces within the LTCA (patient care/treatment area) should be removed or covered. Non-reflective instruments should be used in or near the laser beam for CO_2 lasers.
- All windows, doorways, open portals, etc. of an enclosed laser area must be covered or restricted to reduce diffuse laser light when the laser wavelength is between 300 and 3000 nm or to reduce the laser light to below appropriate ocular MPE levels. Doors must be closed when the laser is in operation.
- Lasers must be stored or disabled when not in use. A key or code is required for the operation of a dental laser. SDM faculty who are trained and qualified to use and operate a laser will have access to the applicable laser key. As a back-up and for further key control, the Laser Safety Officer or the Director of Facilities Management or designee may have access to the laser key(s). The key will be removed and secured after each use. Residents may only use lasers under the supervision of applicable faculty. Keys must <u>not</u> be left in the laser.
- Appropriate warning signs must be posted at entryways to laser-controlled areas.
- All personnel (staff, faculty, vendors) entering a Class 4 laser-controlled area when the laser is in use, need to be adequately trained.
- All personnel entering a Class 4 laser-controlled area must follow all Administrative and Personal Protective Equipment (PPE) control measures.
- Class 4 laser-control entryways must allow for rapid entrance and exit under any condition.
- The laser must have a clearly marked switch to allow for rapid deactivation of the laser or for dental lasers that are not constantly on, the operator may stop the laser by taking the foot from the pedal, turn the key to off position, flip the on-off switch or unplug the laser. When not in use, the laser should be placed in a standby mode and pointed away from personnel to avoid accidental discharge of laser light.
- All personnel entering the laser-controlled area must wear clothing that fully covers the skin, although adverse skin exposure related to dental lasers is unlikely.
- The laser operator must not leave a laser unattended when the laser is enabled or ready to function.

Beam-related Occurrences (eye or skin exposure, inhalation of LGAC or infectious material)

If an exposure occurs or other beam-related incident occurs or almost occurs (near miss), notify the laser operator, immediately. The operator will immediately discontinue the laser procedure and will notify their faculty (if the laser operator is a resident). The LSO, Facilities Management and Sr. Associate Dean of Clinics and Professional Practice will be notified as soon as possible.

Note: Laser exposure incidents may involve patients, visitors, the laser operator, or assistants who are present during the procedure or activation of the laser. Persons who are not at the point of care may be at risk of exposure to laser radiation due to diffuse or reflected laser light.

Medical Response

The person who experienced the exposure will be assessed per the SDM Medical Emergency Response protocol. If acute trauma has occurred, the individual may need to be transported by EMS to the University of Colorado Emergency Department (UCH ED). Follow the SDM Medical Emergency Response policy. 9.2 Medical Emergency Response Policy and Procedures. To access emergency care, pick-up the red phone located in all clinics and the basement. The call will automatically ring through to Oral Surgery or Campus 911. Follow the instructions located above each phone by giving your name, your location and the nature of the emergency to either SDM Oral Surgery or the Campus 911 operator.

In the case of non-acute trauma where the exposed person may be referred to either the UCH ED or Occupational Health clinic, or to their own primary care provider (PCP) refer to the SDM Patient Transport policy for guidance. 9.8 Patient Transport Policy. In the case of eye exposure, a post-trauma eye exam should be completed as soon as possible, not to exceed 48 hours.

Injured SDM faculty, staff, students or residents will notify SDM Human Resources to coordinate workers' compensation. Complete the on-line University Workers Compensation report within 4 days of the occurrence. If a bloodborne pathogen exposure occurs follow the protocol outlined in the SDM Exposure Control Plan. 9.6 SDM Infection Prevention and Exposure Control Plan.

Non-beam Related or Environmental Occurrences

If an environmental emergency such as a fire occurs, use the RACE acronym: Rescue patients and others, Alarm by pulling the fire alarm, Contain the fire by closing doors to the area, and Evacuate. Refer to the SDM Emergency Response Plan for actions to take. 2.6 Emergency Response Plan (Fire, Active Shooter, Tornados, Bomb Threat, Others). Notify the laser operator who will immediately discontinue use and proceed with Emergency Response Plan directions.

Laser Malfunction

If there is a laser malfunction or damage to the laser is noted, immediately contact the department faculty responsible for the laser system, the Laser Safety Officer and Facilities Management who will contact EHS. The laser will be taken out of service and sequestered by Facilities Management until a safety assessment can be conducted and/or the laser is serviced or repaired and deemed acceptable to return to service.

In the event of a laser malfunction during use on a patient, immediately discontinue the procedure; it may be necessary to temporize or otherwise stabilize the patient until the procedure can continue. Immediately notify the responsible faculty (if the operator is a resident and faculty

is not at the chair side). The Laser Safety Officer, Sr. Associate Dean of Clinics and Professional Practice and Facilities Management will be notified right away. The laser and any other equipment and disposables will be sequestered in a secure location for risk management investigation purposes. Facilities Management or the Laser Safety Officer will notify EHS. The Sr. Associate Dean of Clinics and Professional Practice and the University of Colorado Risk Manager will determine whether the incident is reportable to the State of Colorado and/or the FDA (Food and Drug Administration).

Recovery and Post-incident review

Activation of the laser will not restart until the cause(s) of the occurrence or near miss is identified and resolved. Once the laser is determined to be functioning properly, safety precautions are in place or remedied, and a skilled operator is using the laser, patient care may resume at the discretion of the attending faculty or the Sr. Associate Dean of Clinics and Professional Practice. In some situations, patient care or the procedure may need to be temporized/discontinued as safely as possible and continued at a later time.

Whenever an incident occurs, an investigation must be conducted. An occurrence report will be documented in the SDM Patient Safety occurrence reporting database. The Laser Safety Officer and SDM Facilities Management staff will work with SDM faculty involved, University of Colorado Risk Management, EHS and any other involved parties to review the event and to develop and implement action plans.

LASER SAFETY OFFICER:

The Laser Safety Officer (LSO) is appointed by the Chair of each department where lasers are used (Orthodontics, General Practice Residency, and Graduate Periodontics) and are members of the Laser Safety Committee. The Laser Safety Committee is a subcommittee of the Institutional Quality Committee. The Laser Safety Officer(s) collaborate with University Environmental Health and Safety (EHS), the Sr. Associate Dean of Clinics and Professional Practice, Facilities Management and Quality & Patient Safety to monitor and oversee the SDM laser program(s). The LSO in conjunction with the Sr. Associate Dean of Clinics and Professional Practice has the authority to suspend, restrict or terminate the operation of any SDM laser system if a hazardous condition exists. Whenever an intervention is invoked by EHS or the LSO, the hazard and actions taken will be reported to the Sr. Associate Dean of Clinics and Professional Practice, the Department Chair, the Director of Quality and Patient Safety, Facilities Management and formally to the Laser Safety Committee .

The responsibilities of the LSO include:
1. Manage and administer the laser safety program in accordance with University EHS policies or recommendations, ANSI Standards for Safe Use of Lasers in Health Care Facilities, Z136.3, ANSI Standards for Safe Use of Lasers in Education Institutions, Z136.5 and any other known regulations, standards or best practices.
2. Establish written laser safety policies, procedures and protocols for controlling or mitigating potential laser hazards and ensuring that processes are being properly executed.

3. Establish and designate all laser controlled areas (LCA/NHZ) both permanent and temporary, and the placement of necessary barriers and signage.
4. Work with department faculty to ensure that proper safety training is provided to all faculty, residents, students and staff working in the presence of the laser systems.
5. Coordinate medical surveillance and any post-exposure medical needs between the University Occupational Health Department, Environmental Health and Safety, University Risk Management, Human Resources for workers compensation, and department faculty.
6. Work with University Risk Management to report any significant laser related injury to the laser manufacturer and the FDA, as required.
7. Work with Facilities Management and department faculty to ensure that the proper protective safety equipment (protective eyewear) is available and appropriate for any laser in use or present in the school. Verify that laser safety equipment (protective eyewear) and laser accessories are in satisfactory condition and functioning properly.
8. Verify the classifications and labeling of all lasers and laser accessories.
9. Control and manage access to keys or passwords, etc. for activating the laser.
10. Partner with the Facilities Management and department faculty to maintain an accurate and up to date laser inventory of all lasers used or present at the school whether in use or not and whether owned, borrowed, rented, leased, donated or being used on a trial basis or being stored at the school. University EHS may require an inventory report at any time for their review and approval of lasers used or stored at SDM.
11. Inspect all incoming lasers and ensure that the wavelength and OD are permanently marked on the laser.
12. Periodically inspect the functionality of the laser systems and safety features.
13. Oversee and ensure that periodic audits or inspections and servicing of all lasers and accessories is performed as required or as necessary.
14. Collaborate with Facilities Management and department faculty to maintain laser safety program records including laser operating manuals for each laser in use or present in the school. Ensure that all quality control, calibration, inspection records or regulatory records are up-to-date.
15. Investigate all known or suspected occurrences resulting from the operation, maintenance or service of a laser, and in conjunction with department faculty and others, initiate appropriate plans of action including completion of an occurrence report.
16. Report all occurrences and actions taken to the Laser Safety Committee with subsequent report to the Institutional Quality Committee. See also Recovery and Post-incident Review section above.
17. In conjunction with EHS, conduct an annual Laser Safety Audit/Inspection of the Laser Safety Program, laser systems and protective safety equipment.
18. Provide the Laser Safety Committee and Institutional Quality Committee with an annual report that will include the numbers of and types of procedures performed, any adverse reactions to the laser or to the procedure, the lasers used, any new inventory or lasers taken out-of-service, a report of maintenance or work orders, any environmental concerns, inspections, and training records.

