Condensed Self-Study Report of University of Colorado

University of Colorado

Skaggs School of Pharmacy and Pharmaceutical Sciences

Mailstop C238

12850 East Montview Boulevard

Aurora

Colorado - 80045

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University of Colorado

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

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Departmental/Divisional Structure

Central Administration (Administration)
Department of Clinical Pharmacy (DOCP)
Department of Pharmaceutical Sciences (DOPS)

Branch/Distance Campus

Main Campus

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University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

College or School's Overview

College or School's Overview (since last comprehensive on-site evaluation)

(School comments begin here)

Mission, Planning, and Evaluation

2014 revision of mission, vision, values, goals (MVVG) and development of new strategic plan (SP; 2015-20) occurred both *via* broad-based effort including internal (faculty, staff, students) and external stakeholders (alumni, preceptors, pharmacy leaders). SP has 7 strategic initiatives with key performance indicators, timelines and responsible individuals. Concurrently, developed new comprehensive Programmatic Evaluation Plan that monitors achievement of mission and SP goals, operational and curricular effectiveness. Hired new director of assessment to lead programmatic assessment.

Organization and Administration

UC Denver is accredited by HLC through 2020-21. Administration of UC Denver and Anschutz Medical Campus (AMC) re-organized in 2015; appointed a permanent AMC Chancellor which we welcome. Revised faculty governance bylaws to more closely conform to Regent policy. Greater faculty engagement in school governance including all committee chairs, development of MVVG, SP and self-study preparation. Leadership team enhanced with new administrative positions filled by external (associate dean professional education, director experiential programs (replacement), assessment director, student academic coordinator, admissions/recruitment director) and internal candidates (associate dean academic affairs (replacement), associate dean research, associate dean administration & operations, assistant dean clinical affairs). Greater collaboration with external partners especially in clinical services, e.g., University Physicians, Inc., with additional funded faculty positions.

Curriculum

Four key developments: (i) *PharmD curriculum renewal* is in its final year (2015-16). Improvement examples: increased prerequisites allowed pharmacy courses to begin in first semester; more active and self-learning methodologies; required research component; purposeful alignment of IPPEs and didactic courses; advanced IPPE (aIPPE) in P3 spring to prepare students for P3 capstone and assure students prepared for content, patient interactions, drug information, clinical decision-making before APPEs; feedback on aIPPE uniformly positive. (ii) International PharmD (*ITPD) program* started summer 2014 following ACPE approval in January 2014; second cohort of students began summer 2015. (iii) To assure curricular effectiveness, a *more comprehensive curriculum assessment process* developed and implemented involving course directors, assessment and curriculum committees with annual course reviews and reapprovals. (iv) *To enhance quality assurance, experiential programs office* hired 3 outreach coordinators to visit, evaluate and track student feedback on sites; low scoring sites removed if improvements not made.

Students

Greatly increased student involvement via representation on committees (assessment, admissions, curriculum, experiential, ethics, executive) and opened numerous avenues for communications (Deans Student Advisory Cmt, faculty liaison program, focus groups, online evaluations, others); increased

student development support; additional Student Services personnel; new academic improvement plan for students with academic challenges including tutoring and other support services; secured improved dedicated space for pharmacy students in Ed2N building; secured university malpractice insurance coverage for student organization activities; established BSMS program; host student-faculty lunches each semester; support new campus student health and wellness services center.

Faculty and Staff

Increased faculty numbers to 79 (46% increase since 2009) and comparable (47%) increase in all support staff positions. Improved interactions between departmental faculty though mentoring, training, seed grant programs; faculty retreats; curriculum renewal and integrated courses.

Facilities and Resources

Moved into new building in 2011; houses all faculty, staff, administrative offices, including Student Services, Experiential Programs, Distance Degree Programs, IT and research labs. Renovated PCLC to accommodate student lab needs; added more computers to allow half the class to access computers for quizzes/exams. Secured online library access for preceptors in 2014. Increased preceptor training through online programs – orientation, expectations, training programs, resources, Pharmacists Letter; and increased site monitoring through outreach coordinators (see above). New modified RCM budgeting model in 2015; state funding remains low but overall budget picture improved vs. last accreditation review with sufficient reserves to weather a low budget year or other anomaly; developing alternative sources of revenues such as fee-for-service contracts, billing for clinical services, partnering with clinics to meet ACA outcomes.

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

Summary of the College or School's Self-Study Process

Summary of the College or School's Self-Study Process

(School comments begin here)

Our self-study involved the participation of faculty, staff, students, alumni, and other internal (e.g., provost) and external stakeholders and members of the practice community. The final, submitted document is a testament to their contributions and hard work. As dean, I did not write one 'original' word of the self-study narratives although I did provide feedback and edits in the later stages of self-study review.

The Associate Dean for Academic Affairs (ADAA) (Dr. D. Thompson) was given responsibility for overseeing the development and creation of the self-study submission. The self-study started formally in August 2013 when the Dean and the ADAA attended the ACPE self-study workshop in Chicago. A preliminary time-line and plan for the accreditation self-study was developed shortly thereafter by the Dean and Associate Deans. In late August, initial self-study committees based on the six accreditation areas (Mission, Planning & Evaluation; Organization & Administration; Curriculum & Assessment; Students; Faculty & Staff; Facilities & Resources) were established, with faculty members' preferences for group assignment being taken into account when being assigned to a self-study committee. As such, all faculty members (as of the January 2014 retreat) were involved in these committees. Student, staff, alumni and external stakeholder members were then recruited, as appropriate. The steering committee was established and comprised the dean, ADAA (chair), provost, self-study group chairs (6), student volunteers (6), alumni (2) and external pharmacist stakeholders (6) (several of whom were also preceptors). Steering committee members were subdivided into the six accreditation areas, to allow more efficient review of self-study materials. In September 2013, the first meetings of the steering committee were held. In October 2013, the ADAA met with the Student Council to discuss the self-study. Self-study committees were asked to review the accreditation self-assessment check-list for each standard and list evidence that supports their estimation of the status of our school in each, identify any areas that needed improvement and propose how deficiencies could be resolved. At the 2014 January faculty retreat (attended by Dr. Greg Boyer by invitation), each self-study group presented the status of each standard and received feedback from the faculty. Where deficiencies were identified, our faculty developed plans for improvement (that were implemented in 2014). At faculty forums and meetings in 2014, each self-study group submitted reports and presented the status of progress on each standard including resolution of deficiencies and identification of data that were needed. All faculty members had the opportunity to provide feedback at these meetings. The reports were provided to the steering committee sub-group members for feedback that was then provided to each group to facilitate the development of a rough, bare-bones draft of the narrative. After review and revision by the ADAA, these initial narratives were returned to the groups. The ADAA tracked and began to retrieve data/ evidence that was needed for each narrative. At the January 2015 faculty retreat, self-study group chairs briefly presented the status of each standard to the faculty and then each group worked to create a rough first draft of the narrative. These narratives were provided to steering committee members (as appropriate). As the ADAA edited the first drafts, steering committee feedback was incorporated into a second draft and appendices for each standard were developed. These narratives were made available to the faculty for review *via* posting on our school's server. Feedback from faculty was incorporated into final narratives; the narratives were then edited for length for submission. The faculty approved the self-study on August 6, 2015 and the self-assessment on August 14, 2015.

The self-study represents an effort that involved all of our faculty members, and representatives from our students, alumni, preceptors, and internal and external stakeholders.

Summary of Compliance Status

Standards	Compliant	Compliant With Monitoring	Partially Compliant	Non Compliant
Mission, Planning, and Evaluation				
1. College or School Mission and Goals	✓			
2. Strategic Plan	✓			
3. Evaluation of Achievement of Mission and Goals		✓		
Organization and Administration				
4. Institutional Accreditation	✓			
5. College or School and University Relationship	✓			
6. College or School and Other Administrative Relationships	✓			
7. College or School Organization and Governance	✓			
8. Qualifications and Responsibilities of the Dean	✓			
Curriculum				
9. The Goal of the Curriculum	✓			
10. Curricular Development, Delivery, and Improvement.	✓			
11. Teaching and Learning Methods	✓			
12. Professional Competencies and Outcome Expectations	✓			
13. Curricular Core - Knowledge, Skills, Attitudes and Values	✓			
14. Curricular Core - Pharmacy Practice Experiences	✓			
15. Assessment and Evaluation of Student Learning and Curricular Effectiveness		✓		
Students				
16. Organization of Student Services		✓		
17. Admission Criteria, Policies, and Procedures	✓			
18. Transfer of Credits and Waiver of Requisites for Admission with Advanced Standing	✓			
19. Progression of Students	✓			
20. Student Complaints Policy	✓			
21. Program Information	✓			
22. Student Representation and Perspectives	✓			
23. Professional Behavior and Harmonious Relationships		✓		
Faculty and Staff				
24. Faculty and Staff - Quantitative Factors	✓			
25. Faculty and Staff - Qualitative Factors	✓			
26. Faculty and Staff Continuing Professional Development and Performance Review	✓			
Facilities and Resources				
27. Physical Facilities	✓			
28. Practice Facilities	✓			
29. Library and Educational Resources	✓			
30. Financial Resources	✓			

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

1. College or School Mission and Goals

The college or school of pharmacy (hereinafter "college or school") must have a published statement of its mission, its goals in the areas of education, research and other scholarly activities, service, and pharmacy practice, and its values. The statement must be compatible with the mission of the university in which the college or school operates. These goals must include fundamental commitments of the college or school to the preparation of students who possess the competencies necessary for the provision of pharmacist-delivered patient care, including medication therapy management services, the advancement of the practice of pharmacy and its contributions to society, the pursuit of research and other scholarly activities, and the assessment and evaluation of desired outcomes.

2. College or School's Self-Assessment

The college or school has a published statement of its mission; its long-term goals in the areas of education, research and other scholarly activities, service, and pharmacy practice; and its values.	Satisfactory
The mission statement is compatible with the mission of the university in which the college or school operates.	Satisfactory
The college or school's vision includes the development of pharmacy graduates who are trained with other health professionals to provide patient care services as a team.	Satisfactory
The college or school's vision and long-term goals include fundamental commitments of the program to the preparation of students who possess the competencies necessary for the provision of pharmacist-delivered patient care, including medication therapy management services, the advancement of the practice of pharmacy and its contributions to society, the pursuit of research and other scholarly activities, innovation, quality assurance and continuous quality improvement, and the assessment and evaluation of desired outcomes.	Satisfactory
The college or school's vision and goals provide the basis for strategic planning on how the vision and goals will be achieved.	Satisfactory
For new college or school initiatives, e.g., branch campus, distance learning, or alternate pathways to degree completion, the college or school ensures that: • the initiatives are consistent with the university's and the college or school's missions and goals • the same commitment to the instillation of institutional mission and academic success is demonstrated to all students, irrespective of program pathway or geographic location • resources are allocated in an equitable manner	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ How the college or school's mission is aligned with the mission of the institution

☑ How the mission and associated goals address education, research/scholarship, service, and practice and provide the basis for strategic planning

☑ How the mission and associated goals are developed and approved with the involvement of various stakeholders, such as faculty, students, preceptors, alumni, etc.

☑ How and where the mission statement is published and communicated

☑ How the college or school promotes initiatives and programs that specifically advance its stated mission

☑ How the college or school supports postgraduate professional education and training of pharmacists and the development of pharmacy graduates who are trained with other health professionals to provide patient care as a team

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

The mission statement of the Skaggs School of Pharmacy & Pharmaceutical Sciences (SSPPS) is: *We are committed to excellence and innovation in professional, graduate and postgraduate education; scholarship and research; patient-centered care; public health advocacy; and societal leadership and engagement.* This aligns well with the missions of the campus, *viz. The University of Colorado Denver (UCD) Anschutz Medical Campus (AMC) is a diverse teaching and learning community that creates, discovers and applies knowledge to improve the health and well-being of Colorado and the world* (**1.2.1**) and the University of Colorado system, *viz. The University of Colorado is a public research university with multiple campuses serving Colorado, the nation, and the world through leadership in high-quality education and professional training, public service, advancing research and knowledge, and state-of-the-art health care* (**1.3.1**). The threads of education, research, patient care, and service to the community clearly emanate from all of these missions.

The mission, vision, values and goals (MVVG) of SSPPS are published on our website (MVVG) and, thus, are accessible to all internal and external constituents and stakeholders. In addition, the mission is included in student and preceptor handbooks and emphasized in faculty letters of offer, and posted prominently in the SSPPS building.

The mission and goals of SSPPS (**1.1.1**) directly address our school's areas of responsibility as a progressive school of pharmacy in relation to education (professional, graduate and postgraduate), scholarship and research, and service and leadership. Each goal is aspirational and long-term (perpetual), and serves as a basis for our revised strategic plan (**1.3.2**). Our school's MVVG statement was created and then followed by development of the new strategic plan. Hence, each section of the strategic plan has been developed to achieve some aspect of each goal and includes objectives and key performance indicators that can be completed in a finite period of time (1-5 years).

Revision of our school's MVVG started at the January 2013 faculty retreat. Draft documents were revised based on feedback provided by our faculty (at forums and meetings), the self-study steering committee (comprising external stakeholders and alumni), and students from professional and graduate programs. The resultant second draft documents were presented to internal (students and staff) and external (alumni, preceptors, pharmacy leaders) stakeholders for feedback. Further modifications were then made to the drafts based on stakeholder comments and feedback from the accreditation steering

committee. Final drafts of the MVVG and strategic plan were developed with final feedback from faculty and approved by our Faculty Senate on January 9 and 20, 2015, respectively.

Our school makes concerted efforts to achieve its mission through strategic use of its resources to support its faculty, staff, students and alumni. Each faculty member receives annual funds for professional development. Special funding is provided to our associate deans to assist them in advancing our mission areas (**1.3.3**). Recruitment of promising NIH-funded faculty candidates includes substantial start-up packages to ensure our research enterprise continues to flourish. Clinical enterprises (which provide clinical faculty practice and student experiential training sites) are supported through the funding of Department of Clinical Pharmacy (DOCP) faculty lines, collaborative partnerships with University of Colorado Hospital (UCH) and health systems, and the recent establishment of positions for an Assistant Dean for Clinical and Professional Affairs and an Assistant Director of Clinical Affairs. As our school's annual budget is being developed, Executive Committee members are asked by the dean for strategic ideas that should be included (together with justification and cost) in the budget to meet our mission and strategic plan. Budget requests are prioritized based on their capacity to fulfill goals of the strategic plan and their cost relative to funds available.

Our school has a strong commitment to interprofessional education (IPE) and advanced training to pharmacy graduates and other health care practitioners. The AMC established the IPE program over 15 years ago. It involves students from the Schools of Pharmacy, Medicine and Dental Medicine schools and the College of Nursing. During this time, our school has contributed significantly to the development and implementation of the IPE program (see Standard 7) that includes over 600 students, spans four years and is set to expand IPE experiences in clinical rotations. Our experiential program has been at the forefront of IPE for many years by providing a breadth of interprofessional IPPE and APPE opportunities (see Standard 14).

Our school recognizes the importance of training PGY1 and PGY2 residents and fellows as shown by our commitment to fully or partially support 18 residency positions in 6 ASHP-accredited programs (PGY1 and PGY2) and 2 fellowships through provision of both clinical faculty and financial resources. Faculty members serve as directors of our PGY1 community pharmacy residency and PGY2 programs in ambulatory care/family medicine, critical care, infectious disease and oncology. They also serve as preceptors for PGY1 residents at UCH and regularly provide rotations for residents of other health care systems, e.g., VA Hospital, Denver Health Medical Center. Clinical research fellowships in neurology and health outcomes are directed and precepted by our faculty. Residents and fellows are given opportunities to prepare for a future in academia through completion of a teaching certificate program for postgraduate education (directed by our faculty), completion of a research certificate program (co-directed by our faculty together with staff from Kaiser Permanente), and/or participation in the education of our professional program students. These postgraduate training programs are conducted in quality health care facilities where an interdisciplinary team approach to health care delivery is strongly encouraged and supported. For example, our ambulatory care/family medicine residency is based in a Level 3 NCQA-recognized Patient-Centered Medical Home.

Our school offers a variety of postgraduate education and training opportunities to pharmacists. The Office of Distance Degrees and Programs (DDP) oversees the North American Trained (NTPD) and International Trained PharmD (ITPD) programs. In the last 6 years (2009-2015), 243 pharmacists with baccalaureate degrees have earned a PharmD degree through these programs. Our Office of Continuing Pharmacy Education (OCPE) provides numerous programs to practicing pharmacists (**1.3.4**). In 2014, OCPE accredited 10 live conferences, 2 of which were in conjunction with large, international meetings,

while 8 were interprofessional with physicians, advanced practice nurses and physician assistants attending. The total number of ACPE-accredited contact hours for these conferences was 90 with 598 pharmacist participants. The OCPE accredited pharmacy grand rounds at 2 hospitals in the Denver metro area totaling 20 monthly programs for 119 pharmacists. Three APhA certificate training programs (diabetes, immunization, and medication therapy management) were provided for 98 pharmacists. Additionally, select coursework was accredited for 159 pharmacists using DDP and one other online activity for a total of 139 contact hours of enduring or home study continuing education. Our preceptors are provided development opportunities by our Office of Experiential Programs (OEP) and access to resources at the Health Sciences Library.

As a reflection of success of our school in fulfilling its mission, our faculty and students have been successful in receiving national and local recognition in the form of awards for significant achievements in our school's mission areas. Recent national awards examples include ACCP Educator of the Year 2014; AACP Innovations in Teaching Competition 2014 honorable mention; ASHP Student Clinical Skills Competition 2014, 1st place, and Student Pharmacist Compounding Competition 2014, 1st place. Additional examples are provided in **1.3.5**. Our school is ranked nationally #24 for pharmacy programs (USNews) and #4 for NIH funding (BRIMR).