REFERENCES:

American National Standards Institute (ANSI) ANSI Z136.1-2014, "American National Standard for the Safe Use of Lasers"

American National Standards Institute (ANSI) ANSI Z136.3-1996, American National Standard for Safety Use of Lasers in Health Care Facilities"

Colorado Department of Regulatory Agencies (DORA), 3 CCR 709-1 Rules and Regulations, Effective July 2018 (Dental Board Rules and Regulations), Rule IX H and Rule XXIV.

"Laser Safety: Is Your Dental School Ready?", 2017 ADEA, Long Beach, CA "Beyond Boundaries" seminar, March 22, 2017.

"Laser safety: what you don't know can hurt you", Canham, Leslie, Aug. 22, 2011 *Dentistry IQ.*

University of Colorado Environmental Health & Safety (EHS) Laser Inspection 2016 Requirements and Recommendations.

University of Colorado – CU Denver / CU Anschutz Skillsoft web-based training, Environmental Health and Safety, Laser Safety Training module and tests.

University of Colorado Hospital Policy, "Laser and Intense Light Device Safety", March 2014.

Children's Hospital Colorado Policy, "Laser Safety in the operating room", May 1986, Draft revision, December 2016.

510(k) Summary KaVo Dental Corporation, DIAGNOdent 2190.

ACCOUNTABILITY:

All faculty, staff, residents and students involved with the operation of Class 3B or Class 4 lasers (SDM uses Class 4 lasers) are responsible for the safe practice, incorporating all requirements of this policy and any other best practices known to them. The licensed health care professional is responsible to ensure that all safety measures are in place, that the operative field is safe for patient care and that all Federal, State, and other regulations and licensure requirements are followed. The laser operator is responsible for selecting the appropriate wattage and mode for each procedure, for completion of any quality control, and documentation including patient health record documentation.

An EHS Laser Registration form must be completed for each laser or laser system and each Prinicple Investigator (faculty responsible for laser operations). The EHS Laser Registration form identifies name, title, location and phone number for each Principle Investigator. The EHS Laser Registration documents are maintained by the LSO.

AUTHORITY:

The Laser Safety Committee, the Institutional Quality Committee, Sr. Associate Dean of Clinics and Professional Practice and the Laser Safety Officer have the authority to enforce this policy per EHS and SDM policies, regulatory requirements and professional practice and community standards.

REVIEW and APPROVAL:

The SDM Laser Use policy is vetted by members of the Laser Safety Committee, the Institutional Quality Committee and the Sr. Associate Dean for Clinics and Professional Practice. Final approval of the policy is conducted by the SDM Operations Committee, Faculty Senate and SDM Executive Committee. This policy will be reviewed on an annual basis or sooner, as needed.

School of Dental Medicine

UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

Laser Safety Attestation

I understand that I will be working with or in the presence of a Class IV laser while employed by or enrolled in a residency program with the University of Colorado School of Dental Medicine (SDM). I will be provided with wavelength-specific protective eyewear that must be worn while working with or around a Class IV laser to protect my eyes from laser radiation. I have reviewed the SDM policy, Use of Lasers and demonstrated competence in Laser safety by successfully completing the University of Colorado Skillsoft web-based training, Environmental Health and Safety, Laser Safety Training module.

I have been advised that it is in my best interest to obtain a baseline eye examination including a review of ocular history and tests for visual acuity and central (macular) visual field.

The date of my last eye examination including refraction: _____

Printed name: _____

Signature: _____

Date of Signature: _____

10.1 Fall Prevention

Title: Fall Prevention
Source: Quality and Patient Safety and Clinical Operations
Effective Date: July 23, 2018; August 6, 2018; August 11, 2021

INTRODUCTION:

Falls resulting in injury are a significant patient safety concern. Fall prevention is a vital aspect of patient care as falls can lead to mild, moderate or severe injury and even death. The Centers for Medicare & Medicaid Services (CMS) defines a fall as a never event i.e. an adverse patient safety event that should never happen.

PURPOSE:

It is the legal and ethical responsibility of the School of Dental Medicine (SDM) to provide safe patient care. Patient falls often lead to injury and can be a serious patient safety event resulting in temporary harm, permanent harm or death. A fall is often a life-changing event for the patient. As such, SDM places an emphasis on fall risk assessment, interventions to prevent patient falls, and education of patients and their caregivers on fall prevention strategies.

SCOPE:

Many SDM patients are at a higher risk for falls than the general population based on their age, diagnosis, procedure performed including sedation, medications, use of an assistive device and other physiologic conditions such as blindness or low blood sugar. In addition to the patient, the patient's family member or caregiver should be educated on how to prevent the patient from falling.

All SDM personnel including faculty, staff, students and residents have a role in preventing patient falls. They are encouraged to implement fall prevention strategies when necessary. For example, anyone may assist an elderly patient to or from a chair and/or be mindful of postural hypotension and other associated difficulties with ambulating following a long dental appointment.

Patients at higher risk of falling include:
- Patients age 65 years and older
- Patients with a neurological diagnosis
- Patients using an assistive device to walk or who have gait disturbances
- Diabetic patients
- Patients who take four or more medications
- Patients with vision or auditory impairments

DEFINITIONS

Accidental fall: slip or trip.

Anticipated physiological fall: fall related to a patient's age, functional ability including mental impairment, disease(s) or condition(s), procedures performed including sedation, previous fall(s), weak or impaired gait including use of assistive devices, lack of realistic assessment of patient's own ability, or patient making errors in judgment.

Assisted fall: A fall in which an individual was with the patient and attempted to minimize the impact of the fall by slowing the patient's descent.

Baby/Child drop: a fall in which a newborn, infant, or child being held or carried falls or slips from that person's hands, arms, lap, etc. This can occur when a child is transferred from one person to another. The fall is included in the falls data regardless of the surface on which the child lands (floor, operatory chair, gurney, other chair).

Developmental fall: a fall that occurs as part of the child's developmental process and results in injury.

Fall: a sudden, unplanned descent, with or without injury to the patient, that results in the patient coming to rest on the floor, on or against some other surface (e.g., a counter), on another person, or on an object (e.g., a chair). Assisting the patient to the floor is considered a fall.

Intentional fall: patient falls on purpose or falsely claims to have fallen.

Major injury: results in fracture, surgery, casting or traction, intracranial injury requiring neurological consultation, consultation for internal injury such as crushing, burns, electric shock, or death because of the fall.

Minor injury: results in an application of dressing, ice, cleaning of wound, limb elevation or topical medication.

Moderate injury: results in suturing, applying steri-strips, splinting.

Near Miss fall: patient does not reach the floor; is assisted to a dental operatory chair, other chair, gurney or wheelchair. Near miss falls are not calculated in fall rates, but are included in falls data.

Never event: adverse patient safety event that is unambiguous (clearly identifiable and measurable), serious (resulting in death or significant disability), and usually preventable.

Non-physiological fall: fall that is due to a piece of equipment, unsafe conditions or due to precautions that were not in place (patient allowed to walk without their assistive device).

Unanticipated physiological fall: fall that may be attributed to a physiological cause but was created by conditions that cannot be predicted.

- Pattern fall: disorder of balance in elderly

- <u>Premonitory fall</u>: associated with acute illnesses (i.e. myocardial infarction, cerebral vascular accident, gastrointestinal bleed)
- <u>Intentional fall</u>: one throws himself on the floor.

POLICY:

Assessment

All SDM patients will have a fall risk assessment performed yearly. (Due to their age and generally healthy condition, Orthodontic patients will have a fall risk assessment performed as needed.)

The student, resident or faculty caring for the patient will perform a fall risk assessment by asking the following questions that are included in the health history:

- Have you fallen or almost fell in the past three months?
- Do you have a fear of falling?
- Do you have difficulty ambulating (walking or moving around)?
- Do you use an assistive device such as a cane, walker, wheelchair, crutches or artificial limb?
- Do you have a vision or hearing impairment?

Document the patient's answers and comments in the electronic health record (ehr).

Other factors that should be considered when assessing a patient's fall risk are age, gender, and cognitive status, level of function and vision or auditory impairments. Patients who receive sedation will be discharged by wheelchair into the care of their responsible adult caregiver. Sedated patients should be helped into their car (driven by the responsible adult). Patients who undergo oral surgery, tooth extractions or periodontal surgery or who have a higher risk for falls should be discharged via wheelchair.

Implement fall prevention interventions or strategies.

Fall Prevention Interventions

For patients who are moved between the operatory chair and a wheelchair, see Appendix A, Checklist for Safe Transfers.

Patients receiving procedural sedation are considered at high risk for falls. Fall prevention interventions for these patients include those outlined below and

a. One-to-one observation of the patient while under sedation
b. Close observation of the patient while in the recovery phase of sedation
c. Placement of the operatory chair in a low position during patient transfer to a wheelchair or to a standing position
d. Education offered to the patient or their responsible adult caregiver regarding fall prevention

1. If the patient gives a positive answer to one or two of the first three fall risk assessment questions, implement the following interventions:

    a. Offer education to reduce the risk of falls to the patient and/or caregiver
    b. Secure the environment and remove hazards in the operatory area and access pathways/hallways.
    c. Escort the patient while in the clinic area to include the payment window and restroom. Monitor patient by staying by the restroom door; waiting with the patient at the payment window. Be ready to assist the patient, if they start to fall.
    d. Check crutches, cane or walker for non-skid surfaces. Tell the patient or caregiver that they should apply non-skid surfaces, if not present.

2. For patients who answer positively to all three (3) of the first three fall risk assessment questions, implement all fall prevention interventions listed above under #1 and ask the covering faculty to assess the patient's risk for falls. The patient must be escorted throughout the building to include the lobby. Consider transporting the patient by wheelchair.

3. If the patient is at risk for falling, has appropriate capacity and refuses any of the interventions to prevent a fall, document the refusal in the notes and consider completing the AMDA (Against Medical or Dental Advice) form. If the patient lacks appropriate capacity (i.e. Alzheimer's dementia, or any other condition where the patient would not be able to sign his/her own consent), they are not to be allowed to refuse fall risk safety interventions. Respect patient preferences when capacity is intact.

4. If the patient has more than one appointment in one day (CUDT to EM or GPR), the department that performs the procedure or provides the care that increases the patient's risk for a fall must document the fall risk assessment and interventions to update the electronic health record. All providers or clinics are responsible for safe patient care.

General Fall Prevention Interventions

- Place operatory in appropriate position to allow patient to stand or transfer to a wheelchair or walker.
- Help the patient stand up from the operatory chair or other chair.
- Help the patient ease down into the chair for sitting.
- Have the patient hold your arm or place their hand on your shoulder when moving to and from the operatory chair.
- Be sure that lights are on in the restroom before leaving the patient.
- Check that oxygen tubing is not a trip hazard.
- Orient patient and caregiver to request help with ambulation as needed.

- Place articles e.g. glasses, hearing aids, mobility aids, hydration, within easy reach of patient.
- Be sure to lock wheelchair when stationary to prevent accidental movement. Release lock only after patient is secure for transport.

When securing the environment, hazards such as loose belongings and objects must be moved away from the patient's egress path, away from treatment areas.

Patients who use assistive devices should use the same device to ambulate at discharge unless they are being discharged by wheelchair as indicated previously.

Documentation

1. Complete the electronic health record by recording the assessment, interventions, prevention activities, and patient education offered.
2. Document a patient fall or near miss fall in the note. Consult covering faculty.
3. Document patient refusal in the notes (see Fall Prevention Interventions above). Consider using the Against Medical or Dental Advice form (see the Forms tab in axiUm).

Education

Patients at risk for falls will be offered patient education on fall prevention.

Post-fall procedures

When a patient (or visitor) fall occurs, immediately post-fall:

1. Activate the Rapid Response Team to provide medical emergency treatment, as needed or as directed by faculty. Medical Emergency Response
2. Inform covering faculty.
3. Assess the mental and physical status and vital signs of the patient to identify changes from pre-fall status, including determination if the patient can be safely moved from the fall position.
4. For minor injuries, provide first aid. Provide further fall prevention education as indicated.
5. Inspect the environment and fix any hazards.
6. Document the fall in the patient's electronic health record and revise the patient's fall risk status, as indicated.
7. Notify the Sr. Associate Dean of Clinics and Professional Practice and the Director of Quality & Patient Safety. The Dean of Clinics or the Director of Quality & Patient Safety will notify the University Risk Manager of any fall resulting in the need for first aid, emergency medical treatment or transfer to University Hospital.
8. Complete a patient safety occurrence report.
9. Complete an After Fall Assessment report with input from individuals who witnessed the patient's fall, who were involved in the patient's pre- and post-fall care and from the patient, as applicable. See Appendix B After Fall Assessment.

ACCOUNTABILITY:

All faculty, staff, residents and students are responsible for the safety of our patients, visitors and each other. All individuals are responsible for reading and following this policy.

AUTHORITY:

The Sr. Associate Dean of Clinics and Professional Practice, the faculty responsible for patient care, directors, managers, and supervisors have the authority to enforce this policy per professional practice and community standards.

REVIEW AND APPROVAL:

Members of the SDM Patient Safety Committee, Institutional Quality Committee and the Sr. Associate Dean of Clinics and Professional Practice vet the SDM Fall Prevention policy. The SDM Operations Committee, Faculty Senate and SDM Executive Committee grant final approval of the policy. The SDM Fall Prevention policy is reviewed on a triennial basis or sooner, as needed.

REFERENCES:

University of Colorado Hospital, Fall Prevention policy, 2015.
University of Colorado Hospital, Ambulatory Services "After Fall Huddle" form.

Children's Hospital Colorado Fall Prevention policy, Clinical Policy and Procedure Manual, November 2016.

The Joint Commission Sentinel Event Alert, Issue 55, September 28, 2015, Preventing falls and fall-related injuries in health care facilities.

Agency for Healthcare Research and Quality, US Department of Health and Human Services, Patient Safety Network (PSNet), https://psnet.ahrq.gov/primers/primer/3/never-events
June 2017, accessed Oct. 11, 2017.

National Council on Aging (NCOA) at https://www.ncoa.org, accessed Dec. 12, 2017

Kozier, B., Erb, G., et al, Fundamentals of Nursing, Prentice Hall, 6th edition, 2000, pp. 679-681.

Burden, N., Quinn, D., et al, Ambulatory Surgical Nursing, WB Saunders Co., 2nd edition, pp. 529-530.

Smith, S., Duell, D., et al, Clinical Nursing Skills, Prentice Hall Health, 5th edition, 2000, pp. 135 and 293.

Nettina, Sandra, The Lippincott Manual of Nursing Practice, Lippincott, 7th edition, 2001, pp. 164-165.

Centers for Medicare & Medicaid Services (CMS) State Operations Manual Appendix L – Guidance for Surveyors: Ambulatory Surgical Centers Revision 137, 04-01-15, Q-0080 (Rev. 95, Issued: 12-12-13, Effective: 06-07-13, Implementation: 06-07-13) §416.43 Condition for Coverage: Quality Assessment and Performance Improvement

Code of Colorado Regulations, Department of Public Health and Environment, Health Facilities and Emergency Medical Service Division Chapter 20 - Ambulatory Surgical Center and Ambulatory Surgical Center with a Convalescent Center 6 CCR 1011-1 Chapter 20

![CU School of Dental Medicine - University of Colorado Anschutz Medical Campus]

Fall Prevention policy Appendix A

Checklist for Safe Transfers

Moving from the wheelchair to the dental procedure chair.

☐ Remove the wheelchair foot or leg rests and place them aside.

☐ Place wheelchair next to the dental procedure chair.

☐ Place wheelchair so the patient can move toward their stronger side.

☐ Assure the wheelchair wheel locks are engaged so it doesn't slip.