For the majority of AACP survey questions, our results were similar to (graduate, faculty) or better than the national average. For graduating student survey Q86 (*If I were starting my pharmacy program over again I would choose the same college/school of pharmacy*), the level of agreement (LOA; % strongly agree + agree) has been increasing since 2011 such that, in 2014, it exceeded the national average (89.6% vs. 82.6%). We attribute this increase to purposeful efforts we have made (and continue to make) to improve our program, such as a more student-centered curriculum, new opportunities for student engagement including students on committees, expanding independent study opportunities, establishing an honors research program and initiating a faculty-student liaison program. For the same question (Q43), the 5 year average LOA of our alumni was lower than national (78.7% vs. 85.9%) (**1.3.6**). We anticipate the changes we have made to our program will result in improved alumni feedback. The higher LOA for our graduate students speaks to the efforts made by our school. In addition, our school has strived to enhance engagement with alumni by hiring a Director of Communications and Alumni Affairs, establishing more alumni events and more effectively utilizing social media. The survey result associated with alumni affairs improved in the most recent 2014 survey.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

2. Strategic Plan

The college or school must develop, implement, and regularly revise a strategic plan to facilitate the advancement of its mission and goals. The strategic plan must be developed through an inclusive process that solicits input and review from faculty, students, staff, administrators, alumni, and other stakeholders as needed, have the support of the university administration, and be disseminated in summary form to key stakeholders.

2. College or School's Self-Assessment

The program is in the process of or has developed, implemented, and regularly revises a strategic plan to advance its mission and long-term goals.	Satisfactory
The strategic planning process is inclusive, soliciting input and review from faculty, students, staff, administrators, alumni, and other stakeholders as needed, has the support of the university administration, and is disseminated in summary form to key stakeholders.	Satisfactory
The strategic plan of the college or school is aligned with the university's strategic plan.	Satisfactory
Substantive changes are addressed through the strategic planning process, taking into consideration all resources (including financial, human, and physical) required to implement the change and the impact of the change on the existing program.	Satisfactory
Consultation with ACPE occurred at least six months before recruiting students into new pathways or programs.	Satisfactory
The college or school monitors, evaluates and documents progress toward achievement of strategic goals, objectives, and the overall efficacy of the strategic plan.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ How the college or school's strategic plan was developed, including evidence of the involvement of various stakeholder groups, such as faculty, students, preceptors, alumni, etc.

☑ How the strategic plan facilitates the achievement of mission-based (long-term) goals

☑ How the college or school's strategic plan incorporates timelines for action, measures, responsible parties, identification of resources needed, and mechanisms for ongoing monitoring and reporting of progress

☑ How the college or school monitors, evaluates and documents progress in achieving the goals and objectives of the strategic plan

☑ How the support and cooperation of University administration for the college or school plan was sought and achieved, including evidence of support for resourcing the strategic plan?

☑ How the strategic plan is driving decision making in the college or school, including for substantive changes to the program

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms.

(School comments begin here)

Revision and development of our mission, vision, values and goals (MVVG) and strategic plan (**2.1.1**) for 2015-2020 was charged by the dean, led by the Associate Dean for Academic Affairs and undertaken at the 2013 and 2014 annual faculty retreats (**2.3.1**). The MVVG statements guided subsequent development of the new strategic plan. Discussions regarding the strategic plan involved review of the (i) previous strategic plan (i.e., goals accomplished, goals not completed, and goals that were operational or ongoing, rather than strategic), (ii) needs of the profession and (iii) available and anticipated resources. Goals that had not been accomplished in the 2009 plan were prioritized by faculty for inclusion in (or exclusion from) the new strategic plan (**2.3.2**). In addition, our faculty divided into strategic working groups to develop larger, “strategic thinking” ideas. Subsequent revisions occurred with input (discussion or email) by faculty(3/7/14, 8/22/14), a volunteer student group(7/10/14), a graduate student group (12/05/14), the accreditation steering committee (ASC) (**2.3.3**) (7/15/14, 9/19/14), student council (9/2/14), and Executive Committee (11/18/14, 12/2/14). In this process, internal stakeholders (e.g., faculty, students, staff) as well as external stakeholders (e.g., preceptors, alumni, and ASC members) were solicited to provide feedback. The extent of engagement was reflected in AACP faculty survey Q32 (*The school requested my input during the development of the current strategic plan*) in which the LOA of our faculty was 96% in 2014. Further engagement was noted with > 80% response rate on surveys and active participation in annual retreats. A penultimate draft of the strategic plan was distributed by email on 12/5/14 to entry level PharmD (ELPD) student council members, our alumni association leadership, North American Trained PharmD (NTPD) and graduate program students, selected preceptors and alumni, the accreditation steering committee and faculty for feedback. The Executive Council of the school made further modifications based on feedback and resource availability. The final document (**2.3.4**) was presented to our faculty for final discussion (1/8/15) and approval (1/9/15) through the faculty governance process. The strategic plan (**2.1.1**) is aligned with the 2008-2020 strategic priorities of the university (**2.2.1**). The provost serves as the primary liaison with the university administration and, as a member of the ASC, was continually aware of and approved the MVVG and strategic plan (**2.3.5**). The strategic plan received final faculty approval on March 13, 2015.

The strategic plan is based upon seven primary goals that our school will use to achieve its mission and vision. These include: (i) *provide expanded and innovative educational opportunities*, (ii) *advance the practice of pharmacy*, (iii) *improve health through research and scholarship*, (iv) *provide leadership and service to our communities*, (v) *achieve excellence through continuous quality improvement*, (vi) *diversify financial resources, and (vii) develop futurist strategies*. Each one of these goals serves as a strategic initiative in the strategic plan. Plan goals and objectives were developed for each initiative and designed to achieve some aspect of the initiative as prioritized by the faculty in the ensuing 1-5 years. Then, outcomes, known as key performance indicators (KPIs), that are specific, measurable, attainable, realistic, and timely (i.e., SMART) (**2.3.6**) were developed to allow for determining progress on the strategic plan. Strategic initiative 7 (*develop futurist strategies*) has been included intentionally as a means of driving the evolution of the strategic plan through the development of more long-term objectives on a continual basis by assuring that we pay close attention to the future and the projected changes in the education, research and health care practice environments.

For each initiative of the strategic plan, a strategic initiative group (SIG) of 3-6 faculty members, external stakeholders (as appropriate) and one administrator with particular investment (or responsibilities) in the area of the initiative was created. Each SIG was tasked with (i) prioritizing the objectives, (ii) developing time-lines for each objective, (iii) establishing measurable outcomes (i.e., KPIs) for each objective, and (iv) recommending a member who would be responsible for ensuring progress on the objective. Resource allocation for objectives is decided by the Executive Council (Standards 7, 30) and included in development of the annual budget. The process for ongoing review of the strategic plan is described in **2.3.7**. Briefly, in each calendar year, there is a formative assessment and a summative assessment. The formative assessment is conducted in June to assess progress on and resources for initiatives and for liaisons to provide feedback regarding their initiative to the faculty and administration. The summative assessment is conducted in November to review, evaluate, and consider changes to the strategic plan. A progress report on all objectives will then be compiled and analyzed by the Director of Assessment and then reviewed by the Executive committee

and subsequently provided to the faculty, student council, external stakeholders and an external advisory stakeholder committee (membership to be determined) for comment. A draft revised strategic plan will be developed, with updates and salient changes being presented and approved by faculty vote at the annual January retreat. The revised strategic plan will be circulated to the faculty, staff, provost, students and external stakeholders and posted on our school's website. Through this process, progress on achievement of objectives and goals of the strategic plan will be tracked and documented biannually and in an ongoing manner throughout the life of the strategic plan. In addition, this process will ensure that all stakeholders of the school are involved and informed about the status of the strategic plan.

The strategic plan is the guiding document for achievement of our school's mission and goals, and hence, serves as a transparent blueprint for decision-making. We have proven our ability to adhere to the spirit and intentions of our strategic plan. For example, in our previous strategic plan (2009-2015) many notable accomplishments were achieved in all nine of the plan's strategic initiatives (**2.3.8**), including hiring a Director of Assessment to oversee the programmatic assessment. The 2015-20 strategic plan differs from the previous plan in the following ways: (i) identifying KPIs with associated timelines, (ii) designating faculty members responsible for KPI completion (**2.3.9**), (iii) formalizing annual evaluations of progress, and (iv) providing more defined opportunities for input by stakeholders. As before, strategic plans of each of the units within the school (i.e., Offices of Distance Degrees & Programs, Experiential Programs, Student Services, and Departments of Clinical Pharmacy and Pharmaceutical Sciences) will be aligned with our school strategic plan as they are developed or revised.

The process by which our school will revise its strategic plan ensures that input from our faculty, students, staff and external stakeholders is received and necessary resources are available for its implementation. Any substantive change, such as a new program or initiative would be discussed by the Executive Council. If approved, the new venture would be presented by the dean (or an assigned advocate) to the faculty for approval and consideration for inclusion in the strategic plan. The presentation would include justification of the initiative, its resource needs, and potential impact on other school initiatives or programs or strategic plan items. An example of this process that occurred during our last strategic plan period was the planning and approval of the International Trained PharmD (ITPD) program.

As noted, our faculty overwhelmingly agreed that their input was requested during development of the current strategic plan (96% LOA in 2014 vs. 87% national). The faculty LOA for effectively employing strategic planning (Q31) was comparable to national 5 yr average (68% vs. 79%, P=0.07; and in

2014 exceeded national 84% vs 82%) (**2.3.10**). Much of our previous strategic plan was achieved; however, the 5 year average LOA likely trended lower (albeit not significantly) due to a lack of systematic evaluation of the prior strategic plan. The current strategic plan has effectively addressed this issue by including a structured assessment and review plan that ensures annual review and multiple opportunities for faculty member comment and involvement. The plan also ensures students, staff and stakeholders remain engaged and informed.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

3. Evaluation of Achievement of Mission and Goals

The college or school must establish and implement an evaluation plan that assesses achievement of the mission and goals. The evaluation must measure the extent to which the desired outcomes of the professional degree program (including assessments of student learning and evaluation of the effectiveness of the curriculum) are being achieved. Likewise, the extent to which the desired outcomes of research and other scholarly activities, service, and pharmacy practice programs are being achieved must be measured. The program must use the analysis of process and outcome measures for continuous development and improvement of the professional degree program.

2. College or School's Self-Assessment

The evaluation plan describes a continuous and systematic process of evaluation covering all aspects of the college or school and the accreditation standards. The plan is evidence-based and embraces the principles and methodologies of continuous quality improvement.	Satisfactory
Individuals have been assigned specific responsibilities in the evaluation plan.	Satisfactory
The evaluation plan uses surveys of graduating students, faculty, preceptors, and alumni from the American Association of Colleges of Pharmacy (AACP).	Satisfactory
The evaluation plan includes assessments to compare and establish comparability of alternative program pathways to degree completion, including geographically dispersed campuses and distance-learning activities.	Satisfactory
The program assesses achievement of the mission and long-term goals.	Satisfactory
The analysis of process and outcome measures is used for continuous development and improvement of the professional degree program.	Satisfactory
The program measures the extent to which the desired outcomes of the professional degree program (including assessments of student learning and evaluation of the effectiveness of the curriculum) are being achieved.	Satisfactory
The program measures the extent to which the desired outcomes of research and other scholarly activities, service, and pharmacy practice programs are being achieved.	Satisfactory
The evaluation plan includes the college or school's periodic self-assessment using the accreditation standards and guidelines to assure ongoing compliance.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ How all components of the program's mission and goals are being followed and assessed

☑ How the college or school periodically self-assesses its program using the accreditation standards and guidelines to assure ongoing compliance.

☑ A description of the instruments used in assessment and evaluation of all components of the program's mission (e.g. in the areas of education, research and other scholarly activity, service, and pharmacy practice).

☑ How assessments have resulted in improvements in all mission-related areas

☑ Innovations and best practices implemented by the college or school

☑ Description of the members of the Assessment Committee (or equivalent structure/accountable person), charges and major accomplishments in the last academic year

☑ How the college or school makes available to key stakeholders the major findings and actions resulting from its evaluation plan

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

(School comments begin here)

Our school adopted its mission, goals, and strategic plan in March 2015 for the period 2015-2020. A comprehensive Programmatic Evaluation Plan (PEP) has been developed that assesses activities focused on (1) mission and strategic plan achievement (2015-2020), (2) operational assessment, and (3) curricular effectiveness (**3.1.1**). The PEP categorizes assessment activities, describes data sources and types, lists responsible parties, and describes the outcome of the assessment with intended usage. The NTPD and ITPD programs are integrated into the PEP, but have separate consideration, where appropriate, due to program-specific courses, methodologies, and/or student characteristics. The PEP has a corresponding evaluation calendar (**3.18.5**) to outline assessments that are formative and summative, track progression, collect substantiating evidence, and assess achievement. The PEP maps its activities to the accreditation standards and uses the guidelines to ensure completeness. The PEP was developed with input from faculty, administration, and external stakeholders to ensure comprehensiveness and build upon our school's culture of assessment. The PEP itself is assessed on an annual basis to allow for adaption and ensure continuous quality improvement. By having a uniform, but malleable, evaluation plan, our school is able to assess courses, curriculum effectiveness, and mission achievement in a consistently rigorous manner.

In addition to the PEP, our school's committees and administration, within their charges and responsibilities, ensure compliance and monitor and assess the program's missions and goals in an ongoing fashion. Examples relating to the education mission and goals include reports of the standing Assessment and Curriculum committees, approval of all curricular programs, course changes, and comprehensive curriculum renewal. Outcomes are also assessed through student assessments of program (**3.3.1**), courses (**3.3.2**) and instructors (**3.3.3**), NAPLEX and MJPE results, and AACP graduating student, alumni, faculty, and preceptor surveys.

Assessment instruments are used for internal and comparative review. For example, research, scholarship, and service are primarily assessed internally in the annual review process (see Standard 26) wherein grant funding, publications, presentations, and service within the school, institution and profession are documented. The university monitors research grant expenditure levels on a departmental and school basis and publishes monthly cumulative and annual summary reports (**3.18.6**). AACP collates research funding data for annual publication and in the 2012-13 ranking, our school was ranked 5th of all US Schools of Pharmacy for both NIH funding ($13.2 million) (#4 in 2014 by BRIMR) and total research funding ($16.6 million) (see Standard 30). Our School also consistently ranks first or second among all basic science departments on the Anschutz Medical Campus (AMC) in terms of NIH funding. Finally, there are multiple research rankings published annually; the most appropriate for a biomedical-based campus is the worldwide Shanghai ranking in clinical medicine and pharmacy

(ranking). In 2014, AMC was ranked in the top 76-100 universities worldwide (rankings are in groups of 25; this represents a top 10 percent ranking) in research in medical sciences and pharmacy.

Mission areas have been improved as a result of assessment. As a leading example, assessment was instrumental in assuring the quality of and improving the PharmD curriculum. The sequence of courses and content within courses was revised based on feedback from student evaluations, focus groups, and experiential programs. For example, diabetes content was previously taught in P3 fall; course assessments and experiential opportunities led to the decision to offer this content in P2 fall. The number of electives was expanded as a result of student assessments. An intersession (in the middle of the P4 year) was introduced to (i) allow benchmarking of each student's skills and abilities, (ii) reconnect our P4 students with the school community, and (iii) provide our faculty with a final opportunity to assess student preparedness for practice. Other examples of how assessment has influenced the renewed curriculum include aligning experiential activities with didactic coursework (e.g., Pharmacotherapy series), introducing more active learning, adding the innovative 6-week advanced IPPE in the P3 spring semester (see Standard 14), placing greater emphasis on communication with specific courses to develop these skills, and development of a research project with a poster presentation in the research seminar course series to allow integration of research concepts learned in the curriculum. Our school uses end-of-course CoursEval® surveys, mid-course focus group feedback, grade distribution, and overall course GPA to review courses. These data are provided to course directors who use them to implement course improvements. Every course undergoes annual review and reapproval by the Curriculum committee, at which time any changes are discussed and documented. This process has been effective; overall, courses are performing very well according to student-based feedback.

Many approaches are taken to assess progress on the clinical service mission, such as tracking success of pharmacy residents (using ResiTrak®), and measuring development, expansion and external funding of clinical programs. In addition, assessments of clinical practice and patient care activities are conducted using the annual performance evaluation process (Standard 26), which includes reporting of practice-derived metrics regarding outcomes associated with patient care activities, feedback from leadership teams and colleagues at individual clinical practice sites, nomination or receipt of professional practice awards, and consideration of projects or publications that originated in clinical practice sites. Assessments of current faculty activities and evaluation of future needs of our school in mission-related areas have resulted in a number of changes, improvements and expansion in clinical activities. These include procurement of grant and other funding to expand faculty practice sites (e.g., safety-net clinics that provide care to underserved and uninsured populations); reallocation of additional faculty time devoted to development of new clinical services and expansion of teaching efforts in several key areas (e.g., family medicine, internal medicine and geriatric medicine); acceleration of discussions with key stakeholders related to pharmacist provider status and direct or indirect reimbursement for clinical activities; expansion of school-funded PGY1 and PGY2 residency programs in community pharmacy practice and ambulatory care/primary care; and development and approval of new faculty appointments that allow additional advancement opportunities for current faculty members, as well as increasing our school's flexibility to hire new faculty members into positions that are more dedicated to the patient care and teaching missions of the school **(3.18.7**). These sites are model ambulatory care experiential sites that model advanced pharmacy practice and collaborative drug therapy in an interprofessional setting.

Fulfillment of the scholarly activity mission include annual reviews of faculty, development of an electronic scholarly activity database, tracking of graduate student employment, tracking publications, and documenting grant funding. Scholarship productivity assessments inform individual action plans for faculty members that are discussed and formalized during the annual evaluation process (see Standard

26). Wider AMC reviews of research funding are used to assess research lab space assignments at the campus level, an annual process overseen by a campus-wide space committee. At the school level, the internal and external assessments of research activity are used to guide allocation of research space within the school. These data are also used to monitor whether additional steps need to be taken to stimulate research productivity within the school, such as focusing on different strategic areas of research or providing additional research infrastructure for faculty e.g., seed grant funding.