☐ Assure the dental chair is locked so it does not move away when the patient pushes against it.

☐ Assure that the dental chair is at the same height/level as the wheelchair. If possible, if the dental chair is lower by about an inch this will help the individual move to the dental procedure chair more easily.

☐ Place the safety belt around the patient's waist so that you have something to hold onto besides the patient's clothing or arms.

☐ Scoot the patient forward in the wheelchair to decrease the distance of how far the patient needs to move to get into the dental procedure chair.

☐ Discourage the patient from grabbing your shoulders or arms. Ask them to push from the wheelchair armrest and to reach for the dental procedure chair.

☐ If the patient is extremely weak, the patient does not need to stand completely up but just enough to clear their bottom/buttocks and reach the dental procedure chair.

☐ Bend your knees and keep your back straight. Lift with your knees and not your back.

Moving back from the dental procedure chair to the wheelchair.

☐ Move the wheelchair so the patient can move toward their stronger side.

☐ Assist the patient to a sitting position at the side of the dental procedure chair and make sure the patient's feet are securely on the floor.

☐ Assure the dental procedure chair is at the same level or a bit higher than the wheelchair so that it is easier for the patient/client.

☐ Reverse the process above and use your legs to assist with patient using the safety belt.

☐ Once the patient is in the wheelchair, place the foot or leg rests back on the chair and remove the safety belt.

https://www.youtube.com/watch?v=LZAYejxPl5Q

School of Dental Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

APPENDIX B

After Fall Assessment			
Date of Fall			*Patient Safety Network #*
Date of Assessment			*Clinic or School location*
Notify Dr. Lonnie Johnson at 303-724-6976			
Document fall in ehr			
	Yes	*No*	*Comments*
Was the fall observed?			
Did the patient fall during an appointment?			
Did the patient fall in the restroom?			
Did the patient fall near a chair, counter, or other object?			
Did the patient fall after standing up?			Fall from wheelchair? Wheelchair brake set?
Was the patient unaccompanied?			
Was this a slip/trip incident?			Did the patient fall when transferring between surfaces or were the lights dim?
Risk Factors for this Patient			
Was the patient screened for fall risk assessment at this appointment?			
Is the patient over age 65?			Patients over 65 are at higher risk for falls.
Did the patient undergo a procedure that increased their fall risk?			Oral surgery, periodontics surgery, endodontics procedure, biopsy
Did the patient receive IV or oral sedation?			
Does the patient have low blood sugar, confusion; feel faint, dizzy or fatigued?			
Does the patient have impaired mobility such as leg weakness or uses an assistive device?			Was the patient's assistive device inaccessible?
Is the patient on a medication that may cause them to be unsteady?			
Critical Injury Occurrence	*Call Dr. Lonnie Johnson at 303-724-6976*		
Did the patient experience a loss of consciousness?			
Did the patient sustain a neck or spine injury from the fall?			
Did the patient fracture a bone from the fall?			
Future Fall Prevention			

How could this fall have been prevented?
What could be done to prevent this fall from occurring in the future?
What would you teach another person that could have prevented this fall?
Is there any other information about this fall you would like to share?

Title:	Single-Use, Limited-Use, Multi-Use, Reusable and Disposable Items
Source:	Office of Clinical Affairs, Departments of Restorative Dentistry and Surgical Dentistry
Effective Date:	August 6, 2018

INTRODUCTION

The University of Colorado School of Dental Medicine (SDM) may use items that are identified as single-use devices (SUD), limited-use, multi-use, reusable or disposable. The School of Dental Medicine follows Food and Drug Administration (FDA), Department of Health and Human Services (DHHS), and manufacturer's requirements in the use and reprocessing of all items.

PURPOSE

The SDM has a legal and ethical responsibility to prevent malfunctioning of devices within its scope and to provide safe patient care including the assurance that supplies, instrumentation, equipment, and implantable devices meet manufacturer, FDA and DHHS requirements.

POLICY

Categories of devices/items

Devices, instruments and other items are divided into three groups: (1) critical, (2) semi-critical, and (3) noncritical. The first two categories reflect definitions set forth in the Medical Device User Fee and Modernization Act of 2002 (MDUFMA), and all three reflect a classification scheme recognized in the industry.[1]

These categories of devices are defined as follows:

(1) A critical device or item is intended to contact normally sterile tissue or body spaces during use. Critical items used in the School of Dental Medicine include but are not limited to: surgical instruments, scalpels, needles, periodontal curettes and scalers, surgical burs, implant healing abutments and cover screws, and implant temporary abutments.

(2) A semi-critical device or item is intended to contact intact mucous membranes and not penetrate normally sterile areas of the body. Semi-critical items used by the SDM include but are not limited to: dental mirrors, amalgam condensers, handpieces, and implant impression copings.

(3) A noncritical device or item is intended to make topical contact and not penetrate intact skin. Noncritical items used in the School of Dental Medicine include but are not limited to: x-ray tube heads, lead aprons, pulse oximeters, blood pressure cuffs, and impression trays.

Single-use devices and items

With regard to reprocessing single-use devices (SUD), the Department of Health and Human Services (DHHS) states that "A reprocessed single-use device is defined as an original device that has previously been used on a patient and has been subjected to additional processing and manufacturing for the purpose of an additional single-use on a patient. The subsequent processing and manufacture of a reprocessed single-use device shall result in a device that is reprocessed within the meaning of this definition." [2]

The reprocessing of all critical and semi-critical devices and items used by the SDM is prohibited unless the item has been cleared for reprocessing by the FDA 510 (k) process (an approved 510 (k) on file with the FDA). The FDA with an approved 510 (k) process must clear critical and semi-critical devices previously thought to be exempt from FDA premarket submission. The 510 (k) outlines the appropriate validation data regarding cleaning, sterilization and functional performance of the device.

All devices used in the School of Dental Medicine must have an approved 510 (k) by the FDA and be cleared by the Director of Clinical Support Services, with the final approval for use and/or reprocessing by the Senior Associate Dean of Clinics and Professional Practice.

Limited-use, multi-use items, reusable and disposable items

Items used by SDM that are labeled limited-use, multi-use, or reusable are those items intended for more than one use. These items might be limited to reprocessing or use only a specified number of times according to manufacturer instructions. Limited-use, multi-use, or reusable items will be reprocessed as allowed through the FDA 510 (k) approval process and according to manufacturer's written recommendations for reprocessing.

Disposable items used in the facility that are labeled, "single-use" will NOT be reprocessed or reused. All devices must be appropriately discarded. Items that pose a bloodborne pathogen sharps injury may be placed in a sharps container.

Inspection

All items that are reprocessed according to manufacturer's instructions will be thoroughly inspected for obvious defects or damages prior to reprocessing. This includes, but is not limited to:

- Cracked or broken parts (broken tips)
- Broken or bent connectors/contacts
- Cuts, punctures, nicks, etc. on insulation
- Flaking of metal parts
- Inadequate removal of biological debris (inadequate cleaning process)

The person performing the disinfection, sterilization and/or reprocessing will be responsible for inspecting the items.

For additional information and specific requirements for device and instrument use, sterilization and dispensing see policy 7.6 Sterilization Processing and section 9.6 SDM Infection Prevention and Exposure Control Plan of the School of Dental Medicine Clinic Policies, Procedures and Information Manual. [3]

REVIEW AND APPROVAL

The members of the SDM Infection Control and Life Safety Committee and the Senior Associate Dean for Clinics and Professional Practice vet the SDM Single-Use, Limited-Use, Multi-Use, Reusable and Disposable Items policy. The SDM Operations Committee, Faculty Senate and SDM Executive Committee provide final approval. The policy is reviewed on an annual basis or sooner, as needed.

REFERENCES

[1] Spaulding, E.H., "The Role of Chemical Disinfection in the Prevention of Nosocomial Infections," P.S. Brachman and T.C. Eickof (ed), Proceedings of International Conference on Nosocomial Infections, 1970, American Hospital Association, Chicago, 1971:254-274.

[2] Federal Register: April 30, 2003 (Volume 68, Number 83 [Notices] Page 23139-23148,From the Federal Register Online via GPO Access [wais.access.gpo.gov] [DOCID:fr30ap03-63]

[3] School of Dental Medicine Clinic Policies. Procedures and Information Manual, http://www.ucdenver.edu/academics/colleges/dentalmedicine/FacultyResources/Documents/Clinic%20Policy%20and%20Procedure%20Manual%202016%20(11-16-16).pdf

10.3 In vitro Use of Animal Blood, Fluid or Tissue for Research or Teaching

Title:	**In vitro Use of Animal Blood, Fluid or Tissue for Research or Teaching**
Source:	**Clinical Affairs**
Effective Date:	**June 24, 2019**
Approval Date:	**July 10, 2019**

INTRODUCTION:

It is the intent of the University of Colorado School of Dental Medicine (SDM) to provide a safe and hygienic environment when using animal blood, fluid or tissue for research or teaching purposes.