Our school has implemented several innovations that support best practices in academia. For example, our process of course review and renewal is a model for utilizing data effectively. Assessment data are collected from students, analyzed and reviewed by the Assessment committee, and communicated to course directors and the Curriculum committee. The course director responds to the data by informing the Curriculum committee how the data will be used to make any adjustments to the course. This course reapproval process demonstrates how data should be gathered, communicated and used for continuous quality improvement.

The PEP is a bold innovation in assessment in that it is a comprehensive and integrated approach to programmatic, curricular, and individual assessment with student success being one of its primary foci. The PEP transforms assessment from being solely focused on student learning to a comprehensive assessment approach that acknowledges multiple aspects of higher education, including student success, support systems, institutional mission, and the everyday operations within the school. Only through a model of assessment and continuous improvement, as that put forth in the PEP, can our school measure and ensure it is achieving its mission and adequately serving its stakeholders.

The Assessment committee includes faculty members from both departments, students from each year of the entry-level PharmD program and an external stakeholder pharmacist practitioner (**3.18.8**). Its charges are provided in **3.18.9**. Major accomplishments of the committee in 2014 are summarized in **3.18.10**.

AACP surveys are an important standardized tool to use for internal and external review and benchmarking (included in the PEP). The Assessment committee reviews the results of the surveys to delineate areas of strength as well as opportunities for improvement and reports them to the administration and faculty for appropriate action. For example, based on feedback from the faculty survey, a concerted effort was made to establish greater parity in departmental contributions to the service and education missions of the school and a faculty survey of administrators was established (**3.3.5**). Our school actively engages external stakeholders in the assessment and strategic planning process by inviting community members to serve on committees (including the Assessment, Curriculum and Experiential committees) and on Strategic Initiative Groups on an as-needed basis. Active participation from community members provides external guidance to our school and facilitates feedback about our school within their own networks.

Building upon our assessment practices, we have developed and launched an assessment webpage on our school's website. It provides assessment information in a centralized and easily accessible location. The intention of this initiative is to increase transparency and communicate achievements of our program and curriculum with our stakeholders. The website (assessment URL) houses our PEP, PEP calendar, and corresponding reports and dashboards to demonstrate progress and/or achievement of key programmatic outcomes, e.g., funding, graduation rates, and achievements in pharmacy education, research and practice. In addition, the annual state of the school address by the dean provides a yearly

summary of activities involved in the mission and goals of our school. The slides used in the annual school-wide convocation presentation are posted on our school's website (**3.18.11**).

Our school publishes two newsletters to communicate with external stakeholders. *E-SCRIPTS,* published bi-monthly and electronically (archived pdf copies), provides a brief snapshot of current happenings at our school. *Pharmacy Perspectives* is a semi-annual print newsletter (also available electronically) that provides a more in-depth look at the school, and is mailed to alumni and friends in the spring and fall. In addition, in April 2015, our school introduced a blog site for stakeholders to exchange opinions and post ideas. Social media (Facebook®, Twitter®, LinkedIn®) is also used to keep stakeholders abreast of immediate and breaking news.

The effectiveness of our school in obtaining external stakeholder feedback is similar to national as reflected in AACP alumni survey Q17 (*Since graduation, the college/school has solicited my input/ feedback for programmatic improvement*) (57% vs. 61%, P=0.4) (**3.18.12**). In addition, our alumni's LOA regarding Q14 (*The college/school communicates effectively with alumni about college/school activities.*) was similar to national (79% LOA vs. 83%, P=0.48). Responses to general comments in graduating student Q88, faculty Q66, preceptor Q42 and alumni Q45 are provided in the school comments on this survey section (**3.18.13**). The 97% LOA of our graduating students with Q84 (*I am prepared to enter pharmacy practice*) (vs. national 95%, P = 0.02) attests to the overall success of our academic program.

Our school has become more comprehensive in its assessment methodology and usage since the last accreditation cycle. This evolution has occurred purposefully out of the recognized need for a more comprehensive assessment plan to assure achievement of all components of the mission. Finally, our school hired a Director of Assessment to add another important level of expertise to our assessment program and lead development of a more centralized and focused emphasis on comprehensive programmatic assessment.

4. College or School's Final Self-Evaluation

☐ Compliant	☑ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

Our programmatic evaluation plan is new in structure with oversight and accountability through faculty members, administration and a new Director of Assessment. In accordance with the PEP, the first formative assessment is to occur this summer and the summative assessment in December/January. Results will be reported to ACPE, if requested.

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

4. Institutional Accreditation

The institution housing the college or school, or the independent college or school, musthave or, in the case of new programs, achieve full accreditation by a regional/institutional accreditation agency recognized by the U.S. Department of Education.

2. College or School's Self-Assessment

The institution housing the program, or the independent college or school, has full accreditation by a regional/institutional accreditation agency recognized by the U.S. Department of Education or it is in the process of seeking accreditation within the prescribed timeframe.	Satisfactory
The college or school reports to ACPE, as soon as possible, any issue identified in regional/institutional accreditation actions that may have a negative impact on the quality of the professional degree program and compliance with ACPE standards.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ Any deficiencies from institutional accreditation that impact or potentially impact the college, schools or program (if applicable)

☑ Measures taken or proposed by the college or school to address any issues arising from institutional accreditation (if applicable)

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

(School comments begin here)

In April 2011, the University of Colorado Denver (UCD) underwent an accreditation evaluation visit from the Higher Learning Commission (HLC), one of six regional institutional accreditors in the United States. The HLC accredits degree-granting post-secondary educational institutions in the North Central region which includes Colorado and 18 other states. (https://www.ncahlc.org/About-the-Commission/about-hlc.html). UCD received full accreditation through 2020-21 (see **4.1.1**). No deficiencies were identified (**4.1.2**; **4.1.3**) that impacted or had the potential to impact the SSPPS.

No changes have been made to the PharmD programs in the SSPPS that would affect the accreditation of the university. A newer program that allows the education of pharmacists outside of the US or Canada, the International Trained PharmD (ITPD), was a substantive change that was approved by ACPE in 2014 (submitted December 2012; approved January 2014).

As an active participant in the UCD accreditation process and being vigilant in reporting any substantial changes in its PharmD programs to ACPE, the school has ensured that it is compliant with this standard.

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As an active participant in the UCD accreditation process and being vigilant in reporting any substantial changes in its PharmD programs to ACPE, the school has ensured that it is compliant with this standard.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

5. College or School and University Relationship

The college or school must be an autonomous unit within the university structure and must be led by a dean. To maintain and advance the professional degree program, the university president (or other university officials charged with final responsibility for the college or school) and the dean must collaborate to secure adequate financial, physical (teaching and research), faculty, staff, student, practice site, preceptor, library, technology, and administrative resources to meet all of the ACPE accreditation standards.

2. College or School's Self-Assessment

The university president (or other university officials charged with final responsibility for the college or school) and the dean collaborate to secure adequate financial, physical (teaching and research), faculty, staff, student, practice site, preceptor, library, technology, and administrative resources to meet all of the ACPE accreditation standards.	Satisfactory
The college or school participates in the governance of the university, in accordance with its policies and procedures.	Satisfactory
The college or school has autonomy, within university policies and procedures and state and federal regulations, in all the following areas: • programmatic evaluation • definition and delivery of the curriculum • development of bylaws, policies, and procedures • student enrollment, admission and progression policies • faculty and staff recruitment, development, evaluation, remuneration, and retention	Satisfactory
The college or school's reporting relationship(s) is depicted in the university's organizational chart.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ How the college or school participates in the governance of the university (if applicable)

☑ How the autonomy of the college or school is assured and maintained

☑ How the college or school collaborates with university officials to secure adequate resources to effectively deliver the program and comply with all accreditation standards

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

(School comments begin here)

The University of Colorado Denver (UCD, comprising the downtown Denver campus and the Anschutz Medical Campus [AMC]) is one of three institutions that make up the University of Colorado system. An elected and constitutionally-mandated Board of Regents provides general supervision of the university

and controls all funds and appropriations made to the university (unless otherwise provided by law). The president of the University of Colorado, Bruce Benson, is appointed by the Board of Regents and serves as the CEO and chief academic officer of the university (CUPresURL). As chancellor, Don Elliman is the chief academic and administrative officer of AMC with responsibility over all of its activities (ChancURL). Ms. Lilly Marks, vice-president for health affairs for the University of Colorado, works closely with Chancellor Elliman and focuses on the larger and changing health care environment issues facing the campus (**5.2.1**). Dr. John Reilly, the newly-appointed School of Medicine dean and vice-chancellor for health affairs (VCHA) oversees joint programs of the health sciences professional schools that include the Center for Bioethics and Humanities, the Interprofessional Education Office and the Area Health Education Center. All UCD deans, including AMC deans, report to Provost Rod Nairn who has responsibility for all academic programs (**5.2.2**). The organizational structure of the school in the context of the administration of AMC and UCD is illustrated in **5.2.3**. This administrative structure in which AMC has its own chancellor (separate from the UCD downtown campus chancellor) is very beneficial to the AMC schools in that it has positioned the campus to focus more on its unique mission and pursue entrepreneurial health care and research initiatives.

The dean participates in the governance of UCD and AMC through regular meetings of the UCD Dean's Council (for UCD-AMC issues) and the AMC dean's meetings (for issues specific to AMC) and the Dean's Coordinating Council meetings (for issues specific to the VCHA).

The administration, faculty, staff and students of our school participate in governance at various levels, including system (University of Colorado), institution (UCD), campus (AMC), and school (SSPPS) levels (**5.2.4**). The organization of the school as a separate academic unit and the authorities and responsibilities of the dean and faculty are stipulated in Regent Law (*Article 4: Organization of Academic Units*and *Article 5: Faculty*). The dean, as principal administrative officer for the school and the presiding officer for faculty meetings of the school, is responsible for school-level matters, including (but not limited to) enforcement of admission requirements, the efficiency of departments within the school, budgetary planning and allocation of funds, faculty assignments and workloads, recommendations on personnel actions, curriculum planning, and academic advising accountability and reporting. The Faculty Council is the representative governing body of the University of Colorado Faculty Senate, consisting of members of the Senate elected according to the Faculty Senate Constitution (**5.2.5**). The faculty (through Faculty Council) and the administration collaborate on major decisions affecting the academic welfare of the university. The nature of the collaboration, shared as appropriate with students and staff, varies according to the nature of the decisions in question. The faculty takes the lead in decisions concerning selection of faculty, educational policy related to teaching, curriculum, research, academic ethics, and other academic matters (**5.2.6**). The administration takes the lead in issues of internal operations and external relations of the university. In every case, the faculty and the administration participate in the governance and operation of the university as provided by and in accordance with the laws and policies of the Board of Regents and the laws and regulations of the state of Colorado. The chair of the Faculty Council speaks for the faculty when addressing the Board of Regents on matters of importance to shared governance. Our faculty members are active participants in the administration and committees of the Faculty Council, e.g., Dr. Borgelt served as the 2014-15 President of the Faculty Council (**5.2.7**).

Each University of Colorado campus (e.g., UCD, AMC) has a Faculty Assembly that serves as the representative governing body of that campus' faculty senate. At AMC, its faculty members comprise elected representatives from each of the campus schools, the Health Sciences Library, and the chairs of the faculty governing organizations in each of the AMC schools/colleges (**5.2.8**) according to its constitution and by-laws. The Assembly advises and recommends action to the AMC Chancellor and the

Faculty Council concerning matters related to academic policy and ethics. Our faculty members have served leadership roles in the AMC Faculty Assembly.

Regent Law (*Article 4.A.1(B)*) states “Colleges and schools shall usually be operated as separate academic units at the campuses.” Thus, the autonomy of the school is assured by Regent Law. The school is accountable to the university through academic program review (conducted every 5 – 7 years) and submission of annual evaluations, such as faculty-course evaluations, student admission numbers, graduation rates and student success in obtaining licensure. Regent law 5.E.5 and the University of Colorado Faculty Senate constitution state the school has autonomy in the following areas: definition and delivery of the curriculum (*V.B.1.: initial authorization and direction of all courses*), development of bylaws, policies, and procedures (*V.B.1.: origination of academic policy and standards; V.B.2.: origination of scholastic policy; V.C.2.: establishing policies and procedures with respect to faculty personnel matters within the college or school*), student admission and progression policies (*V.B.1.: origination of academic policy and standards, including initial authorization and direction of all courses, curricula, and degrees offered, admissions criteria; V.B.2.: origination of scholastic policy, including scholastic standards and requirements for admission, grading (consistent with the Uniform Grading System of the university), continuation, graduation and honors*), and faculty and staff recruitment, development, evaluation, and retention (*V.C.1.: recruiting and evaluating candidates for appointment to the faculty of the college or school; V.C.2.: establishing policies and procedures with respect to faculty personnel matters within the college or school*). These are codified in the SSPPS Faculty Senate bylaws (**5.2.9**).

On an annual basis, the Associate Dean for Finance and Budget (ADFB) evaluates the financial position of the school. The ADFB requests budget ideas/needs (including costs and justifications) from the faculty and administrators that are reviewed and prioritized by the Executive committee in the context of the strategic plan of the school. The dean and the ADFB meet with the other deans and the Provost and the vice-chancellor for administration and finance to discuss the anticipated funding of AMC by the state and the central administration needs of the campus. The contribution that each school makes to central administration is discussed, negotiated and finalized in these meetings. Based upon the external and internal items, the ADFB then makes budget projections. Despite relatively low state financial support from the state (see Standard 30), the campus has been able to benefit from state tobacco settlement funds that have been used to bolster education programs at AMC. The lack of dependence on state funds also benefited the university during the recent financial recession in that the university had already pursued outside funding streams. The university has made fundraising (both by the system and individual school) a major initiative as an alternative means of supporting the missions of each school. Up to this point of time, reductions in funding from the state are largely made up through increases in student tuition and other revenue sources (e.g., externally funded faculty positions). Through prudent budgeting and effective collaboration with central administration, our school has maintained adequate resources to effectively deliver its PharmD program and support its other mission areas. In so doing, it is able to comply with all accreditation standards. These considerations notwithstanding, our school has been remarkably resilient and successful in fostering an environment that ensures its success in meeting its mission. For example, since the last accreditation visit, our school has relocated into its new building, hired a net of 25 new faculty members, remodeled the education facilities that house our Pharmaceutical Care Learning Center to better allow formulation activities, and expanded library access to clinical preceptors.

Overall, the school has benefited by the autonomy granted to it in all of its mission areas. This autonomy allows for greater flexibility, creativity and long-term academic and financial planning that helps to advance the mission of our school and campus.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

6. College or School and Other Administrative Relationships

The college or school, with the full support of the university, must develop suitable academic, research, and other scholarly activity; practice and service relationships; collaborations; and partnerships, within and outside the university, to support and advance its mission and goals.

2. College or School's Self-Assessment

The college or school, with the full support of the university, develops suitable academic, research, and other scholarly activity; practice and service relationships; collaborations; and partnerships, within and outside the university, to support and advance its mission and goals.	Satisfactory
Formal signed agreements that codify the nature and intent of the relationship, the legal liability of the parties, and applicable financial arrangements are in place for collaborations and partnerships.	Satisfactory
The relationships, collaborations, and partnerships advance the desired outcomes of the professional degree program, research and other scholarly activities, service and pharmacy practice programs.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

- ☑ The number and nature of affiliations external to the college or school
- ☑ Details of academic research activity, partnerships and collaborations outside the college or school
- ☑ Details of alliances that promote and facilitate interprofessional or collaborative education
- ☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☑ Any other notable achievements, innovations or quality improvements

(School comments begin here)

Our school collaborates with on-campus schools and external constituents and institutions to fulfill its mission and goals relating to education, patient care, research and scholarly activity and service.

In the education domain, external collaborations have been established to support the didactic curriculum and experiential programs of the PharmD curricula. On-campus and off-campus faculty (external to our school) have been recruited to educate our students in areas of the curriculum in which their expertise supplements and/or complements that of our faculty (**6.4.1**). Our faculty participates in graduate and professional programs at other Anschutz Medical Campus (AMC) health professions schools (**6.4.2**) and serve as visiting faculty at schools of pharmacy overseas, e.g., Turkey. For the international programs, memoranda of understanding (MOUs) are established that delineate the expectations regarding education activities and remuneration for services provided (**6.3.1**). The AMC has developed an interprofessional education (IPE) program for all health professions students (pharmacy, medicine, dentistry, nursing, physician assistant and physical therapy). The development,

implementation and operation of this program involves faculty members from all four schools, including a faculty member from each school that serves on the IPE Advisory Council.

The school has 730 affiliation agreements with institutions that serve as experiential sites. These include on-campus (e.g., University of Colorado Hospital [UCH], Children's Hospital of Colorado) and external health care institutions (e.g., community pharmacies, clinics, hospitals, etc.). For all experiential sites, affiliation agreements are executed to delineate the expectations of the school, professional standards, responsible preceptor(s) and the logistical/legal requirements of the site (see Standard 28).

Our school has numerous practice agreements that support our clinical faculty. The major practice site is UCH that includes both inpatient and ambulatory care practices. As of June 30, UCH funded 5.05 FTEs for our faculty that provide clinical services and recently funded a joint position in which a clinical faculty member serves as the point of contact for all UCH preceptors. Other clinical practice sites include Children's Hospital Colorado, Denver Health, and several Federally Qualified Health Centers (FQHCs) in the Denver Metro area (Sheridan Clinic, Denver Indian Health, Clinica Family Health Services, Salud Family Health Centers) (**6.4.3**). Clinical services affiliation agreements are established with all of these institutions, examples of which are included in **6.1.1** and **6.1.2**.

Faculty members are funded by the site and/or by grants to provide clinical service, conduct scholarly activity (e.g., documenting improved patient outcomes [**6.4.4]**) and promote the development and institution of innovations that improve patient outcomes and site efficiency. As an example, the Denver Health Eastside Clinic site won an ASHP Best Practice Award in 2013. Our school was also a finalist in the AACP Lawrence C. Weaver Engaged Community Service Award for clinical service and care within FQHCs and safety net organizations. These ambulatory care clinics serve as model clinical pharmacy sites with Collaborative Drug Therapy Management protocols, serve as rotation sites for PGY2 Ambulatory Care residents and are preferred APPE sites. Our school fosters the training of PGY1 and PGY2 residents through relationships with other institutions, e.g., UCH, Denver Health, FQHCs, King Soopers (Standard 25). Affiliation agreements are established that define the responsibilities that the site will have when a student is present, e.g., access to patients, physical space they need, ability to provide educational environments, and the administrative requirements of the site (e.g., additional drug testing, background checks or immunizations of students assigned to the site). These agreements undergo review as they are renewed, with any requested changes needing approval by university legal department.