"The Institutional Animal Care and Use Committee (IACUC) maintains oversight review for federally mandated rules and regulations with regard to animal research, ethics, misconduct and biomedical research for the University of Colorado Anschutz Medical Campus (CU Anschutz)." The IACUC recognizes the Animal Welfare Act, Public Health Service Policy on Humane Care & Use of Laboratory Animals, and the Guide to the Care & Use of Laboratory Animals. SDM will follow all policies and procedures required by the IACUC.

PURPOSE:

This policy will outline the SDM processes for acquisition, thawing, use and disposal of animal blood, fluid or tissue (animal parts) for SDM research or training. SDM personnel will follow the IACUC policy titled, "Fluid and Tissue Use" located on the University of Colorado Environmental Health & Safety (EHS) website, Laboratory Animal Resources, IACUC Protocol Policies section at this link:
http://www.ucdenver.edu/research/Research%20Administration%20Documents/Fluid-tissue%20use%20policy.pdf

POLICY and PROCEDURES:

Per the university Environmental Health and Safety (EHS) department, "Pathological wastes, such as carcasses, tissues and organs, may decay and create severe nuisance odors and attract pests and vermin. Pathological wastes and carcasses may not sit for longer than 24 hours at ambient temperatures." Do not allow animal parts to thaw at room temperature overnight, over weekends, or over holidays.

The university Multi-purpose Medical/Science Lab (MPL) in the Research 1 North building will receive, store, thaw and discard animal parts for the SDM. Faculty and researchers are required to use the MPL for teaching or research purposes involving animal parts. The Multi-purpose Medical/Science Lab (MPL) per their protocols may thaw animal parts at room temperature.

NOTE: On a rare occasion, SDM may use animal parts at the school. For example, laser training using animal parts will be conducted at SDM due to specific requirements for laser safety to include blocking of ambient laser light by specially made laser curtains.

Do not leave animal blood, fluid or tissue unattended. Leaving animal parts unattended is a violation of Colorado State and Federal regulations and is a finable offense to the generator (SDM). Staff must transfer animal parts to the MPL upon receipt or lock the parts in the SDM freezer or be in possession of the animal parts i.e. during a class, or while accessing for research. For instructions on transferring animal parts between the MPL and SDM see the section below, **_Lab set-up, clean up and animal part disposal_**.

Required Documentation

The form "Notice of In Vitro Use of Blood, Fluid or Tissue for Research or Teaching" must be completed for each use of animal parts whether for teaching or research purposes.
- The form is found at this link: http://www.ucdenver.edu/research/OLAR/Pages/Forms.aspx
- Look for IACUC Forms – Tissue, Blood, and Fluid in vitro Use Form.
- The form IS required for all uses of animal parts or products whether for teaching or research purposes.
- Send this notice to the IACUC Office (F489) or to Mark.Douse@cuanschutz.edu
- The form is used to describe the goals and justification for the blood, fluid or tissue use, including a narrative description of the product, source of the product, any hazardous material use, biosafety procedures and any permits that are required.
- Tissue obtained from a slaughterhouse must be described on this form.
- This form must be used for any sample from a USDA-covered species (all warm blooded vertebrate animals, excluding purpose bred mice and rats)
- Completion and submission of this form assures that the IACUC and veterinary staff are aware of the use of the animal blood, fluids or tissues on campus, and assures that occupational health concerns and other health and safety issues (e.g. storage, disposal, etc.) have been addressed.
- Keep a copy of the signed form.

NOTE: For research projects, per regulatory requirements, failure to comply with this policy may result in notification of your funding agency (e.g. NIH) and regulatory agencies (e.g. USDA) that your research has violated federal and/or local policies regarding the human use of animals. This notification may affect continuous funding of your animal-related research. Further, depending on the violation, you may be required to take additional training and/or your privilege to conduct animal research at CU Anschutz might be temporarily suspended or even completely revoked.

Required Training and Appropriate Lab Attire

The director, instructor, or lead researcher of the lab session must verify that participants of the lab session (staff, faculty, students, or residents) have completed the required MPL training prior to the lab session or class. MPL training consists of a safety training video that is located at https://www1.ucdenver.edu/docs/default-source/offices-oit-documents/ems/laboratory-safety-video.mp4?sfvrsn=80b86eb9_2

The MPL training requirement applies to the director, instructor or lead researcher, as well. The video may be uploaded to Canvas. Directors, instructors or the lead researcher are required to maintain proof that training was completed prior to the lab session. These documents must be maintained for 1 year beyond the expected graduation date for students and residents. For staff and faculty, the training documents must be maintained for 3 years.

The director, instructor or lead researcher must ensure that participants are wearing appropriate lab attire before entry into the MPL. Appropriate lab attire is required in the MPLs. At a minimum, anyone working in a laboratory or other technical work areas MUST wear closed-toe shoes and long pants (or long skirt/dress), so that skin between the pants (or skirt/dress) and shoes is not exposed. This requirement applies to the director, instructor or lead researcher, too. Appropriate lab attire is in addition to the required personal protective equipment requirements. See the ***Safety Protocols for Use of the Teaching Lab*** section below for a description of appropriate lab attire.

The director, instructor or lead researcher will conduct a brief review of safety procedures and the locations of safety equipment at the beginning of each lab session.

Ordering animal blood, fluid, or tissue (obtaining the items)

First, you must complete the University form: Notice of In Vitro Use of Blood, Fluid or Tissue for Research or Teaching if you have not already done so. See the ***Required Documentation*** section above.

To order pig feet, pig jaws, sheep heads or bovine mandibles, email your request to
Matt Sweeney
BPO Parts LLC
1331 Santa Fe Mtn. Rd.
Evergreen, CO 80439
Email: bpopartsms@gmail.com
Web address: http://www.bpopartsllc.com

- There may be a minimum number of parts required to order. For example, you only need 3 bovine mandibles, but BPO Parts requires that the minimum order be 5 mandibles.
- Keep a copy of your email request to indicate the full chain of custody.
- Requests for pig parts and bovine mandibles must be made at least 2 weeks in advance. More time may be necessary depending on the number of items requested.
- Departments generally order:
  - General Practice Residency (GPR) may order approximately 10 pig jaws for resident training.
  - Oral and Maxillofacial Surgery (OMFS) may order 60 pig feet for student training. Due to the larger volume of pig feet needed, you should notify BPO to begin to accumulate pig feet as early as several months before the date of the training; contact BPO to confirm.
  - Graduate Periodontics may order 5 to 9 pig jaws. They may order bovine jaws, sheep heads or pig snouts for resident training and research
  - Orthodontics may order parts for research.

Receiving and Storing Animal Parts

NOTE: The loading dock, conference rooms, offices, the Technique Lab, the Simulation Clinic, or any other location within SDM is NOT to be used for receipt of animal parts or thawing, storage, teaching or research without permission of the Senior Associate Dean of Clinics and Professional Practices.

Contact the Multi-Purpose Medical/Science Lab (MPL) at 303-724-0649 to notify them that the School of Dental Medicine (include department name) will be receiving animal parts and the expected delivery date. Provide a description and quantity of the animal parts. The MPL will receive, store for 1 week, thaw and discard animal parts for SDM. MPL staff will accept packages during normal operating hours (Monday-Friday 7:30 a.m. to 5 p.m.).

Verify with Alison Grice, Medical Teaching Lab Manager, or MPL Staff, that freezer space will be available at the MPLs for the quantity and size of animal parts you have ordered. See below for contact information. To transfer animal parts to the SDM freezer on the loading dock, if extra storage space is needed, see the ***Lab set-up, clean up and animal part disposal*** section below.

Have the animal parts delivered to
Research 1 North Room 1305
12800 East 19th Ave.
Aurora, CO 80045

For questions regarding MPL policies or procedures, please contact Alison Grice, Medical Teaching Lab Manager at 303-724-0649 or Alison.grice@cuanschutz.edu. The MPL manager has an office in RC 1 North in room 1305. The MPL manager also has an office in ED 2 North room 5113 with phone number 303-724-8110. The work cell phone number is 720-767-4123. You may reach MPL staff at MPLStaff@cuanschutz.edu.