In the areas of scholarly activity and research, our faculty is well recognized and respected for its expertise and productivity, being ranked #4 among all pharmacy schools in the country in NIH funding (2014 Blue Ridge Institute) and #1 among basic science departments on the AMC (**6.4.5**). The expertise and creativity of our faculty has resulted in extensive collaborations with faculty and researchers from other AMC schools and from national and international institutions (**6.4.6**). In addition, our Colorado Clinical & Translational Sciences Institute promotes collaboration across the AMC by providing funding for team science grants, methods grants (where investigators with a specific experimental need collaborate with labs using these techniques) and supporting core facilities that allow interactions with established experts using state-of-the-art equipment. While the sources of support for these activities are varied (**6.4.7**), the primary funding mechanism is (and continues to be) NIH. Affiliation agreements are established with all non-federal funding sources and define the scope of the research to be conducted, how funds/resources will be used and legal rights and responsibilities (including intellectual property ownership) (**6.2.1**). As a direct result of these productive research endeavors, patents and several start-up companies have been developed by our faculty (**6.4.8**). Faculty members

share their expertise with companies in Colorado and elsewhere through consulting activities and with the larger scientific, education and health care communities through invited opinion pieces, research lectures and presentations at meetings or conferences. An annual school research retreat focuses on developing translational interactions between basic and clinical researchers. In addition, since 1994, our Center for Pharmaceutical Biotechnology, a collaborative endeavor with the Department of Chemical Engineering on the Boulder campus has organized an annual conference on protein stability that brings in experts in basic and applied aspects of protein formulation.

An important goal of the school is to actively engage with and provide service to its communities. For residents of the greater Denver Metro area, students and faculty participate in health screenings and brown bags at community events and health fairs, examples of which include the National Western Stock show, 9News Health Fairs, Paris Health Fair, Diabetes Expo, and the Denver Black Churches Health Fair. The health fairs commonly involve students and faculty from other AMC schools. In collaboration with faculty and students from the College of Nursing, our students and faculty have participated in flu shot clinics for 4 elementary schools near the AMC. For the academic and practice community of Colorado, our school provides continuing education programs and helps organize and participate in programs with other AMC schools, such as the annual Bugs & Drugs conference. A more recent development is the creation in 2015 of the D.A.W.N. clinic, a student-run health facility for indigent patients. The clinic is staffed by faculty preceptors to enable students to provide direct patient care. This clinic, largely started by pharmacy and medical students, now includes students from the School of Dental Medicine and College of Nursing. Several of our clinical faculty members provide outreach to international underserved populations by participating in clinics in South America and Haiti. Our school joined a clinic in Guatemala developed by the AMC Center for Global Health that is already staffed by faculty, residents and students from the medical, dental and nursing schools. Beginning in fall 2015, our students (on an elective APPE rotation) will have the unique opportunity to participate in team-based health care for an underserved population at this site.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

7. College or School Organization and Governance

The college or school must be organized and staffed to facilitate the accomplishment of its mission and goals. The college or school administration must have defined lines of authority and responsibility, foster organizational unit development and collegiality, and allocate resources appropriately. The college or school must have published, updated governance documents, such as bylaws and policies and procedures, which have been generated by faculty consensus under the leadership of the dean in accordance with university regulations.

2. College or School's Self-Assessment

The college or school is organized and staffed to facilitate the accomplishment of its mission and goals.	Satisfactory
The college or school administrative leaders working with the dean have credentials and experience that prepare them for their respective roles.	Satisfactory
The college or school administration has defined lines of authority and responsibility, fosters organizational unit development and collegiality, and allocates resources appropriately.	Satisfactory
The college or school has established mechanisms to foster unity of purpose, effective communication, and collaboration among administrators.	Satisfactory
The college or school's administrative leaders - individually or collectively - are developing and evaluating interprofessional education and practice opportunities	Satisfactory
The college or school has published, updated governance documents, such as bylaws and policies and procedures, which have been generated by faculty consensus under the leadership of the dean in accordance with university regulations.	Satisfactory
If the college or school organizes its faculty into subunits, such as departments or divisions, subunit goals and objectives align with the mission and goals of the college or school.	Satisfactory
The effectiveness of each organizational unit is evaluated on the basis of its goals and objectives and its contribution to the professional program.	Satisfactory
Programs are in place to hone leadership and management skills of college or school administrators, including department/division chairs (if applicable).	Satisfactory
Faculty meetings and committees established to address key components of the mission and goals are part of the system of governance of the college or school.	Satisfactory
Where appropriate, faculty committees include staff, students, preceptors, alumni, and pharmacy practitioners.	Satisfactory
Minutes of faculty meetings and committee actions are maintained and communicated to appropriate parties.	Satisfactory
The college or school has policies and procedures that address potential systems failures, whether such failures are technical, administrative, or curricular.	Satisfactory
Contingency planning includes creating secure backups of critical applications and systems data, providing mechanisms for making up lost course work and academic	Satisfactory

credit, securing alternate means for communication and information delivery, and creating exit strategies to protect students if part or all of a program loses viability.	
The college or school maintains an effective system of communication with internal and external stakeholders.	Satisfactory
Alternate program pathways are integrated into the college or school's regular administrative structures, policies, and procedures (including planning, oversight, and evaluation), and are supervised by an administrator who is part of the college or school.	Satisfactory
The college or school ensures that workflow and communication among administration, faculty, staff, preceptors, and students engaged in distance-learning activities are maintained.	Satisfactory
The college or school retains ultimate responsibility for the academic quality and integrity of distance-learning activities and the achievement of expected and unexpected outcomes, regardless of any contractual arrangements, partnerships, or consortia for educational or technical services.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ A description of the college or school's organization and administration and the process for ongoing evaluation of the effectiveness of each operational unit

☑ A self-assessment of how well the organizational structure and systems of communication and collaboration are serving the program and supporting the achievement of the mission and goals

☑ How college or school bylaws, policies and procedures are developed and modified

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ How the college or school's administrative leaders are developing and evaluating interprofessional education and practice opportunities

☑ How the credentials and experience of college or school administrative leaders working with the dean have prepared them for their respective roles.

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

Our school is organized into two departments, DOCP and DOPS. Each is led by a department chair, with vice-chairs that assist the chair in areas of departmental affairs as assigned. Other organizational units that report directly to the dean include finance and budget, communications and alumni affairs, development, and human resources. There are 6 associate or assistant deans; all have appropriate training and credentials. Our organizational chart is included in **7.1.1** and administrator job descriptions are included in **7.2.1**. The effectiveness of each operational unit is assessed by several mechanisms, e.g., the annual faculty survey of administrators (who oversee all units) provides faculty perspectives, and annual evaluations of each administrator by the dean (includes assessment of their units). Our

school's new Director of Assessment will provide greater data analytics for each unit as part of the new programmatic evaluation plan.

Administrators have participated in both formal and informal training and mentoring programs to develop their leadership and management skills. For example, the university has an Excellence in Leadership Program (ELP) that has been completed by a number of administrators and faculty members. Nationally, others have participated in the ACCP Leadership Academy both as participants and faculty.

The dean functions as the CEO of our school and has ultimate accountability for our programs. He leads our school's Executive committee (EC) (**7.8.1**), which usually meets every 2 weeks and shares information on student issues, matters pertaining to our school and university, and provides input on all matters of the school, including strategic planning, operations and budgetary affairs and priorities, programmatic assessment, faculty affairs (including mentoring, development, evaluation), curriculum matters including interprofessional education, student affairs (from both student and administration perspectives), research and scholarly activities and clinical affairs. The associate/assistant deans meet on weeks when the full EC does not meet to share ideas, offer support, provide updates and develop recommendations for the dean or EC to consider. These regular meetings foster effective communication and collaboration among our administrators. The executive team works very well together and attended the 2015 AACP Interim Meeting on Teams Leading Change as a collective group. The dean also heads the Executive Council (**7.8.2**) that convenes on an *ad hoc* basis to discuss and develop plans to address issues of a more confidential or controversial nature.

Other organizational units in the school include the Offices of Continuing Pharmacy Education, Distance Degrees and Programs (DDP), Experiential Programs (OEP), Information Technology and Student Services, each of which is supervised by a director who reports to an associate dean. The dean's office includes directors of Communication & Alumni affairs (DCAA), and Personnel. Each department and organizational unit is provided with staff support to ensure that it fulfills its part of the school's mission. Staff members are evaluated annually according to mandated processes (see Standard 26).

Discussion of school issues by our faculty occurs in faculty forums or meetings. Faculty senate meetings, held quarterly, are mandatory. The agenda for the meeting and reports from each of the school's standing committees are distributed to faculty prior to the meeting. Committee chairs (or their designate) are present at faculty meetings and available for questions or comments. Minutes are taken at each meeting and all votes are recorded. At least annually, the chancellor and provost attend a faculty meeting to provide updates on campus issues and to hear concerns of the faculty.

Faculty forums occur monthly, are voluntary and provide a venue for faculty to discuss various topics (often when policies or procedures are under development) to obtain faculty input prior to final approval, or to apprise faculty of campus or university services. For example, the University Ombudsman's Office attended a forum to provide information about services it provided. Forums have also been used to present updates on a variety of issues within the school that need a longer period of time to present and discuss than is available at faculty meetings, e.g., student admissions data and feedback from faculty about the admission process and recruitment efforts. For both Faculty senate meetings and forums, the faculty is solicited to submit agenda items they would like discussed.

Our school's faculty senate bylaws (**7.8.3**) define the faculty governance of the school and the processes by which the faculty participates with school administration to define policies and exercise leadership. The bylaws define standing and special committees, faculty meetings, voting requirements and

procedures, and faculty senate representation at both the school and university levels. This document recently underwent substantial revision by the faculty and was approved on August 4, 2015.

The dean, in consultation with the nominations committee, assigns members and chairs to each standing committee, with balanced representation from the two departments. Several key committees have student representatives and external stakeholders (e.g., pharmacy practitioners including preceptors and/or alumni), to provide valuable perspectives in discussions and decisions. Our school has made great strides since the last accreditation to be more inclusive of student members on committees and to schedule meetings at times when students are not expected to be in class. Committees fulfill their charges under authority of administration and faculty and make policy recommendations that require approval by the faculty. A list of committees, their membership and charges may be found in **7.3.1**.

The NTPD and ITPD programs require a high level of communication and management between students, faculty, DDP staff and administration. The DDP director meets weekly with her staff and the Associate Dean for Professional Education (ADPE). DDP course instructors are in regular contact with educational technology staff located within DDP. Student concerns are identified through phone and email communication, contact with advisors, course evaluations, online town hall meetings and focus group teleconferences. They receive regular emails about registration information, policy updates and other pertinent information and DDP staff make concerted efforts to maintain open communication with all students in the NTPD and ITPD programs.

Our school has made significant investments during this past accreditation period to enhance internal and external communications. There are two dedicated communications individuals, the DCAA, and Website & Social Media Coordinator. Our school publishes a monthly e-newsletter (eScripts), which is emailed to all students, faculty, alumni, and other stakeholders. Our school also publishes an award-winning (Public Relations Society of America) semi-annual print publication (Pharmacy Perspectives), has developed a mobile application, and uses social media outlets (Facebook, Twitter, and LinkedIn) and a blog to communicate with students and stakeholders. Our website was completely redesigned with stakeholder input and launched in April 2015. In addition, AMC students are now able to keep their ucdenver.edu email addresses upon graduation, a benefit we anticipate will further improve alumni engagement.

Our school is committed to further development of an effective longitudinal interprofessional education (IPE) program that spans the didactic and experiential parts of the curriculum. To this end, the ADPE is an active member of the AMC IPE Advisory Council, with a time commitment to this activity representing 20% of her annual distribution of effort. The DDP director also has committed 10% of her distribution of effort (DOE) to the IPE council to facilitate the creation of online programming in concert with the on-campus program. This has been a successful investment of administrator capital insofar as AMC is now one of 9 national incubator sites for IPE (NCIPEURL)**.**

Our school developed in collaboration with the campus a continuity of operations plan to accommodate situations in which the school or its facilities (e.g., learning management system) are compromised. Detailed plans are provided in **7.5.1** and **7.5.2**.

Overall, the AACP graduating student, alumni and faculty survey responses are similar to or exceed national in relation to the average LOA (**7.8.4**). It is noteworthy that our faculty had a higher LOA for Q7 (*I am aware that my college/school has policies for dealing with harassment and discrimination*) (97% vs. 95%, P=0.03), Q9 (*The committee responsible for the curriculum is effective.*) (88% vs. 82%, P=0.01), Q11 (*The school uses an effective faculty recruitment process*) (84% vs. 76%, P=0.04), Q12 (*I have*

access to documents that detail policies related to my performance as a faculty member) (89% vs. 85%, P=0.02) and Q13 (*My performance assessment criteria are explicit and clear*) (84% vs. 76%, P=0.02). While our faculty survey LOA for Q6 (*I am given the opportunity to provide evaluative feedback of the administrators*) was comparable to national (60% vs. 65%, P = 0.63), the low percentages prompted the introduction in 2014 of an annual faculty survey of administrator performance; this resulted in an increase in our faculty LOA from 51% (2013) to 88% (2014). The only other variation from national was in preceptor Q15 (*I know how to utilize policies of the college/school that deal with harassment and discrimination*) in which our alumni LOA was less than national (74% vs. 81%, P<0.01). Our OEP has since developed an online program on sexual harassment through E*Value that has been completed by 84% of the preceptors.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

8. Qualifications and Responsibilities of the Dean

The dean must be qualified to provide leadership in pharmacy professional education and practice, including research, scholarly activities, and service. The dean must be the chief administrative and academic officer and have direct access to the university president or other university officials delegated with final responsibility for the college or school. The dean must unite and inspire administrators, faculty, staff, preceptors, and students toward achievement of the mission and goals. The dean is responsible for ensuring that all accreditation requirements of the ACPE are met, including the timely submission of all reports and notices of planning for substantive changes.

2. College or School's Self-Assessment

The dean is qualified to provide leadership in pharmacy professional education and practice, including research, scholarly activities, and service.	Satisfactory
The dean is the chief administrative and academic officer and has direct access to the university president or other university officials delegated with final responsibility for the college or school.	Satisfactory
The dean unites and inspires administrators, faculty, staff, preceptors, and students to achieve the mission and goals.	Satisfactory
The dean is responsible for ensuring that all accreditation requirements of the ACPE are met, including the timely submission of all reports and plans for substantive changes.	Satisfactory
The dean has the assistance and full support of the administrative leaders of the college or school's organizational units and adequate staff support. In instances where the dean is assigned other substantial administrative responsibilities within the university, arrangements for additional administrative support to the office of the dean are made to ensure effective administration of the affairs of the college or school.	Satisfactory
The dean is responsible for compliance with ACPE's accreditation standards, policies, and procedures. In the event that remedial action is required to bring the college or school into compliance, the dean takes the necessary steps to ensure compliance in a timely and efficient manner.	Satisfactory
The qualifications and characteristics of the dean relate well to those called for in the standards, i.e.: • a degree in pharmacy or a strong understanding of contemporary pharmacy and health care systems • a scholarly concern for the profession, generally, and for the diverse aspects of pharmacy science and practice, in particular • publications in pharmacy and biomedical literature in areas relevant to the mission and goals of the college or school • appropriate leadership and managerial skills and experience in the academic (preferred) or health care sectors • recognition for career accomplishments by pharmacy or other health profession educators, researchers, and practitioners • strong written and interpersonal communication skills	Satisfactory

• experience with and a commitment to systematic planning, assessment, and continuous programmatic improvement • a thorough understanding of and a commitment to teaching and student learning, including pedagogy • evidence of a commitment to the advancement of research and scholarship • the ability and willingness to provide assertive advocacy on behalf of the college or school to the university administration • the ability and willingness to provide assertive advocacy on behalf of the college or school and the profession of pharmacy in community, state, and national health care initiatives • a record of and willingness to continue active participation in the affairs of pharmacy's professional and scientific societies	
The dean has the authority and accepts ultimate responsibility for ensuring: • development, articulation, and implementation of the mission and goals • acceptance of the mission and goals by the stakeholders • development, implementation, evaluation, and enhancement of the educational, research, service, and pharmacy practice programs • collaborative efforts to develop, implement, evaluate, and enhance interprofessional education, practice, service, and research programs • development and progress of the strategic plan and the evaluation plan, including assessment of outcomes • recruitment, development, remuneration, and retention of competent faculty and staff • initiation, implementation, and management of programs for the recruitment and admission of qualified students • establishment and implementation of standards for academic performance and progression • resource acquisition and mission-based allocation • continuous enhancement of the visibility of the college or school on campus and to external stakeholders • the effective use of resources to meet the needs and mission of the college or school	Satisfactory
The dean has ensured that ACPE has been notified in advance of the implementation of any substantive change, allowing sufficient time for evaluation of compliance with standards or the need for additional monitoring.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions
☑ How the dean provides leadership for the college or school and program and how the qualifications and characteristics of the dean support the achievement of the mission and goals
☑ The authority and responsibility of the dean to ensure all expectations of the standard and guidelines are achieved
☑ How the dean interacts with and is supported by the other administrative leaders in the college or school

☑ How the dean is providing leadership to the academy at large, and advancing the pharmacy education enterprise on local, regional, and national levels.

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

Dr. Ralph Altiere joined the University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences in 1987, was promoted to Associate Dean for Academic Affairs in 1995, and has led our school as dean since 2006. His experience as an academician, educator, scholar, scientist and advocate for schools of pharmacy and the profession of pharmacy make him eminently qualified to serve as dean and leader of our school (**8.1.1, 8.1.2**). Since assuming his role as dean, Dr. Altiere has successfully overseen our last accreditation in 2009, the construction and opening of our new building on the Anschutz campus that houses all faculty offices and research facilities, a 44% expansion of our faculty and a 55% increase in extramural (NIH) funding. Dean Altiere has the widespread support of both faculty and other administrative leaders in the school. On average 82% of our faculty agrees that the dean is an effective leader of the school (AACP faculty survey Q3), comparable (P=0.62) to national results (84%) (**8.3.1**).

As chief academic and administrative officer of our school, Dean Altiere is ultimately responsible for the school achieving its mission and goals and ensuring that all ACPE accreditation standards are met. Such authority is provided in the laws of the Regents. To ensure continuing success of the school, the dean has developed an effective and supportive administrative team; since the last accreditation, four new members have been appointed: Associate Dean for Administration and Organization; Associate Dean for Finance, Budget and Administration; Associate Dean for Research and Graduate Studies; and Assistant Dean for Clinical and Professional Affairs. These new administrators complement the existing Associate Deans for Academic Affairs, Professional Education, and Student Affairs (**8.3.2**). The dean's office receives excellent support from its staff (**8.3.3**). During times when Dean Altiere is away from the school and/or unable to attend to matters in person, he ensures that other administrators appropriately represent him and our school.

Dean Altiere meets twice each month with the Executive committee that comprises associate and assistant deans, department chairs, the Director of Communications & Alumni Affairs (DCAA), a representative of our faculty senate and the Student Council president. Each administrator has defined responsibilities (see Standard 7). The faculty's LOA in relation to our school's administrative team having clearly defined responsibilities (Q1) and functioning as a unified team (Q2) are similar (P=0.51-0.62) to national surveys (**8.3.1**). It is notable that the LOAs increased greatly in 2014 90% for Q1 (78% in 2013) and 96% for Q2 (62% in 2013). Faculty meetings and forums, attended by the dean and our faculty, are held monthly. In addition, the dean attends the meetings of both departments. Through these opportunities, our dean actively seeks input from our faculty and other administrative leaders and thereby fosters an inclusive and collegial team. Dean Altiere meets regularly with the administrative leaders of the AMC and is well respected by other AMC school deans. Dean Altiere has direct access to the provost, chancellor and, as necessary, the president of the university.

Dean Altiere is active in the local, national, and international pharmacy community. In collaboration with the dean at Regis University School of Pharmacy, he is advocating for pharmacist provider status in Colorado, has hosted a series of meetings with both schools, and has engaged with the Colorado Pharmacists Society to advance this initiative. Dean Altiere has served on the AACP Academic Affairs committee and Institutional Research committee. He also currently serves as President of the Academic Pharmacy Section of the International Pharmaceutical Federation (FIP). Given these activities, it is surprising that the LOA of our alumni is only 51% for Q15 (*the current dean is providing leadership in pharmacy*) (vs. 66% national, P < 0.01) (**8.3.1**). In addition, the LOA with Q16) (*the dean encourages alumni to stay involved*) has been 36-51% since 2009 (vs. 58-62% for national) despite the fact the dean initiated the school's first modern alumni association. We believe these reflect ineffective communication between our school and its alumni in the past. In an attempt to address this issue, our school hired a DCAA and, more recently, a web site and social media coordinator. The DCAA has been responsible for instituting new communication vehicles, examples of which include a bi-monthly electronic newsletter, a blog for external stakeholders, a quarterly print publication and a Facebook page. There has also been a concerted effort to feature our school and faculty on various local and national news stories in order to improve knowledge of the contributions we make to local health care issues and to advance the profession as a whole. We anticipate the impact of these efforts will become more evident in the coming years.

Our dean is a strong advocate for advancing pharmacy practice internationally through improvements in pharmacy education. To this end, he has been an active member of the International Pharmacy Federation (FIP), serving as president of the Academic Pharmacy Section. In addition, he has established international pharmacy education outreach relationships with schools of pharmacy in Turkey and Ireland and others in various stages of progress.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

9. The Goal of the Curriculum

The college or school's professional degree program curriculum must prepare graduates with the professional competencies to enter pharmacy practice in any setting to ensure optimal medication therapy outcomes and patient safety, satisfy the educational requirements for licensure as a pharmacist, and meet the requirements of the university for the degree.

The curriculum must develop in graduates knowledge that meets the criteria of good science; professional skills, attitudes, and values; and the ability to integrate and apply learning to both the present practice of pharmacy and the advancement of the profession. Graduates must be able to identify and implement needed changes in pharmacy practice and health care delivery.

2. College or School's Self-Assessment

The curriculum prepares graduates with the professional competencies to enter pharmacy practice in any setting to ensure optimal medication therapy outcomes and patient safety, satisfies the educational requirements for licensure as a pharmacist, and meets the requirements of the university for the degree.	Satisfactory
The curriculum develops in graduates knowledge that meets the criteria of good science; professional skills, attitudes, and values; and the ability to integrate and apply learning to both the present practice of pharmacy and the advancement of the profession.	Satisfactory
The curriculum fosters the development of students as leaders and agents of change. The curriculum helps students embrace the moral purpose that underpins the profession and develop the ability to use tools and strategies needed to affect positive change in pharmacy practice and health care delivery	Satisfactory
In developing knowledge, skills, attitudes, and values in students, the college or school ensures that the curriculum fosters the development of professional judgment and a commitment to uphold ethical standards and abide by practice regulations.	Satisfactory
The college or school ensures that the curriculum addresses patient safety, cultural competence, health literacy, health care disparities, and competencies needed to work as a member of or on an interprofessional team.	Satisfactory
Curricular content, instructional processes, course delivery, and experiential education are documented, aligned, and integrated where appropriate.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ A description of the college or school's curricular philosophy

☑ A description of how the curriculum fosters the development of students as leaders and agents of change and helps students to embrace the moral purpose that underpins the profession and develop the ability to use tools and strategies needed to affect positive change in pharmacy practice and health care delivery

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

The purpose of our school's professional curricular pathways is to prepare graduates to be competent, ethical, contemporary and compassionate pharmacists whose focus is to improve health and well being through patient-centered pharmacy care. To achieve this purpose, our school works to develop students as self-directed learners. Our graduates are committed to active involvement in the advancement of the pharmacy profession and dedicated to fulfilling the public trust by assuming responsibility for optimizing patient care through provision of appropriate drug therapy and by assuring the safe, effective and efficient use of drug therapies and drug delivery systems. As with the ELPD program, the ITPD and NTPD programs are guided by our curricular mission and encompass our abilities-based outcomes (ABOs) (**9.1.1**), all of which directly address this standard, its guidelines and the new 2014 Pharmacist patient care process.

To prepare our graduates for pharmacy practice beyond 2015, our school began its curriculum renewal process in 2007. It started with identification of four key domains:

Domain 1: Foundational Sciences. The development of intellectual curiosity and the skills necessary to apply scientific principles and methods to identify and solve problems.

Domain 2: Communication and informatics. Effective communication skills, professional behaviors and attitudes that promote health literacy through successful, culturally-competent patient and professional interactions, as well as the management and use of resources of the health care system to promote health; to provide, assess, and manage safe, accurate, and time-sensitive medication distribution; and to improve therapeutic outcomes.

Domain 3: Integrated clinical sciences. The care of patients is based on sound therapeutic principles, evidence-based data, and cooperation with other members of an inter-professional health care team. This domain integrates pathophysiology, pharmacology, and pharmacotherapy specific to organ systems and disease states to create a unified understanding and approach to clinical situations.

Domain 4: Pharmacy and Health Care. Patient care takes into account relevant legal, ethical, social, cultural, economic, and professional issues, emerging technologies, and evolving biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences.

A renewed curriculum was then developed in a prospective fashion, driven by our school's 14 programmatic ABOs and mapped to these same ABOs and all required ACPE content into the domains. This process allowed for vertical and horizontal integration of the domains through thoughtful course development to foster the highest level of learner competence.

P1 year is optimized to expand upon the knowledge and skills gained through required prerequisites (**9.9.1**). For example, Applied Biological Chemistry considers biochemistry in the context of pharmacy applications. Similarly, Mechanisms of Disease integrates biochemical and physiological concepts as they relate to diseases and potential drug targets. Furthermore, development of several course series in the renewed curriculum allows for achievement of ABOs and learning of ACPE content at progressively higher levels as students proceed through the curriculum. For example, the 7-

course Pharmacotherapy series has designed a progressive learning and assessment plan (**9.9.2**). Patient Centered Communication provides foundations early in the curriculum that are reinforced and reassessed throughout the curriculum. Evidence-based Medicine & Literature Evaluation forms an important foundation for Clinical Reasoning & Decision-making. Modern Drug Design & Actions serves as a foundation for Medicinal Chemistry. This course development process led to collaboration between pharmaceutical sciences, pharmaceutical outcomes and clinical sciences faculty members in developing innovative educational approaches throughout the renewed curriculum.

Curriculum renewal also allowed courses to be redesigned to strengthen areas of the existing curriculum in which student outcomes could be improved. For example, our students did well in areas 1 (mean 12.8) and 3 (mean 13.1) vs. area 2 (mean 12.2) of the NAPLEX exam (**9.9.3**). The Pharmacy Practice Fundamentals and Pharmaceutics courses were designed to bolster student skills in calculations, sterile and non-sterile formulation, and dispensing, all critical components of area 2. Improved scores in this area are expected as the first class of the renewed curriculum graduates in 2016.

Educational approaches throughout the curriculum are designed with our ABOs in mind and vary based on the abilities being developed. Most courses use a blended model of didactic learning, active learning (e.g., interactive audience response systems, small group interactions in large classrooms, use of standardized patients, and peer learning and assessment), simulations, and real-life experience. The development and integration of IPPE assignments into courses by faculty members provides a model for meaningful application of information and skills for students. Incorporation of such real-life IPPE experiences of the students into courses is considered a strength by our faculty. Assessment techniques reflect the abilities-based educational approaches with more reliance on performance-based evaluations and less on multiple choice questions.

The faculty has been deliberate in developing students as leaders and agents of change and this is an important aspect of our professional program. Salient examples include:

- The AMC IPE and Development (IPED) course provides foundational knowledge and skills for leadership styles, situational leadership, followership, and advocacy and assertion. It improves the ability of our students to gain essential experience working with other health care practitioners, both in classroom and experiential settings. Students receive interprofessional peer feedback on their leadership skills in multiple settings across the curriculum.
- Our renewed curriculum builds on the foundation of the IPED course as students are provided with numerous pharmacy practice and health care delivery activities in their IPPEs and APPEs in which to practice and get feedback on their leadership skills (Standard 14).
- The P3 pharmacogenomics course prepares our graduates for their expanded roles and optimization of future patient-centered care.
- Our school has had a P3 capstone course since introduction of the ELPD program 16 years ago. This course builds upon the self-directed and life-long learning skills our students acquire throughout the curriculum. Its format requires students to demonstrate situational leadership in clinical decision-making within a team-based care model. The course received an honorable mention for the AACP Innovations in Teaching Award in 2014.

Student professional organizations and their activities (supported by our school and faculty) develop leadership skills, attitudes and values. The central role played by our students in establishing the interprofessional student-run health clinic is one of many examples.

NAPLEX pass rates of our graduates demonstrate them to be some of the best in the nation. For the past 7 years, they have surpassed the national pass rate for both the NAPLEX and MPJE (**9.4.1**, **9.5.1**).

Our curriculum develops in our graduates the ability and confidence to push the boundaries of practice in any pharmacy setting that improve the health outcomes of patients (**9.9.4**).

ITPD and NTPD students enter their programs to obtain advanced training that will allow them to serve as change agents and leaders in their professional communities. This is particularly true for ITPD students who, during the application process, must describe in a personal statement how they plan to improve patient care in their home countries.

Notable innovations include integration of IPPEs with all didactic courses, including basic science courses. The advanced IPPE (aIPPE), offered at the start of the P3 spring semester, is designed to give students an introduction to the expectations of APPEs and to provide students with a better practice-related perspective on the capstone course that follows it. It also provides a unique opportunity for students to appreciate more complex clinical scenarios and self-reflect on areas of knowledge that need to be revisited in the capstone prior to entering APPEs. The overwhelmingly positive feedback provided by students regarding this new course in the renewed curriculum indicates that it met these objectives. As noted, the capstone course received honorable mention for the Innovations in Teaching Award by AACP (2014). The IPE program provides a unique longitudinal experience for over 600 students from the AMC dental medicine, medicine, public health, nursing, pharmacy, physical therapy, and physician assistant programs. IPPEs and APPEs in interprofessional environments allow students to hone leadership skills and explore clinical care or practice improvement from an interprofessional perspective.

In the AACP surveys, the very high LOA expressed by our graduating students for Q36 (*The program included opportunities to develop professional attitudes, ethics and behaviors*) (96% vs. 95%, P=0.4) and our alumni for Q20 (*I knew what the program outcomes were*) (91% vs. 93%, P=0.2) were similar to the national average and indicate that the programs meet the goals of our curriculum and the objectives of this standard.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

10. Curricular Development, Delivery, and Improvement.

The college or school's faculty must be responsible for the development, organization, delivery, and improvement of the curriculum. The curriculum must define the expected outcomes and be developed, with attention to sequencing and integration of content and the selection of teaching and learning methods and assessments. All curricular pathways must have both required and elective courses and experiences and must effectively facilitate student development and achievement of the professional competencies.

The curriculum for the professional portion of the degree program must be a minimum of four academic years or the equivalent number of hours or credits. The curriculum must include didactic course work to provide the desired scientific foundation, introductory pharmacy practice experiences (not less than 5% of the curricular length) and advanced pharmacy practice experiences (not less than 25% of the curricular length).

2. College or School's Self-Assessment

The college or school's faculty is responsible for the development, organization, delivery, and improvement of the curriculum.	Satisfactory
The curriculum defines the expected outcomes and is developed with attention to sequencing and integration of content and the selection of teaching and learning methods and assessments.	Satisfactory
All curricular pathways have both required and elective courses and experiences and effectively facilitate student development and achievement of the professional competencies.	Satisfactory
The curriculum for the professional portion of the degree program is a minimum of four academic years or the equivalent number of hours or credits.	Satisfactory
Introductory pharmacy practice experiences are not less than 5% (300 hours) of the curricular length.	Satisfactory
The advanced pharmacy practice experiences are not less than 25% (1440 hours) of the curricular length.	Satisfactory
On behalf of the faculty, the Curriculum Committee (or equivalent) manages curricular development, evaluation, and improvement to ensure that the curriculum is consistent with the collective vision of the faculty and administration.	Satisfactory
Learning outcomes for curricular courses and pharmacy practice experiences are mapped to the desired competencies and gaps and inappropriate redundancies identified inform curricular revision.	Satisfactory
Curricular design allows for students to be challenged with increasing rigor and expectations as they matriculate through the program to achieve the desired competencies. The curriculum design enables students to integrate and apply all competency areas needed for the delivery of holistic patient care.	Satisfactory
The Curriculum Committee (or equivalent) is constituted to provide balanced representation from all departments, divisions, and/or disciplines within the college or school.	Satisfactory

Faculty members are aware of the content, competencies, and learning outcomes for each other's courses and use that information to optimize these elements within their own courses.	Satisfactory
The curriculum complies with university policies and procedures and the accreditation standards.	Satisfactory
Student representation and feedback are integral parts of curricular development and improvement.	Satisfactory
The Curriculum Committee (or equivalent) has adequate resources to serve as the central body for the management of orderly and systematic reviews of curricular structure, content, process, and outcomes, based on assessment data.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ A description of the curricular structure, including a description of the elective courses and experiences available to students

☑ How both the didactic and experiential components comply with Standards for core curriculum and IPPE and APPEs in regard to percentage of curricular length

☑ Any nontraditional pathway(s) leading to the Doctor of Pharmacy degree (if applicable)

☑ Data that link teaching-and-learning methods with curricular outcomes

☑ How the results of curricular assessments are used to improve the curriculum

☑ How the components and contents of the curriculum are linked to the expected competencies and outcomes through curricular mapping and other techniques and how gaps in competency development or inappropriate redundancies identified inform curricular revision

☑ How the curricular design allows for students to be challenged with increasing rigor and expectations as they matriculate through the program to achieve the desired competencies and how the curriculum design enables students to integrate and apply all competency areas needed for the delivery of holistic patient care.

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

Our school offers a 4-year program for the ELPD, with full-time didactic, active learning classes, IPPEs occurring across the first 3 years, and APPEs comprising the entire 4th year of the program. Our school also offers a 3-year (minimum) ITPD program, with a hybrid of live and online didactic, and live and simulated experiential (IPPE) coursework followed by 9 months of APPEs. Our school also offers a 2-year (minimum) post-baccalaureate PharmD program called the NTPD with online didactic coursework and 1200 hours of APPEs.

Our faculty has been responsible for the development and approval of the renewed curriculum used in all professional programs. Its development was based on 5 themes central to the practice of pharmacy

with the Colorado 14 ABOs as guiding principles. The Curriculum committee, which includes faculty members, student representatives, alumni and preceptors (**10.1.1**), is the primary vehicle through which our school applies the guidelines for this standard. It manages curricular development, evaluation (in conjunction with the Assessment committee), and improvement on behalf of the faculty and administration, and is responsible for ensuring the curriculum complies with university policies and procedures and accreditation standards. The DDP committee provides guidance in the manner by which the curriculum is delivered in the ITPD and NTPD programs. As such, the DDP committee works closely with the Curriculum, Assessment and Experiential Education committees in fulfilling its responsibility to manage these programs. The Associate Dean for Professional Education, and the Curriculum and DDP committees assure alignment of the ELPD, ITPD and NTPD programs.