Thawing animal parts

MPL staff can thaw the animal parts prior to the lab. Call the MPL staff 72 hours prior to scheduled lab time. (For example, the parts are needed on Monday; call the MPL staff no later than Wednesday of the prior week). MPL staff can store small packages needing refrigeration or freezing for up to 1 week prior to the class or event and up to 1 day after the class or event; otherwise, the animal parts will be discarded.

Scheduling a Multi-Purpose Medical/Science Lab (MPL) and supplies or equipment

A Multi-Purpose Medical/Science Lab must be scheduled through the EMS on-line room-scheduling program (Event Management System). The MPL are available 24 hours a day, 7 days a week excluding University closures; however, MPL staff operating hours are Monday-Friday from 7:30 a.m. to 5 p.m. When reserving an MPL, 72 business hours' notice is required. Other requested services may require additional notice.

All functions in Education Facilities, including MPLs, should begin at the scheduled time and end ten minutes before the scheduled end time (for example, a reservation of 10 a.m. to 11 a.m. includes in-lab time of 10 a.m. to 10:50 a.m.). This will allow the lab manager to set up for the next class or event. For information on after-hours access to an MPL, see the ***MPL Room Access*** section below. Supplies and equipment may be ordered through the EMS on-line scheduling program. For more information on supplies, equipment and storage, see the ***Supplies, Equipment, and Storage*** section below.

For questions regarding the EMS Web App scheduling program or classroom scheduling policies and procedures, contact tss.schedule@ucdenver.edu

Supplies, Equipment, and Storage

SDM departments may want to take their own supplies to the MPL. However, the MPL has disposable and non-disposable supplies and equipment that may be ordered through EMS for a charge. The prices are nominal and are shown in the EMS program. MPL supplies include aprons, masks, eyewear, gloves, and absorbent pad for the countertop, dissection trays, and sharps containers, among other supplies. The MPL manager can order any supplies not listed in the EMS system with advance notice; there will be a charge for the supplies or equipment.

NOTE: If SDM takes sharps containers to the MPL, the sharps containers **must** be left at the MPL for discarding. If your event would like to use the MPL sharps containers, the cost is $0.10 to $0.58 per container. DO NOT transport sharps containers (with sharps) back to SDM for disposal.

MPL staff will accept packages of supplies or equipment during normal operating hours (Monday-Friday 7:30 a.m. to 5 p.m.) at Research 1 North 12800 E. 19th Ave. Room 1305 Aurora CO 80045.

If your event requires that supplies be stored in the MPLs, storage time must be included in the room reservation request. This additional storage time cannot exceed ½ business day of normal MPL operation hours (M-F 7:30 a.m. to 5 p.m.) from the start of the event time. In addition to the advanced storage time, 30 minutes should be added at the end of the room request to allow for the removal of any large equipment. (Example, original reservation for March 3, 2017 in MPL 1409 at 10 a.m. to 12 noon. The new reservation that includes storage and removal time would be March 2, 2017 in MPL 1409 from 12 noon to 5 p.m. (through the night) and March 3, 2017 from 7 a.m. to 12:30 p.m.)

Please ensure that you have scheduled delivery and pick-up of any large equipment during your "new" reservation time. If your delivery is outside of normal operating hours, and you are unable to receive it yourself, please contact the MPL staff 72 hours prior to delivery to arrange to have someone on hand to accept your package. Additional fees will apply.

MPL staff are **not responsible** for the relocation of any large equipment required for your MPL room reservation. Please notify appropriate delivery personnel that they must deliver the equipment to the MPL.

- Requestors are responsible for ensuring their equipment, supplies and packages are out of the lab by end of the reservation time.
- Please contact MPL staff if your reservation extends past 24 hours to make additional arrangements for the storage of your items. MPL room storage is not guaranteed for extended events and is dependent on availability.
- Please contact MPL staff if any supply storage requires specific temperature conditions.

MPL Room Access

MPLs will be opened 15 min. before the reserved start time by medical teaching lab personnel. If additional set-up time is required, it must be included in the reservation time. Contact MPL staff if additional arrangements must be made regarding your reservation.

Access to the MPLs is restricted to personnel who have completed the required training and who are wearing appropriate laboratory attire. See the section above, ***Required Training and Appropriate Lab Attire***.

Additional information for lab access is necessary for after-hours or weekend requests; therefore, after-hours and weekend requests must be submitted at least 72 business hours in advance, or they may be denied. In EMS, please request "Room Access" under the "Police" option and make a statement to have rooms unlocked or locked based on your scheduled event time, if your event time is outside of normal MPL staff operating hours that are Monday-Friday from 7:30 a.m. to 5 p.m.

If a weekend event is taking place, please email Alison.grice@cuanschutz.edu and betty.charles@cuanschutz.edu with the name of the instructor (and university ID number) who will need access to the labs to see if temporary badge access can be granted during your specific

reservation time. Also, include the reservation time plus 15 min. under the police section of the EMS scheduling system. The police will unlock and relock the lab doors after hours. For example, your reservation time is 6 p.m. to 10 p.m. on a Saturday. Your note under the police section of the EMS scheduling system, should read, "Please unlock room 15 min. prior to event and lock room after event time".

There is an additional charge to use the MPL if you are using for an outside agency as the campus only supports the use of university space for campus related educational activities.

Lab set-up, clean up and animal part disposal

In the event that additional freezer space is needed for storage of animal parts prior to thawing and the parts have been delivered to the MPL:
- Obtain a cart from SDM and go to the MPL
- Place the extra animal parts in black plastic bags; no more than 40 lbs. for each bag
- Obtain a yellow biohazard bin from the MPL
- Place the bags into the yellow biohazard bin with the lid closed (if the original container with the animal parts will fit into the yellow biohazard bin, place the original container in a black storage bag and place it into the yellow biohazard bin, close the lid)
- Place the yellow biohazard bin onto the cart
- Transport the bin to the SDM freezer on the loading dock and place the bags into the freezer
- Return the empty yellow biohazard bin to MPL
- Use a similar process with a yellow biohazard bin to return the animal parts to the MPL for thawing, use and disposal

If the MPL does not have enough room to store animal parts for disposal after use, follow the process above to transfer the animal parts to SDM and follow the section below titled ***Discarding after use in the rare occurrence that animal parts are used or stored at SDM***.

There is a charge for MPL staff time to set-up and clean up the lab(s). For small classes with minimal lab set-up and clean up (15 minutes or less), the staff charge may be waived. If it takes the MPL more than 15 minutes to get items ready for your class, then there is a charge ($22.50/30 minutes.) At any time that a lab is not cleaned up after use by the participants, a minimum 30-minute staff charge will apply ($22.50/30 minutes).

It is the expectation of the MPL that the lab will be left in a clean and orderly manner. Follow the requirements below regarding lab clean up and animal part disposal. It is best to use the MPL PPE supplied.

- Dispose of all sharps into sharps containers immediately after use.
- Dispose of all animal tissue, body parts, and organs in a black trash bag provided by MPL staff.
- Place the black trash bag in the yellow biohazard bin if samples are NOT to be saved for future use.

- Keep the bag weight to what can be comfortably lifted. Bag weight cannot exceed 40 lbs. Ask MPL staff for additional bags if needed.
- Tie the top of the bag in a double knot.
- MPL staff will arrange for disposal.
- Place disposable PPE into the red biohazard waste step-can.
- Place trash into the trash container.
- Wipe down all work surfaces with provided disinfectant.

Safety Protocols for Use of the Teaching Lab

The MPL are Biosafety Level 2 Laboratories (BSL). BSL 2 is suitable for work involving agents that pose moderate hazards to personnel and the environment. Specific safety precautions must be followed.

- Appropriate lab attire is required in the MPLs. At a minimum, anyone working in a laboratory or other technical work area MUST wear closed-toe shoes and long pants (or long skirt/dress), so that skin between the pants (or skirt/dress) and shoes is not exposed.
- Personal Protective Equipment (PPE) to include aprons or gowns worn over clothing, masks, eyewear and gloves must be worn during procedures, during set-up of the laboratory (manipulation of animal parts), and during clean up.
- Remove PPE and wash hands before leaving the laboratory areas. Place disposable PPE in the red biohazard step-can.
- Wear protective eyewear when conducting procedures that have the potential to create splashes of microorganisms or other hazardous materials. Know where the eyewash station is located.
- Gloves must be worn to protect hands from exposure to hazardous materials. Change gloves when contaminated, glove integrity is compromised, or when otherwise necessary.
- Remove gloves and wash hands and non-disposable PPE (eyewear) when work with hazardous materials has been completed and before leaving the laboratory.
- Do not wash or reuse disposable gloves. Dispose of used gloves with other contaminated laboratory waste (not the animal parts) in the red biohazard step-can.
- Follow CDC recommended handwashing protocols.
- <u>Persons must wash their hands after working with potentially hazardous materials and before leaving the laboratory.</u>

For more information on the requirements for personal protective equipment, access this link, http://www.ucdenver.edu/research/EHS/RS/compliance/Pages/Personal%20Protective%20Equipment.aspx

- Lockers are available for storage of personal belongings. Personal belongings are not allowed in the MPL.
- Eating, drinking, smoking, handling contact lenses, applying cosmetics, and storing food for human consumption is not permitted. Food and drinks must be stored outside the laboratory area in cabinets or refrigerators designated and used for this purpose.