During the curricular renewal process, the entire faculty (through subcommittees of the domains) (see Standard 9) engaged in mapping of learning outcomes for courses and pharmacy practice experiences to their desired ABOs. Gaps identified in the mapping process informed curricular revision. ABOs and ACPE appendix B were mapped to each domain. Courses were then developed, and the ABOs and ACPE content were then mapped to individual courses (**10.3.1**). In overseeing curriculum developments, the Curriculum committee ensured expected competencies and outcomes were confirmed, resolved gaps in competency development or inappropriate redundancies, ensured the curricular design was optimally sequenced, and allowed for students to be challenged with increasing rigor and expectations as they progressed through the curriculum. Each course syllabus includes a list of the ABOs mapped to it, a requirement included in the standard syllabus used by all courses (**10.3.2**). Importantly, when designing the renewed curriculum, special attention was given to content that could become prerequisites and to place coursework related to pharmacy practice earlier in the curriculum, a desire expressed by students. This process allowed the placement of a Pharmacotherapy course in the P1 year and the development of biomedical science courses tailored to illustrate the connection of science to pharmacy practice.

The resulting renewed ELPD curriculum comprises 150.6 credit hours with the following breakdown: # 35% experiential training, 25% integrated clinical sciences (ICS), 20% foundational sciences, 10% pharmacy & health care topics, and 10% communication and informatics topics. **10.3.3** illustrates how each of the domains is longitudinally represented throughout the ELPD curriculum and purposefully integrated horizontally and vertically to facilitate an understanding of the relationship between science with practice. Electives and independent study allow students to develop areas of personal interest to expand understanding of professional opportunities, and to reinforce the outcomes of the curriculum (**10.3.4**).Following faculty approval of the renewed curriculum, the DDP committee updated the NTPD program to align it with ELPD. The ITPD program was created based on the renewed curriculum; as such, no updating of alignment was necessary (**10.3.5**). The course catalog (**10.3.6**) provides a listing and description of all courses offered in the ELPD, ITPD and NTPD programs (designated PHRD, PRDI and PRDO respectively).

The first 3 years of the renewed ELPD curriculum consists primarily of didactic courses with aligned experiential training. Didactic courses utilize a mixture of active, problem-based, and lecture-based learning modalities, while experiential courses occur outside of the university classroom setting in patient care sites. Required IPPE hours are balanced between community and health systems settings, with students completing 77 hours in each prior to the P3 spring semester. These 154 hours, along with 18 hours of service-learning IPPE activities and 40 hours of IPE IPPEs, are completed prior to P3 spring. IPPE activities are incorporated into many didactic courses to purposefully integrate theoretical with practical education and application, reinforce the connection between practice and the basic and clinical

sciences, and strengthen the learning process. Students' IPPE work culminates with the P3 spring aIPPE (an innovative full-time 6 week experience), amassing another 240 hours focused on patient-centered care. Students complete the P3 year with a total of 452 IPPE hours that have been mapped to ACPE Appendices C and D (see Standard 14).

The ELPD P4 year is APPE training with the exception of a 2 week intersession that occurs in the spring of P4. Students complete a total of six 6-week APPEs (40 hours/week; 1440 hours total) in pharmacy practice settings, balanced between health systems, community, ambulatory care, and electives. In addition, students complete a 3-week "mini-APPE" (120 hours) with a focus on community medication therapy management delivery. The total APPE hours completed by students is 1,560.

ITPD and NTPD programs differ from the ELPD program in that students are already bachelor-trained practicing pharmacists in North America (NTPD) or abroad (ITPD). As such, these programs are adapted to provide credit to their students for previous professional experience and/or demonstration of competency. Successful completion of our biomedical and pharmaceutical sciences entrance exams exempts students from the Mechanisms of Disease, Applied Biological Chemistry, Pharmaceutics, Modern Drug Design & Action, Medicinal Chemistry, Pharmacology/Toxicology, and Pharmacokinetics coursework and is required to enter the ITPD program. Given that ITPD students are practicing pharmacists and adult learners, IPPE hours are reduced to the required minimum. These students have a greater level of comfort around medications and the medication use process in their home country and will be able to quickly compare and contrast their experiences with those in the IPPE courses.

NTPD students are given credit for the degree they possess and for their experience in North American practice settings, allowing exemption from IPPE requirements, community-based APPEs and the following courses: Pharmacy Practice Fundamentals, Pharmacy Law, Patient Centered and Clinical Communication I & II, Self-care I & II. The NTPD program requires 1200 hours of APPE experiences (comprises 46% of curriculum or 30 of 65 credits) in recognition of the previous degree and working experience of these pharmacists.

The curriculum has been designed to purposefully challenge students with increasing rigor and expectations. Baseline skills, established in pharmacy practice fundamentals, drug information, communication, and pharmacist patient care process, are built upon, refined, and reassessed as the students continue through the curriculum. While the focus of an individual course's assessment may be in a specific treatment area, such as asthma pharmacotherapy, fundamental elements of these core skills perpetuate, such that students must continue to demonstrate their improving competence in communicating, accessing reliable drug information, and incorporating previous course knowledge to complete a pharmacist care process. The ICS series is organized to challenge students with case scenarios that grow in complexity and difficulty as the student progresses. Early courses involve disease states that are simple (i.e., clear treatment guidelines, less clinical controversy); as the series progresses, more complex cases are introduced that require more critical thinking and judgment for management. The Capstone course completes the ICS series and occurs after students have engaged in their aIPPE. This course prepares students to handle complex patients with multiple problems, requiring a synthesis and application of learned information from all previous semesters in order to deliver holistic patient care. NTPD and ITPD courses demonstrate learning progression aligned with that of the ELPD pathway (**10.3.1**).

Multiple teaching and learning methods are used to ensure students successfully achieve our 14 ABOs. For some ABO's, significant progress can be achieved through didactic instruction and modeling.

However, most require active or hands-on learning to master basic and advanced proficiencies with a high level of competence. A hallmark of our curriculum is the ASCEND program (Standard 14) that allows each student to achieve the ABOs and thereby realize their full potential as a practitioner. This involves students applying knowledge and skills (recently acquired in courses) in controlled, simulated settings and subject to faculty feedback (often OSCEs) prior to embarking on caring for actual patients in practice settings. During IPPEs, preceptor mentors are encouraged to continually challenge their students by providing them with activities and allowing them more independence as they progress through the curriculum. In this process, students advance from an observational or “shadowing” role to a more contributing and participatory role in all areas of practice. The APPE year builds on this process, as students are placed in practice settings and expected to step in and contribute to the pharmacist patient care process and operations. The emphasis is on giving students progressively more independent responsibilities to prepare them for pharmacy practice.

To ensure the curriculum continues to improve, it is assessed continuously at all levels, i.e., class level, individual course instructor, Assessment committee, Curriculum committee, and Experiential Education committee (see Standard 15). Each course receives formative student feedback during (focus group) and after course completion (CoursEval® survey of instructors and course). These evaluations, together with student performance, are reviewed by our Assessment committee annually. This involves a longitudinal (multiyear) review of each course’s performance and benchmarking of each course against itself (in previous years) and other courses in the curriculum. After a course has been offered, the course director is required to complete a standard form (**10.3.7**) that identifies the course’s strengths and weaknesses, and plans for any changes. This is reviewed by the Curriculum (ELPD), and DDP (ITPD, NTPD) committees. These committees ensure all courses continue to meet the needs of the curriculum. Some examples of areas that are emphasized during the review process include: course directors and instructors are assisted in identifying and coordinating areas of overlap between courses; ensuring consistent and appropriate application of the basic and clinical sciences and pharmacy practice throughout the curriculum; recommending the amount of content and activities in courses to ensure a reasonable and balanced course load for students; and ensuring that course syllabi are consistent and conform to our school’s standard syllabus. APPE evaluations, summative ABO achievement and standardized curricular outcomes (e.g., NAPLEX pass rates) have not been assessed for the renewed curriculum because the first class graduates in 2016. However, review of student performance in the aIPPE showed students were rated highly by preceptors. Students also provided overwhelmingly positive feedback about the aIPPE experience (**10.3.8**), indicating it has further prepared them for the Capstone, APPEs, and pharmacy practice. Students also rated this course positively, indicating that it complemented what was taught in other courses and was relevant to the practice of pharmacy. Taken together, these assessment data provide early indications that students are meeting the required expectations (if not exceeding them) in the P1-P3 years and being sufficiently prepared for their APPE rotations.

In addition to the aIPPE, the renewed curriculum has other innovations. The P1 Patient-Centered Communications courses provide students with critical skills and knowledge to effectively communicate to patients, family members, and health care providers. Importantly, these skills are reinforced at multiple levels of the curriculum in the P2-P4 years. The new Drug Information series promotes student understanding the logic process for evidence-based medicine applications and the multiple processes influencing the decision-making capacity of patients, clinicians, and regulatory bodies. After completing the aIPPE, students identified the communications and drug information courses as being the most

valuable in terms of making them practice-ready. The new aIPPE allows students to identify their ability to meet pre-APPE core performance domains and abilities.

LOAs exceeded national levels for faculty Q46 (*The college/school uses programmatic assessment data to improve the curriculum.*) (82% vs. 76%, P=0.02) and graduating student Q30 (*The sequence of courses was appropriate to build my knowledge and skills*) (95% vs. 87%, P<0.01). Results of all other survey questions for faculty, graduating students, and alumni were similar to national (**10.3.9**).

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

11. Teaching and Learning Methods

The college or school, throughout the curriculum and in all program pathways, must use and integrate teaching and learning methods that have been shown through curricular assessments to produce graduates who become competent pharmacists by ensuring the achievement of the stated outcomes, fostering the development and maturation of critical thinking and problem-solving skills, meeting the diverse learning needs of students, and enabling students to transition from dependent to active, self-directed, lifelong learners.

2. College or School's Self-Assessment

The program, throughout the curriculum and in all pathways, uses and integrates teaching and learning methods that have been shown through curricular assessments to meet the diverse learning needs of students and produce the desired professional competencies and outcomes, including the development and maturation of critical thinking, problem-solving, and self-directed, lifelong learning skills.	Satisfactory
Faculty members use a variety of teaching and learning techniques (e.g., active learning, case studies, etc.) that have been thoughtfully selected, designed, and/or tailored to help students achieve the learning outcomes articulated for their courses.	Satisfactory
The college or school evaluates the effectiveness of its curricular innovations through its assessment activities.	Satisfactory
The outcomes of the distance-learning activities are appropriate for the student population and achievable through distance study.	Satisfactory
Teaching and learning methods used assure that learning experiences, opportunities, and outcomes are comparable for all pathways, branches or campuses.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ A description of teaching and learning methods and strategies employed in the delivery of the curriculum, including nontraditional pathway(s) leading to the Doctor of Pharmacy degree (if applicable), and how those methods are expected to advance meaningful learning in the courses in which they are employed.

☑ Efforts of the college or school to address the diverse learning needs of students

☑ The formative and summative assessments used to evaluate teaching and learning methods used in the curriculum, including nontraditional pathway(s) leading to the Doctor of Pharmacy degree (if applicable)

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)
Student learning is dependent upon the individual learning style of each student and the context in which the student is learning. As such, different learning strategies are incorporated throughout the curriculum, with each course director determining the balance of lecture, active learning, oral and written communication, interprofessional and experiential activities to be used. Starting P1, students participate in an active learning environment through student role play and interactions with standardized patients in their Patient Centered Communication courses. The learner progresses from observing modeling of appropriate behaviors, practicing behaviors with faculty and standardized patients (with peer guidance), and being evaluated in simulated environments. For example, P1 students take a medical history within the first 3 weeks of classes. A major goal of the renewed curriculum was to have didactic courses drive student activities in the IPPE environment. Individual course directors meet with an OEP director to develop activities aligned with what the student is learning in the classroom. Such experiential activities occur at IPPE sites. In the Pharmacotherapy 5 course, ELPD students must identify a drug-drug interaction with an antiepileptic drug at their IPPE, document the cause and clinical significance of the interaction, discuss the interaction with their preceptor and document completion in E*Value®. These activities are also performed by ITPD students, with the majority being completed at IPPE sites and the remainder at their place of employment. Such activities also occur in foundational sciences courses. For example, the pharmaceutics course has ELPD students determine how to compound a non-pre-manufactured dose of hydrocortisone cream and evaluate the salts of different dosage forms of methylphenidate at their IPPE. Other approaches taken in courses include case discussions, debates, and oral and written reflections that require the student to move from being a learner to a teacher.

From the P1 year, students are enrolled in the IPE program where they work as a team with other AMC school students, allowing them to identify the role of the pharmacist in the pharmacist care process. The IPE Development course also fosters student professionalism and leadership (see Standard 12). Additional IPE activities are implemented throughout the curriculum and include solving complex patient cases using an electronic medical record as a communication tool, working as a team to solve simulated clinical emergencies or global- or patient- specific ethical issues. The impact of the IPE program is most evident when our students are on APPE rotations, as they are able to readily engage in team-based care. In support of this, the Sheridan Health Services nursing director stated that medical and nursing students shadow their mentors while pharmacy students did so much more and were integral in teaching the other members of the team about drug therapy. This led her to request an additional APPE pharmacy student year-round to ensure the clinic’s interprofessional team had more pharmacy support.

Effectiveness of teaching, learning and course assessment innovations in courses are assessed by students through CoursEval® surveys and focus groups. AACP surveys are used to assess more global aspects of the curriculum (including the ITPD/NTPD programs, with permission from AACP). The Assessment committee annually reviews the results of these assessments and student performance on graded evaluations in the course, and provides a summary to the Curriculum and DDP committees. For example, ELPD students reported the previous curriculum’s Comprehensive Patient Care capstone course was too challenging due to the level of clinical-based skills expected in the course activities. This led to the introduction of such skills earlier in the curriculum to improve student preparedness for the capstone format, e.g., patient assessments and plans, and oral exams. Given the success of these changes in the ELPD program, the NTPD program added more foundational and comprehensive patient assessment and care teleconferences to their pharmacotherapy course series wherein faculty monitor a live student-run patient case discussion and provide feedback on clinical decision-making. Finally, teaching methods are subject to structured peer review in the promotion process.

Technologies that provide students with a variety of learning approaches have been embraced by our school. Canvas®, the AMC learning management system, provides a comprehensive package of education tools (**11.4.1**). All on-campus lectures are video-captured using Panopto® and are available for student review *via* Canvas®. Our school has tracked the use of Panopto® and found students have increasingly used the system to enhance their learning experience (**11.4.2**). An audience response system, TurningPoint®, is also used in class for active learning. Our university has a centralized online education department that supports online courses and educational technologies. When using on-campus facilities, our faculty members are assisted in their use of technology by our school's IT personnel, and IT-trained pharmacy students who attend each lecture.

NTPD and ITPD programs use online courses that are developed with guidance from our school's two instructional designers and delivered both asynchronously and synchronously *via* Canvas®. Our instructional designers have implemented CAP (Course Assessment Process), a process that leads faculty to ensure content and assessments relate to learning outcomes. Online course content is provided by a combination of audio-accompanied lectures, web-based tools and other methods. Active learning is fostered by team- and case-based live teleconferences, wiki-based assignments, live teleconferenced journal clubs, threaded discussions, professional portfolios, online interviews with standardized patients (for assessments and counseling), quizzes, and online assignments.

The effectiveness of our inclusion of active learning in the curriculum is reflected in the high LOA with AACP alumni Q21 (*When I was a student, the curriculum provided opportunities to engage in active learning, e.g., laboratories, recitations, student portfolios, problem-based learning*) (92% vs. 95% national, P=0.2) and graduating students Q32 (*I was provided opportunities to engage in active learning, e.g., laboratories, recitations, student portfolios, problem-based learning, in-class activities*) (98% vs. 96% national, P=0.06) (**11.4.3**).

While the AACP survey results suggest that our existing curriculum was very successful (see below), we anticipate the revised curriculum, by being more engaging and student self-directed, will better prepare our students to enter practice. Since 2003, our students have taken the California Critical Thinking and Skills Test upon admission (P1) and during the P3 year. From this assessment, it is clear that our students in the previous (class of 2015) and renewed (class of 2016) curriculum improve in their critical thinking skills equally well as they progress through the curriculum (**11.4.4**). Further analysis of these data indicate that students with lower scores in P1 improved to a greater extent than students with higher scores. A similar process will be used to examine development of critical thinking skills in ITPD students.

Our school continues to be committed to improving our students' experiences with their education. The most significant innovation has been the creation of the revised curriculum that advocates for increased group learning, case study utilization and active learning. Furthermore, our faculty invest a significant amount of time providing students feedback during individualized performance-based assessments throughout the curriculum. Since 2009, our regular and clinical teaching track faculty has increased 46%, i.e., from 54 to 79. In addition, our school has also employed two full-time instructional designers to enhance student learning.

AACP surveys showed that our graduating students expressed a higher LOA than national for Q30 (*The sequence of courses was appropriate to build my knowledge and skills*) (95% vs. 87%, P < 0.01), 31 (*I developed the skills needed to prepare me for continued learning after graduation*) (98% vs. 96%, P=0.01) and 33 (*I was encouraged to ask questions in class*) (93% vs. 90%, P=0.03) (**11.4.3**).Given the revised curriculum was designed to include more active learning opportunities, we anticipate these

LOAs will remain at this high level if not increase even further. LOAs of our alumni (Q21, 22; > 93%), faculty (Q 38, 39; > 83%), graduating students (Q28, 29, 32; # 93%) and preceptors (Q23; 98%) were comparable to national. For faculty Q38 (*Laboratories and other non-classroom environments are conducive to learning.*), the LOA has been declining (2009: 93.5%; 2014: 83.6%). Based on discussions with the faculty relating to this trend, we retrofitted the PCLC in 2015 to maximize student capacity for lab courses and allow active learning and computer-based assessments.

Through the use of a variety of approaches in our program to foster learning, students are encouraged to be more actively engaged in their education and to function effectively as a team member or leader. Our school provides the tools necessary for our graduates to be self-directed, life-long learners.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

12. Professional Competencies and Outcome Expectations

Professional pharmacist competencies that must be achieved by graduates through the professional degree program curriculum are the ability to:

1. Provide patient care in cooperation with patients, prescribers, and other members of an interprofessional health care team based upon sound therapeutic principles and evidence-based data, taking into account relevant legal, ethical, social, cultural, economic, and professional issues, emerging technologies, and evolving biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences that may impact therapeutic outcomes.
2. Manage and use resources of the health care system, in cooperation with patients, prescribers, other health care providers, and administrative and supportive personnel, to promote health; to provide, assess, and coordinate safe, accurate, and timesensitive medication distribution; and to improve therapeutic outcomes of medication use.
3. Promote health improvement, wellness, and disease prevention in cooperation with patients, communities, at-risk populations, and other members of an interprofessional team of health care providers.

These professional competencies must be used to guide the development of stated student learning outcome expectations for the curriculum. To anticipate future professional competencies, outcome statements must incorporate the development of the skills necessary to become self-directed lifelong learners.

2. College or School's Self-Assessment

Professional Competencies 1, 2 and 3 guide the development of stated student learning outcome expectations for the curriculum.	Satisfactory
The curriculum prepared graduates to provide patient care in cooperation with patients, prescribers, and other members of an interprofessional health-care team based upon sound scientific and therapeutic principles and evidence-based data.	Satisfactory
The curriculum fosters an understanding of, and an appreciation for, the legal, ethical, social, cultural, economic, and professional issues, emerging technologies, and evolving biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences that may impact therapeutic outcomes.	Satisfactory
The curriculum prepares graduates to manage and use resources of the health care system, in cooperation with patients, prescribers, other health care providers, and administrative and supportive personnel, to promote health; to provide, assess, and coordinate safe, accurate, and time-sensitive medication distribution; and to improve therapeutic outcomes of medication use.	Needs Improvement
The curriculum prepares graduates to promote health improvement, wellness, and disease prevention in cooperation with patients, communities, at-risk populations, and other members of an interprofessional team of health care providers.	Satisfactory
Outcome statements include developing skills to become self-directed lifelong learners.	Satisfactory
The curriculum prepares graduates to independently seek solutions to practice-based problems in the scientific and clinical literature.	Satisfactory

Graduates possess the knowledge, skills, attitudes, and values needed to enter practice pharmacy independently by graduation.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions
☑ A description of the professional competencies of the curriculum
☑ A description of the assessment measures and methods used to evaluate achievement of professional competencies and outcomes along with evidence of how feedback from the assessments is used to improve outcomes
☑ How the curriculum is preparing graduates to work as members of an interprofessional team, including a description of the courses that focus specifically on interprofessional education
☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
☑ Any other notable achievements, innovations or quality improvements
☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

In 2009, the dean appointed a task force comprising faculty members from both departments to develop ability-based outcomes (ABOs) for the PharmD program. The ABOs were specifically designed to address CAPE 2004 outcomes and this standard, and to align with learning and practice expectations our faculty viewed as being important for preparing our students for the future of pharmacy practice. The 14 ABOs address the areas of patient care, systems management, public health, professionalism, communication skills, and scholarship (**12.1.1**). They were approved by the SOP Faculty Senate on 11/20/09 and apply to the ELPD, ITPD and NTPD programs. All courses map directly to the ABOs and to ACPE Appendix B content (**12.2.1**). Hence, the professional competencies and outcome expectations of our students meet this standard. Our curricular mapping ensures that each ABO is addressed with increasing complexity and difficulty as student's progress through the curriculum and appropriate redundancy as warranted. This is exemplified in several curricular course series, e.g., Patient Centered Communication 1 (PCC1) & 2 (PCC2), Self-care 1 & 2, Pharmacotherapy (PT) 1-7 and Capstone. Due to their professional experiences, ITPD and NTPD students enter the curriculum having already met several of the ABOs (**12.2.1**). However, fundamental knowledge and skills are assessed *via* engagement with higher level concepts and application. Any deficiencies are noted and addressed as necessary. In all pathways, successful completion of the curriculum ensures that all students meet the ABOs and are thus ready to serve as competent, contemporary pharmacists upon graduation. From a programmatic perspective, all courses require initial and annual approval by the Curriculum and DDP committees and in this process, courses are matched to the ABOs, as are their activities and assessments. At the January 2016 faculty retreat, the renewed curriculum will be evaluated for its ability to meet the new CAPE 2013 outcomes and modified accordingly.

The success of the curriculum in preparing our students to attain the ABOs is measured by quizzes, written (multiple choice, short-answer, essay) exams, in-class activities, verbal evaluations, skill-based evaluations (e.g., in PCLC), objective structured clinical evaluations, portfolios, written reflections, verbal and written presentations, and skill demonstration in real-world practice settings (e.g., in experiential

activities). The capstone course is designed to provide a faculty-based checkpoint to verify student progress in meeting the ABOs needed for entry into APPEs. The aIPPE (P3 ELPD) and IPPEs during the second live session (ITPD) provide an opportunity for our preceptors to verify student progress in meeting ABO and pre-APPE requirements. Successful completion of all course activities and longitudinal portfolios by students also assures pre-APPE readiness. The final assessment of student achievement of all ABOs and ultimate preparedness for pharmacy practice occurs in the APPEs. Evaluation rubrics based on the ABOs have been created for APPEs to measure achievement of specific outcomes. Multiple courses in the curriculum use components of these rubrics in their assessments, thus promoting consistent expectations throughout the curriculum. As examples, rubrics in PCC1 & 2 are carried forward through the PT courses (**12.5.1**) to evaluate student achievement of communication outcomes. In addition, rubrics have been made similar from course to course with respect to expectations for the pharmacist patient care process (**12.5.2**). In these courses, students are given the opportunity to develop the skill(s) *prior* to the formal evaluation by initially practicing and receiving feedback from peers, then practicing with a standardized patient (SP) and receiving feedback from the SP and peers and/or a faculty member. After the evaluation, students are able to self-assess by reviewing video or audio recordings of the encounter. This assessment process allows students and faculty members multiple opportunities to address how well individual students (as well as entire classes) are achieving specific practice-based outcomes. Debriefing sessions are included in these courses to provide the class feedback prior to evaluations.

Our school is nationally recognized for providing an outstanding environment for preparing students for practice. For example, Dr. Page was ACCP Clinician of the year in 2013, and in 2014, Dr. Saseen was ACCP Educator of the Year, our student team won the ASHP National Patient Skills Competition, and our capstone course received an honorable mention for the AACP Innovations in Education Award. Finally, multiple aspects of our experiential program have been deemed worthy of publication in AJPE (**12.5.3**). The success of our curriculum in preparing our students to practice is reflected in higher LOA expressed by our ELPD graduating students with the AACP Q84 (*I am prepared to enter pharmacy practice.*) than national (97% vs. 95%, P=0.02) (**12.5.4**). For graduating NTPD students, the LOA was 100%. For the graduating student questions asking about program preparation for practice (Q10-29), the LOA was similar to (P#0.05) (Q10, 14-16, 18-25) or exceeded (P<0.05) (Q11, 12, 13, 17, 26, 27) national results with percentages in the range 83-99%.

The AMC has an 18-year history of providing IPE to our students. It started as a 1-year course on ethics and has evolved into a 4-year longitudinal curriculum that spans foundational knowledge, simulation training and clinical experiences. The IPE and Development (IPED) courses include 36 didactic hours of team-based learning methodologies over 2 semesters (integrated into Introductory Professional Development and Portfolio courses II & III) and involves 600 students from 7 AMC schools (Dental Medicine, Medicine, Pharmacy, Physician Assistant, Physical Therapy, Nursing, Public Health). They develop competencies in teamwork and collaboration (team structure, roles and responsibilities, situational monitoring, conflict management, advocacy and assertion), values and ethics (8-step method for analysis, professional and patient autonomy, informed consent, conflicts of interest, access to health care), and quality and safety (systems level practice, patient engagement, developing a safety toolkit, improving care, contributing to a culture of safety). ITPD and NTPD students augment their existing interprofessional experience by completing the online section of the campus-wide IPED coursework. On-campus IPE students then practice these competencies together in a variety of high-stakes, simulated acute clinical situations (e.g., a home health visit, advanced cardiac life support) in the Center for Advancing Professional Excellence (AMC CAPE). During these activities, students are assessed on

teamwork/collaboration, quality/safety, and values/ethics. P4 students are placed in clinical APPE rotations with fellow AMC IPE students to apply their team behaviors and skills in real-life situations. The IPE council is currently developing an assessment to evaluate student success in these clinical environments. Our graduating students are comparable to national (P=0.89) with a 97% LOA on Q25 (*the program prepared me to practice pharmacy in interprofessional and collaborative practice settings*).

Noteworthy achievements include the successful creation and implementation of the renewed curriculum. Quality improvements include the development of a clearer relationship between courses in the curriculum and the expected graduating student professional competencies/outcomes (ABOs). Finally, our campus is recognized as a leader in the development and implementation of innovative IPE, and is one of nine national incubator sites for IPE (**12.5.5**).

Overall, the AACP survey responses from alumni, faculty and preceptors are positive and comparable to national (**12.5.4**). The LOA of our alumni with Q34 (*The PharmD program prepared me to manage the system of medication use*) was lower than national (86% vs. 91%, P=0.01) but higher LOAs relative to national were expressed for Q37 (*The PharmD program prepared me to search the health sciences literature*) (97% vs. 95%, P=0.03) and 38 (*The PharmD program prepared me to evaluate the health sciences literature*) (97% vs. 93%, P=0.01). Our preceptors expressed a lower LOA than national for Q27 (*The PharmD program prepared students to develop disease management programs*) (78% vs. 83%, P=0.03), 28 (*The PharmD program prepared students to manage the system of medication use*) (84% vs. 88%, P<0.01) and 34 (*The PharmD program prepared students to apply state and federal laws and regulations to the practice of pharmacy*) (88% vs. 91%, P=0.04). It was the perceived deficiency in medication use systems by our alumni and preceptors that led us to improve our curriculum by incorporating pharmacy practice fundamentals, pharmacy management, and health care informatics into our renewed curriculum. We also threaded drug information/literature evaluation content throughout coursework to provide students with an increasing level of literature evaluation skills as they progress through the curriculum. Although this change hasn't been in place long enough to see improvements in the graduating student survey, the P3 students reported their training in drug information as one of the most important factors for aIPPE success in an internal survey.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

We believe that we are compliant with this standard. However, we did check "needs improvement" in our school's self-assessment for "The curriculum prepares graduates to manage and use resources of the health care system, ..." As noted in the narrative, in response to alumni and preceptor survey results, we have purposefully provided additional components in the renewed curriculum devoted to these areas of practice. However, as noted, it is too early in the process to determine the overall effectiveness of these measures but current feedback from students suggests that we have addressed this issue. Once the renewed curriculum has been completed in May 2016, we will have better measures from graduating student surveys.

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13. Curricular Core - Knowledge, Skills, Attitudes and Values

To provide the thorough scientific foundation necessary for achievement of the professional competencies, the curriculum of the professional degree program must contain the following:

- biomedical sciences
- pharmaceutical sciences
- social/behavioral/administrative sciences
- clinical sciences

Knowledge, practice skills, and professional attitudes and values must be integrated and applied, reinforced, and advanced throughout the curriculum, including the pharmacy practice experiences.

2. College or School's Self-Assessment

The curriculum contains at an appropriate breadth and depth the necessary elements within the following areas as outlined in Appendix B of the Standards:	Satisfactory
biomedical sciences	Satisfactory
pharmaceutical sciences	Satisfactory
social/behavioral/administrative sciences	Satisfactory
clinical sciences	Satisfactory
The content of curricular courses is mapped to Appendix B to assess where specific content foundations are addressed in the curriculum. Gaps in curricular content and inappropriate redundancies identified in the mapping process inform curricular revision.	Satisfactory
The didactic course work provides a rigorous scientific foundation appropriate for the contemporary practice of pharmacy.	Satisfactory
Knowledge, practice skills, and professional attitudes and values are integrated and applied, reinforced, and advanced throughout the didactic and experiential curriculum.	Satisfactory
The biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences are of adequate depth, scope, timeliness, quality, sequence, and emphasis to provide the foundation and support for the intellectual and clinical objectives of the professional degree program and the practice of pharmacy.	Satisfactory
The sciences provide the basis for understanding the development and use of medications and other therapies for the treatment and prevention of disease.	Satisfactory
Courses and other formal learning experiences are coordinated and integrated across disciplines.	Satisfactory
Where instruction is provided by academic units of the university other than the pharmacy program, these areas are developed in accordance with the professional degree program's curricular goals and objectives; and assessment liaison mechanisms ensure effective instructional delivery and achievement of the educational objectives of the program.	N/A

3. College or School's Comments on the Standard

Focused Questions
☑ The curricular structure and content of all curricular pathways
☑ A description of the breadth and depth of the biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences components of the didactic curriculum, and the strategies utilized to integrate these components
☑ How the curricular content for all curricular pathways is linked to Appendix B of Standards 2007 through mapping and other techniques and how gaps in curricular content or inappropriate redundancies identified inform curricular revision
☑ Examples of assessment and documentation of student performance and the attainment of desired core knowledge, skills and values
☑ Evidence that knowledge, practice skills and professional attitudes and values are integrated, reinforced and advanced throughout the didactic and experiential curriculum
☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
☑ Any other notable achievements, innovations or quality improvements
☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

Our renewed PharmD curriculum was built around four main organizational domains that were designed to facilitate vertical integration of topics and the development and reinforcement of core knowledge and skills. These include: Communications and Informatics, Foundational Sciences, Integrated Clinical Sciences, Pharmacy and Health care in addition to experiential training. The specific courses included under each domain are shown in **13.2.1, 13.2.2**. *In toto*, the courses encompass all of the key topic areas of ACPE standards Appendix B (**13.1.1**) and cover each in appropriate depth. They were developed to satisfy our school's 14 ability-based outcomes (ABOs) and, in so doing, are optimized for the training of pharmacists for current and future standards of practice.

When the ELPD curriculum began in 1999, pharmacology and pathophysiology were integrated with pharmacotherapeutics in systems-based courses. In early versions of the previous curriculum, medicinal chemistry and toxicology were also integrated into these systems-based courses. However, based upon assessment of student learning and feedback, it was evident that fragmentation of the content into these courses hindered the ability of students to grasp important overarching concepts. Interpretation of these data resulted in reconsolidation of these disciplines into individual courses, a philosophy that has continued into the renewed curriculum. Another outcome of this analysis was to move physiology and biochemistry into prerequisite subjects (**13.2.3**) and redevelop the foundational sciences courses related to these disciplines (i.e., Mechanisms of Disease [MDx], Applied Biological Chemistry [ABC]) such that they were more drug- or disease-centric than discipline-centric and, therefore, more tailored to the needs of pharmacy students. For example, in ABC, the topic of therapeutic proteins and their appropriate care and handling was introduced. Didactic lectures and an innovative small group debate session are used to foster understanding of the clinical uses of therapeutic proteins, how mishandling impacts product quality, the role of pharmacists in assuring product quality and the adverse clinical effects of degradation of therapeutic proteins. This is just one example of several key topics that went

beyond Appendix B. Renewal of the curriculum also allowed for expansion of key contemporary subjects (e.g., pharmacogenomics, informatics and pharmacy management) from being electives or small content areas in larger courses to stand-alone required courses. The curricular location and timing of individual courses were carefully considered to ensure necessary prerequisite knowledge and skills were obtained and integration with concurrent (or preceding) courses could be optimized. The percentage of didactic course credits (47%) that involve faculty from both departments serves as evidence of the practical integration of the clinical sciences with the pharmaceutical sciences (**13.2.4**).

The ITPD/NTPD pathways are based on the content and structure of the ELPD curriculum and take into account, as appropriate, the previous education of the students. Foundational sciences competency is assured in NTPD students through attainment of their BS (Pharmacy) degree, and in ITPD students through passing of biomedical and pharmaceutical sciences competency exams or the FPGEE exam. Our faculty members serve as course directors for all ITPD/NTPD courses to ensure the quality of the courses are comparable to those in the ELPD program. Communication and US-based pharmacy practice courses and IPPEs occur in the first on-campus session for the ITPD program; NTPD students (who are currently licensed) are exempt from these courses. Courses in pharmacotherapy, Clinical Reasoning & Decision Making and Capstone represent the majority of the ITPD/NTPD pathways. APPEs in these programs use identical syllabi and outcomes as the ELPD program. Public Health, IPE and Evidence-Based Medicine courses are based on the same courses in the ELPD program. All courses are mapped to ACPE appendices B, C and D, and our ABOs (**13.2.5, 13.2.6**).

The integrity and faithfulness of each course to our 14 ABOs and ACPE Appendix B was ensured with the first offering of the renewed curriculum and are monitored on an annual basis by the Curriculum and DDP committees (**13.2.7**). The course reapproval process involves course director reflection on the success of the previous offering of the course *via*: an overall assessment of the course (including student course evaluations and student focus group feedback), affirmation that assigned ABOs and ACPE content are included in the course, description of student performance on assessments, summary of the Assessment committee review, and planned changes to the course and syllabus and reasons (**13.2.8**). Through this thorough review process, we are assured that (i) our ABOs and Appendix B content are being appropriately covered, (ii) gaps in curricular content or inappropriate redundancies are prevented, and (iii) the quality of the course is being improved or at least maintained on an annual basis.

In the curriculum renewal process, mapping (together with feedback from graduating student surveys) identified content areas that needed to be added to the NTPD pathway. Public Health, IPE, Pharmacogenomics, Capstone courses were subsequently included in the NTPD pathway in fall 2014, ensuring its alignment with the ELPD curriculum. ITPD and NTPD courses are based on the same ELPD courses. Where possible, identical ELPD instructors and content are used in ITPD/NTPD courses. Examples of these include pharmacotherapy courses, Patient Centered Communication (ITPD only), IPE, Evidence-Based Medicine & Literature Evaluation, Public Health I & II, and Capstone.

Our ABOs define the desired core knowledge, skills and values for our students. The Assessment committee (through the course assessment review process) tracks student performance and verifies that students are achieving these ABOs based on assessments in the courses. The Experiential Education committee tracks student performance on APPE evaluations that are also based on the ABOs. Receipt of a score of at least "*consistently meets expectations*" on these evaluations serves as verification of attainment of the ABOs in a practice setting. The LOA of our graduating students for Q47 (*I was academically prepared to enter APPEs*) exceeded national (97% vs. 92%, P=0.01) indicating the effectiveness of pre-APPE courses (**13.2.9**).