- Mouth pipetting is prohibited: mechanical pipetting devices must be used.
- Careful management of needles and other sharps are of primary importance. Needles must not be bent, sheared, broken, recapped, removed from disposable syringes, or otherwise manipulated by hand before disposal.
- Used disposable needles and syringes must be carefully placed in conveniently located puncture-resistant sharps containers used for sharps disposal.
- Non-disposable sharps must be placed in a hard-walled container for transport to a processing area for decontamination, preferably by autoclaving. Return to SDM.
- Broken glassware must not be handled directly. Instead, it must be removed using a brush and dustpan, tongs, or forceps. Plastic ware should be substituted for glassware whenever possible.
- Perform all procedures to minimize the creation of splashes and/or aerosols.
- Decontaminate work surfaces after completion of work and after any spill or splash of potentially infectious material with appropriate disinfectant.

Incidences or occurrences

Incidents that may result in exposure to infectious material must be immediately evaluated and treated according to procedures described in the MPL laboratory biosafety manual. Medical evaluation, surveillance, and treatment should be provided and appropriate records maintained.

For incidents that involve a medical emergency or event, provide first aid or CPR, based on the type of incident. First aid kits are located near the sinks in every MPL. Emergency trauma kits are located in every MPL and are to be used in the event of severe bleeding or trauma. If these trauma kits are opened, the room will be placed in lock down and University Police will be dispatched. Blue strobe lights will become active. See the link for more information: http://www.ucdenver.edu/anschutz/about/location/Police/CampusSafety/Pages/Active-Shooter-Info.aspx

An AED is located near the rest rooms. Contact University Police at 303-724-4444 from a cell phone or landline if a situation requires further medical intervention. You may also contact 911. MPL staff have medical training and can aid if available.

Report any incidents of microbiological breach or other event to the MPL lab manager, to the Dental School Director of Quality and Patient Safety, to the School of Dental Medicine Clinical Dean, and to the University Risk Manager.

Other Safety Requirements

Pets are not permitted in the MPL. Service animals require prior approval from Disability Resources and Services. For additional information, please visit http://www.ucdenver.edu/student-services/resources/disability-resources-services/Pages/disability-resources-services.aspx

http://www.ucdenver.edu/student-services/resources/disability-resources-services/accommodations/Pages/service-animals.aspx

MPLS are equipped with Anschutz campus security features. For more information, access these links
https://www.cuanschutztoday.org/new-security-measures-cu-anschutz/

http://www.ucdenver.edu/anschutz/about/location/Police/CampusSafety/Pages/Active-Shooter-Info.aspx

Volunteer, trainees (other than students and residents) and minors require additional forms and approval prior to participating or being in an MPL. For additional information see,
https://www.cu.edu/risk/volunteer-trainee-and-minor-participants

http://www.ucdenver.edu/research/Research%20Administration%20Documents/Admittance%20of%20Minors%20to%20Hazardous%20Areas%20-%20NIH%20Document.pdf

Discarding after use in the rare occurrence that animal parts are used or stored at SDM

Dissection trays are located in the freezer on the loading dock.

Animal parts are cremated after use under the direction of University EHS (Environmental Health and Safety). EHS sends a biweekly email to SDM every other Friday asking whether animal parts disposal is needed. Respond to this email with the number of bags and description of the contents. Pick-up occurs on the next Wednesday morning. EHS coordinates all aspects of the pickup.

When animal parts are used or stored for disposal at SDM, always route communication about animal parts cremation through EHS. You may call EHS at 303-724-0111 or 303-724-0345 and leave a message or email biowaste.disposal@cuanschutz.edu

EHS will take any animal carcass, tissue, blood or fluid that does **not** contain chemicals, compounds, or drugs that are not suitable for your pet. This is called a non-hazardous carcass. Anesthetics, analgesics, chemotherapeutics, pharmaceuticals, and surgical implants are acceptable.

- Remove all sharps from the animal tissue/parts. Sutures may be left in the animal parts.
- Place the parts in a large <u>black</u> trash bag. Tie the top of the bag in a double knot. The black trash bags are located in the freezer on the loading dock.
- Weigh the bag on the loading dock scale. The bag must not weigh more than 40 lbs.
- Label each bag with a "Pet Cremation Services" bag tag (located on the side of the freezer)

- Write SDM as the clinic name and the weight of the bag. In the "Pet Name" area, write the bag # (for example, bag #1 or bag #2). Leave the "Owner Name" section blank.
- Leave the date blank. EHS will complete the date section and the rest of the bag tag on the day of pick-up.

- Start a Pet Cremation Services manifest (located on the side of the freezer).
    - EHS will complete the manifest # and pick-up date. Circle or write in the Location Name with SDM. Circle or write in Anschutz and enter the phone # of the person who packaged the bags.
    - List each bag (Bag #1, Bag #2, etc.) and the bag contents of each bag (pig jaws, etc.). EHS will complete the weight column.
    - Leave the manifest in the document holder on the side of the loading dock freezer.
    - EHS will complete the rest of the manifest including the University Signature.
    - EHS will coordinate the pick-up by PCS and the signature of the PCS Driver.

- Place the black trash bag in the freezer located on the dock. The freezer must be kept locked. The SDM warehouse staff maintains the key to the freezer. EHS also has a key to the freezer.
- After pick up, EHS will scan the completed manifest and return the original to the SDM contact. Keep this copy of the manifest to indicate SDM chain of custody.
- Disposal of animal parts used for teaching or training is $0.79 per bag at 30-40 lbs. Disposal of parts used for research purposes is billed to the SPO (Standing Purchase Order).
- To order blank manifests or bag tags, call EHS Biowaste at 303-724-0345 or email biowaste.disposal@cuanschutz.edu.
- If you have questions, call Biowaste at 303-724-0345 or email biowaste.disposal@cuanschutz.edu. You may also call 303-724-0111 or email mark.garcia@cuanschutz.edu.

Inventory and Biohazardous signage

SDM Support Services will maintain an inventory of animal parts stored in the SDM loading dock freezer.

The freezer will be marked with appropriate biohazardous signage. Contact information including emergency contact information will be posted on the freezer.

REFERENCES:

IACUC policy titled, "Fluid and Tissue Use" located on the University of Colorado Environmental Health & Safety website, Laboratory Animal Resources, IACUC Protocol Policies section at this link:
http://www.ucdenver.edu/research/Research%20Administration%20Documents/Fluid-tissue%20use%20policy.pdf

Multi-purpose Teaching Lab policies

ACCOUNTABILITY:

All faculty, staff, residents and students are responsible for the safety of our school, SDM individuals, and patients. All individuals are responsible for reading and following this policy.

AUTHORITY:

The Sr. Associate Dean of Clinics and Professional Practice, the faculty responsible for the research project or teaching, directors, managers, and supervisors have the authority to enforce this policy per University policy, professional practice, and community standards.

REVIEW AND APPROVAL:

The Sr. Associate Dean of Clinics and Professional Practice, the Operations Committee, Faculty Senate and SDM Executive Committee grant final approval of this policy. The policy is reviewed on a triennial basis or sooner, as needed.

10.4 Use of Protective Stabilization

Title: **Use of Protective Stabilization**
Source: **Clinical Affairs**
Effective Date: **November 2019**

INTRODUCTION:

It is the intent of the University of Colorado School of Dental Medicine (SDM) to provide safe, quality, timely and effective dental care to a broad range of patients in an educational setting. For some patient populations, this necessitates the use of protective stabilization with a device or immobilization by another person.

Note: protective stabilization was formerly known as medical immobilization or physical restraint.

PURPOSE:

Protective stabilization is used primarily with our special needs patient population when patient or personnel safety are of concern. Protective stabilization is also used when a patient interferes with treatment or has a need for protective intervention. "Protective stabilization is an advanced behavior guidance technique which must be integrated into an overall behavior guidance approach that is individualized for each patient…"

DEFINITIONS:

Per the State of Colorado, protective stabilization is "any manual method, physical, or mechanical device, material, or equipment that immobilizes or reduces the ability of a patient to move his or her arms, legs, torso, or head freely…" Protective stabilization may involve active and/or passive stabilization.

Active stabilization involves restraint by another person, such as a parent/guardian, dentist or dental staff. This may include hand holding, head guarding, and therapeutic holding.

Passive stabilization involves the use of a restraining device such as a papoose board or mouth prop.

POLICY:

Prior to using protective stabilization, the dentist will consider the patient's oral health needs, effect on quality of dental care, and emotional and cognitive development levels as it relates to the patient's ability to understand and cooperate during dental treatment. The dentist will also consider the patient's medical and physical conditions, parental or legal guardian preferences,

and previous unpleasant and/or painful medical or dental experiences. The dentist will consider using an alternative, less restrictive, behavior guidance method.

Use of protective stabilization has the potential to produce serious consequences, such as physical or psychological harm, loss of dignity, and violation of a patient's rights. Protective stabilization must not cause serious or permanent injury to the patient. The patient must experience the least possible discomfort.

The dentist or parent/legal guardian only may perform protective stabilization. Dental hygienists and dental assistants may not use protective stabilization by themselves, but may assist the dentist.
If protective stabilization includes a head hold, this technique is activated last.

Indications

1. The patient requires immediate diagnosis and/or urgent limited treatment and cannot cooperate due to emotional and cognitive developmental levels, lack of maturity, medical and physical conditions, or some combination thereof.
2. Emergent care is needed and uncontrolled movements risk the safety of the patient, staff, dentist, or parent/guardian.
3. A previously cooperative patient quickly becomes uncooperative during the appointment and protective stabilization is necessary to protect the patient's safety and to help expedite the completion of treatment already initiated.
4. A sedated patient becomes uncooperative during treatment (a specific informed consent for stabilization is not required).
5. A patient with special health care needs experiences uncontrolled movements that significantly interfere with the quality of care.

Prohibitions for protective stabilization

Protective stabilization will not be used for
   1. A cooperative, non-sedated patient.
   2. A patient who cannot be stabilized safely due to associated medical, psychological, or physical conditions.
   3. A patient with a history of physical or psychological trauma due to restraint (unless there are no alternatives).
   4. A patient with non-emergent treatment needs in order to accomplish full mouth or multiple quadrant dental rehabilitation.
   5. Protective stabilization should not be used as a means of discipline, convenience, or retaliation.
   6. Protective stabilization should not induce pain for the patient.

Informed consent for protective stabilization and consent documentation

A general consent to treat and a separate consent for protective stabilization will be obtained. The consent process must include a review of the benefits and risks of using protective stabilization, as well as alternative behavior guidance techniques such as deferring treatment, utilizing sedation or general anesthesia. The protective stabilization consent will include the reason for the protective stabilization, the specific technique of protective stabilization, and must be obtained separately from the consent for the procedure as it increases the parent or guardian's awareness of the protective stabilization procedure. The protective stabilization informed consent discussion, when possible, should occur on a day separate from the treatment and the practitioner should avoid downplaying the risks involved with protective stabilization. If possible, include the patient in the informed consent discussion with an opportunity for the patient, parent or legal guardian to ask questions and receive answers.

At times, the parent/legal guardian or medical proxy are not present for the informed consent discussion and completion of the treatment plan. In these cases, the "Special Care Supplemental Treatment Plan Consent (Under Traditional Treatment Setting Only)" will be completed. The form and an explanatory letter are sent to the parent, guardian or medical proxy who must agree to the treatment plan stated on the Special Care Supplemental Treatment Plan Consent prior to appointment scheduling. The Special Care Supplemental Treatment Plan Consent supplements the original treatment plan consent. The signed document is scanned to the electronic health record.

This document also outlines financial considerations and includes an additional consent. The additional consent addresses instances where a person who is not the parent/legal guardian or medical proxy accompanies the patient to the appointment. This section is intended to obtain approval for this person to consent to an altered treatment plan. If approval is not obtained, there are a few choices enumerated on the form to include rescheduling the appointment.

Consent during protective stabilization

The dentist must be in regular communication with the patient's parent or caregiver during the protective stabilization episode. Consent for continued stabilization must be obtained at least once per hour.

If the protective stabilization technique changes during the procedure due to a change in the patient's behavior the parent or legal guardian shall be notified, consulted immediately, and verbal consent documented for continuing treatment.

Access to the patient

The parent, legal guardian or caregiver must be allowed access to the patient during episodes of protective stabilization unless the health and safety of the patient, parent or legal guardian or dental team would be placed at risk. The dentist must inform the parent or legal guardian of the

reason access to the patient is denied. Document the incident of denial and the reason for the denial in the patient's electronic health record.

The parent or legal guardian has the right to terminate the use of protective stabilization at any time if he/she believes the person may be experiencing physical or psychological trauma due to immobilization.

If a patient begins to experience severe emotional distress, hysterics, or is uncontrollable, protective stabilization must be terminated as soon as possible.

Precautions

Patients placed in a rigid device may overheat during the dental procedure. Patients must never be unattended to prevent the patient from rolling out of the chair. Protective stabilization devices may compromise airway patency, especially in young children or sedated patients

Documentation

If a parent or legal guardian declines the use of protective stabilization, document the incident of declination and the reason for the declination in the patient's electronic health record. Use the SDM "Against Urgent Medical or Dental Advice" form.

The following elements related to protective stabilization will be included in the patient's electronic health record:
- Indication for stabilization
- Type of stabilization utilized and by whom, including parent or guardian
- Signed informed consent for protective stabilization
- Reason for parental/guardian exclusion during the episode of stabilization
- Duration of application of stabilization including start time and end time
- Status of airway, peripheral circulation, and proper positioning of the stabilization device or method at least every 15 min. throughout the duration
- Cooperation evaluation level during the visit (Frankl Scale, 0 to 6)
- Any unexpected outcomes, such as skin markings
- Whether the parent/guardian, if not present in the room, was given progress updates at least once per hour
- Documentation of continued stabilization at least once per hour
- Documentation of verbal consent from parent or legal guardian to change the type of stabilization technique during the procedure, as necessary
- Management implications of future appointments
- Oral sedation to include the reason for oral sedation, person prescribing the oral sedation, name and amount of oral sedation.
- Any additional behavior management techniques used will be documented in the electronic health record, such as:
- Tell, Show, Do

- Counting
- Singing
- Speaking slowly
- Positive reinforcement
- Teach basic skills, not the concept
- Other

The electronic health record will include the plan for the next visit.

Training

Dentists must successfully complete training beyond basic dental education through either:
1. A continuing education course of no less than 6 hours in advanced behavior management that involves both didactic and demonstration of components of protective stabilization.
2. A residency or graduate program that contains content and experiences in advanced behavior management

Equipment, Cleaning and Disinfection of protective stabilization devices

Protective stabilization devices will be cleaned and disinfected using SDM approved disinfecting wipes. Metal mouth props will be cleaned and sterilized per SDM protocol.

REFERENCES:

State of Colorado Department of Regulatory Agencies, Colorado Dental Board 3CCR 709-1, Dentists and Dental Hygienists, Rule XV. Pediatric Case Management and Protective Stabilization.

Guidelines on Behavior Guidance for Pediatric Dental Patient, American Academy of Pediatric Dentistry (AAPD), Clinical Affairs Committee – Behavior management Subcommittee, Council on Clinical Affairs review council, adopted in 1990, revision 2015, page 180, V 3, no. 6 15/16.

Guideline on Informed Consent, American Academy of Pediatric Dentistry (AAPD), Council on Clinical Affairs, review council, revision 2015, page 351.

Guidelines on Protective Stabilization for Pediatric Dental Patients, Council on Clinical Affairs, originating council, adopted 2013, page 199.

ACCOUNTABILITY:

All faculty, staff, residents and students are responsible for the safety of our patients. All individuals are responsible for reading and following this policy.

AUTHORITY:

The Sr. Associate Dean of Clinics and Professional Practice, the faculty responsible for patient care, directors, managers, and supervisors have the authority to enforce this policy per professional practice and community standards.

REVIEW AND APPROVAL:

The Sr. Associate Dean of Clinics and Professional Practice, the Operations Committee, Faculty Senate and SDM Executive Committee grant final approval of this policy. The policy is reviewed on a triennial basis or sooner, as needed.