In the development of the renewed curriculum, considerable effort was directed towards integration, progressive development and reinforcement of knowledge, practice skills, professional attitudes and values. IPPE activities (P1-P3) are prescribed by the courses in that semester, making the IPPE activities directly related to material being covered in the courses. The time spent on these activities is incorporated into the contact hours of each course and successful completion of the activities contributes towards the course grade. IPPE activities are associated with clinical sciences courses *and* foundational sciences courses. For example, the MDx course has a Community Pharmacy IPPE activity in which students are tasked with identifying a corticosteroid and a leukotriene pathway inhibitor from the prescription shelf. They are asked to work backwards to explain how the agent works within the inflammation cascade, how it impacts the disease progression and to identify its therapeutic target.

Other specific examples of integration are as follows.

- In P1 fall, Patient Centered Communications (PCC) 1 and Pharmacotherapy Self-Care (PSC) 1 have two integrated verbal exams. The first exam covers identifying a patient's primary medical problem and taking a medical history. The second exam covers counseling a patient on a self-care product.
- In P1 spring, PCC2 and Pharmacotherapy (PT) 1 have one integrated verbal exam that covers counseling a patient on a unique (non-oral) dosage form and a pulmonary inhaler using the Indian Health Services model. PCC2 frequently uses content that was covered in PT1 for communication exercises, such as presenting a patient to a health care provider, patient counseling on prescription products and writing a SOAP note.
- Content from PT1 and PSC2 is organized such that topics are also appropriately integrated. PSC2 cases are used to illustrate the OTC management of disease states. Corresponding topics are then covered in PT1 using the cases in PSC2 that required referral to illustrate the prescription management of these disease states. Examples of topics that are integrated include nausea/vomiting, constipation/diarrhea, heartburn/GERD, allergic rhinitis, smoking cessation, ophthalmic/otic conditions and acne.
- In P2 fall, the Pharmacokinetics (PK) course is sequenced to match topics covered in PT2 and 3. The clinical application of the PK concepts is emphasized through the involvement of DOCP faculty members in the development and facilitation of many of the cases. In addition, such concepts are reinforced throughout the PT course series.
- PT 2 and 3 have one integrated activity session and one integrated verbal evaluation related to creating accurate patient assessments and plans for the management of a patient with two high priority disease states. Evidence-Based Medicine & Literature Evaluation uses disease states covered in PT 2 and 3.
- In P2 spring, student groups in the Clinical Reasoning & Decision Making course are assigned a patient case that had been discussed during PT 2 or 3. These cases are then expanded upon in the context of the course.
- PT 4 and 5 have three joint activity sessions. In two of the sessions, there are small group facilitated discussions on the assessment and plans for two high priority problems in a patient, with the problems involving content from each course. The final joint activity session covers QTc-prolonging medications.

Knowledge, practice skills and professional attitudes are frequently reinforced and advanced throughout our didactic and experiential curriculum. The core skill of creating an accurate and complete patient assessment and plan is reinforced and reassessed throughout the PT course series and Capstone course. The level of patient complexity increases each semester so that this skill is enhanced as the student progresses through the curriculum. Many of the core communication skills that were taught in the PCC1 and 2 courses are reinforced and reassessed in courses within the Integrated Clinical Sciences and the Communications/Informatics domains. Many of the core drug information skills taught in the Pharmacy Practice Fundamentals and Drug Information courses are similarly reinforced and applied in courses within the Integrated Clinical Sciences domain and in the Communications/Informatics domain. Professional attitudes are formally assessed throughout all IPPE and APPE experiences.

In the NTPD and ITPD pathways, professional practice skills, knowledge, communication and values are integrated and built upon throughout the following courses: IPE, Clinical Skills Foundations, Drug Information Fundamentals, Evidence Based Medicine, Clinical Reasoning & Decision Making, and Capstone; and additionally in the following ITPD courses: PCC, US-based Pharmacy Practice, Professional Skills Development and IPPEs.

The LOA of our graduating student were comparable to (Q34, P=0.19) or exceeded (Q37, P=0.01) national (**13.2.9**). For the alumni Q24 (*my coursework prepared me to enter my practice experiences*), the LOA of our school was comparable to national (92% vs. 93%, P=0.59). Nevertheless, we have made several changes to the curriculum to better prepare students for APPEs and for entering practice. First, we created an advanced IPPE (aIPPE) experience that occurs during the first 6 weeks of P3 spring semester. This allows students to experience the practice environment and permits any deficiencies in knowledge, skills or values to be identified early and corrected, as appropriate, in the Capstone course prior to the student entering the APPEs. We have also created an Intersession in the P4 APPE year during which all P4 students will return to campus for rotation #6. Throughout intersession, our faculty will have an opportunity to reconnect with students, assess their progression toward achieving the programmatic ABOs and work with students to correct any deficiencies prior to the two remaining APPEs. For alumni surveys, the response rate was very low making it difficult to draw general conclusions from the data. Nevertheless, we reviewed the survey results over the past several years and have made important changes in the renewed curriculum. For Q25 (*the courses I took prepared me to enter my first pharmacy job*), the LOA of our alumni was less than national (82% vs. 88%, P=0.02). Our previous curriculum was focused on clinical pharmacy in any practice setting for many years. However, a large proportion of our students are initially employed in the community pharmacy environment where many of them assume managerial responsibilities very early in their careers. In our previous curriculum, pharmacy management education was available as an elective course. To better prepare our students for their first position, our renewed curriculum includes required Pharmacy Management and Healthcare informatics courses. For Q27 (*pharmacy related elective courses met my needs as a PharmD student*), our alumni LOA was comparable to national (79% vs. 83% national, P= 0.07). In addition, our school has greatly expanded its elective offerings over the past few years from 5 to 18 courses (**13.2.10**).

As noted, all courses in our program are mapped directly to Appendix B and our ABOs, thus ensuring that our school provides the necessary foundational development of knowledge, skills and attitudes for a professional degree program. Through the expansion of prerequisite courses, foundational sciences courses in the curriculum have been redeveloped that place an emphasis on the *application* of biomedical and pharmaceutical sciences to the practice of pharmacy.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

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14. Curricular Core - Pharmacy Practice Experiences

The college or school must provide a continuum of required and elective pharmacy practice experiences throughout the curriculum, from introductory to advanced, of adequate scope, intensity, and duration to support the achievement of the professional competencies presented in Standard 12.

The pharmacy practice experiences must integrate, apply, reinforce, and advance the knowledge, skills, attitudes, and values developed through the other components of the curriculum. The objectives for each pharmacy practice experience and the responsibilities of the student, preceptor, and site must be defined. Student performance, nature and extent of patient and health care professional interactions, where applicable, and the attainment of desired outcomes must be documented and assessed.

In aggregate, the pharmacy practice experiences must include direct interaction with diverse patient populations in a variety of practice settings and involve collaboration with other health care professionals. Most pharmacy practice experiences must be under the supervision of qualified pharmacist preceptors licensed in the United States.

2. College or School's Self-Assessment

The college or school provides a continuum of required and elective pharmacy practice experiences throughout the curriculum, from introductory to advanced, of adequate scope, intensity, and duration to support the achievement of the professional competencies presented in Standard 12.	Satisfactory
The pharmacy practice experiences integrate, apply, reinforce, and advance the knowledge, skills, attitudes, and values developed through the other components of the curriculum.	Satisfactory
Pharmacy practice experiences include periods for preparation and guided reflection.	Satisfactory
The objectives for each pharmacy practice experience and the responsibilities of the student, preceptor, and site are defined.	Satisfactory
Goals and outcomes for each pharmacy practice experience are mapped to activities listed in Appendix C to ensure that students' experience will cover, at a minimum, all the listed activities.	Satisfactory
Student performance, nature and extent of patient and health care professional interactions, where applicable, and the attainment of desired outcomes are documented and assessed.	Satisfactory
In aggregate, the pharmacy practice experiences include direct interaction with diverse patient populations in a variety of practice settings and involve collaboration with other health care professionals.	Satisfactory
Most pharmacy practice experiences are under the supervision of qualified pharmacist preceptors licensed in the United States.	Satisfactory
The college or school ensures that all preceptors (especially first-time preceptors prior to assuming their responsibilities) receive orientation regarding the outcomes expected of students and the pedagogical methods that enhance learning, ongoing training, and development.	Satisfactory

A quality assurance procedure is in place that facilitates standardization and consistency of experiences and outcomes while allowing for individualization of instruction, guidance, and remediation by the preceptor based on student needs.	Satisfactory
Students do not receive remuneration for any pharmacy practice experiences (introductory or advanced) for which academic credit is assigned.	Satisfactory
The introductory pharmacy practice experiences involve actual practice experiences in community and institutional settings and permit students, under appropriate supervision and as permitted by practice regulations, to assume direct patient care responsibilities.	Satisfactory
Introductory pharmacy practice experiences account for not less than 300 hours over the first three professional years. The majority of students' time (minimum 150 hours) is balanced between community pharmacy and institutional health system settings.	Satisfactory
The length of the advanced pharmacy practice experiences is not less than 1440 hours (36 weeks) during the last academic year and after all pre-advanced pharmacy practice experience requirements (i.e., introductory pharmacy practice experiences and required core didactic course work) are completed.	Satisfactory
All required advanced pharmacy practice experiences in all program pathways are conducted in the United States or its territories and possessions (including the District of Columbia, Guam, Puerto Rico, and U.S. Virgin Islands).	Satisfactory
Required experiences include primary, acute, chronic, and preventive care among patients of all ages and develop pharmacist-delivered patient care competencies in the following settings: • community pharmacy • hospital or health-system pharmacy • ambulatory care • inpatient/acute care general medicine	Satisfactory
Simulation is used appropriately as a component of introductory pharmacy practice experiences; it does not account for greater than 20% of total introductory pharmacy practice experience time and does not substitute for the hours devoted to actual experiences in community pharmacy and institutional health system settings.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ How student performance is assessed and documented, including the nature and extent of patient and health care professional interactions, and the attainment of desired outcomes

☑ How, in aggregate, the practice experiences assure that students have direct interactions with diverse patient populations in a variety of health care settings

☑ How the college or school ensures that the majority of students' IPPE hours are provided in and balanced between community pharmacy and institutional health system settings

☑ How the college or school uses simulation in the curriculum

☑ How the college or school establishes objectives and criteria to distinguish introductory from advanced practice experiences.

☑ How the college or schools assures, measures, and maintains the quality of site used for practice experiences

☑ How quality improvements are made based on assessment data from practice sites

☑ How the goals and outcomes for each pharmacy practice experience are mapped to the activities listed in Appendix C of Standards 2007 to ensure that students' experience will cover, at a minimum, all the listed activities

☑ How the college or school is applying the guidelines for this standard, and the additional guidance provided in Appendix C, in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

The experiential program is a robust component of our curriculum as it has been developed through continuous improvement and innovation. Our experiential program has received awards for innovation and been the subject of numerous publications. Recent advances include meaningful alignment of IPPEs with didactic coursework, addition of faculty in clinical settings (hospital, ambulatory clinics, clinics for the underserved), improved preceptor outreach, and training coordinated with the Regis School of Pharmacy.

Our school's ASCEND program is a continuum of required and elective pharmacy practice experiences that support achievement of professional competencies (Standard 12) (**14.5.1**. These include IPPE, advanced IPPE (aIPPE) and APPE experiences. All experiential program goals and outcomes are mapped to our ABOs and ACPE Standards 2007 Appendix C and D content (**14.5.2**). Our school (*via* the Experiential Education committee) has made experiential programmatic alignment of all PharmD programs a priority.

To ensure each rotation is a valuable learning experience, responsibilities of the rotation participants (i.e., student, preceptor, site) are clearly defined and objectives are defined in the context of our school's ABOs (**14.5.3**). For required APPEs, preceptors are licensed pharmacists; for electives, they may be other health care professionals (e.g., MDs) or licensed pharmacists outside the USA (**list on-site**).

The ELPD IPPEs are a comprehensive 390-plus hour program spanning 6 semesters intentionally linked with courses in the didactic curriculum. There is an even balance of the 154 required hours between community and health-system practice settings (**14.5.4**); 4 hours are dedicated to simulation (**14.5.5**). Throughout IPPEs, students are required to reflect upon their practice skills with writings and group discussions (**14.5.6**). During P3 spring, 240 hours are dedicated to a 6-week aIPPE. By design, the IPPE program allows for professional growth and opportunities to be mentored, gradual development and application of skills, and preparation for more independent learning and practice during the APPE year.

ELPD students must complete seven stand-alone, 6-week rotations: one ambulatory care, one community, one medication therapy management (MTM), two hospital/health system and two elective APPEs, stand-alone 6-week rotations. The ITPD and NTPD experiential program requirements have been modeled on the ELPD experiential program. Details of the ITPD IPPE and APPE and NTPD APPE programs are provided in **14.5.7, 14.5.8** and **14.5.9**.

The ELPD IPPE and APPE programs are distinct in terms of structure, outcomes, and student assessment. The Community, Health-System, and Provider IPPEs are longitudinal programs comprising

3-4 hour visits at practice sites (**14.5.4**). Didactic courses contain required IPPE components (**14.5.10**) with specific objectives that relates to their course material (**14.5.11**). IPPEs emphasize professionalism and communication. Assessment of student performance includes feedback from preceptors, reflective activities, IPED grade and didactic course-associated IPPE activities. The aIPPE bridges the IPPE and the APPE program by providing opportunities for the student to demonstrate APPE readiness as evaluated by external practitioners. The aIPPE introduces a greater expectation for student engagement and provision of patient care, and thus, is mapped to additional ABOs (**14.5.2**). Preceptors assess students in a similar manner as the APPE program but adjusted to reflect a P3 level of performance. In contrast to the IPPE phase, *performance* during the aIPPE represents the majority of a student's final grade.

APPEs are mapped to ABOs with the assignment of ABOs varying between APPEs depending on the activities in which the students are engaged (**14.5.12**). Individualized syllabi provide specific learning objectives tailored to the rotation type and emphasize the requirement for direct patient care and interprofessional team practice. ABOs 11 and 14 (professionalism and communication) are common to all APPEs and are thus included in all assessments. All rotation sites are required to annually complete a site survey documenting the percentage of direct patient care and patient populations served (**14.5.13**). At weeks 2 and 5 of each APPE, students submit documentation of daily patient encounters, interactions with team members, and pharmaceutical care interventions. Preceptors document student demonstration of ABOs in a manner consistent with an entry-level practitioner. They complete an initial formative assessment of students at the end of week 1 to identify areas that may warrant attention. At the 3rd and 6th weeks, preceptor(s) complete an assessment and evaluation (respectively) of student performance of ABOs (**14.5.14**). During final evaluation of the APPE, students complete an assessment of how well the experience provided them opportunities to demonstrate each ABO (documented in E*Value). These evaluations are discussed during face-to-face meetings with the student and documented in E*Value. Scores range from *Beyond Entry-Level Performance* to *Not Ready for Advancement.* A grade is assigned to the student by the APPE course director based on the preceptor's week 6 APPE evaluation. In the AACP survey, 88 % of preceptors (Q24, similar to national 90%, P=0.14) agreed thatthe assessment tools provided to them for their site were suitable. Nevertheless, based on preceptor feedback, we continue to improve the APPE assessment tool. Ongoing revisions include objectives that are mapped to ACPE Standards 2016 to ensure all expectations are being met in our required experiential rotations.

Our experiential program offers a wide variety of practice environments for student placement and provides ample opportunity to interact with and care for a diverse patient population. Diversity in disease states, patient demographics, health care teams, site funding models and geographical location result in enriching and unique experiences for students. The Service Learning component of the ELPD IPPE phase is one example of our students engaging with elementary school-aged children from underserved areas in Aurora. Local specialty and nationally recognized hospitals (**14.5.15**) offer IPPE and APPE experiences. In Colorado, 65% of counties are considered rural, allowing unique student experiences. ELPD students are required to complete 1-2 APPEs in these rural areas. APPEs at more than 16 Safety-Net clinics provide health care to patients who have limited access or barriers to care (**14.5.16**). Many ELPD students select health fairs in rural or urban communities as their Own Choice IPPE activity (**14.5.17**). The educational utility of the Own Choice IPPE is illustrated by a student comment (**14.5.17**). The IPPE and APPE programs ensure that our students have direct interactions with diverse populations and are reflected in the high graduating student LOA (97%) on Q51 (*My pharmacy practice experiences allowed me to have direct interaction with diverse patient populations*)(identical to national 97%, P=0.93).

Experiential sites must be of high quality to support the development of our students. To ensure all sites meet our school's educational requirements, new and existing sites are carefully reviewed on an ongoing basis. Quality assurance for addition of a new Colorado site into our program is centered on the application of Exemplary Criteria (**14.5.18**). These are based on ACPE standards for practice sites and preceptors and determine site approval by Office of Experiential Programs (OEP). Lack of qualified preceptors, adequacy of physical space, or inability to meet experiential requirements are common reasons for non-approval of a site. All APPE preceptors must be licensed for at least 1 year and have a current CV on file with OEP.

The quality of all existing sites undergo continuous and retrospective analyses. Through an appointment process involving DOCP and the Associate Dean for Academic Affairs, preceptors hold clinical track faculty positions in the school. Student feedback and assessment of the preceptor/site (**14.5.19**) plays a role in our quality assurance system. Students describe preceptor effectiveness at mentoring, i.e., providing critical and effective feedback and modeling professionalism. They also provide confidential comments about their experiences (viewed only by OEP). Student evaluations are also used to supplement the IPPE/APPE Quality Assurance Site Evaluation form completed by OEP staff used during site visits (**14.5.20**). Our outreach coordinators conduct site visits in Colorado on a weekly basis.Students' evaluation of the rotation experience and preceptor performance are made available to each preceptorat the end of each rotation. A rating of *performing below expectations* triggers the E*Value Low Score Notification feature notifying OEP. If a pattern is determined, OEP intervenes with the intention of helping improve the site or preceptor. If poor performance persists, removal from the program may occur. Conversely, outstanding examples are recommended for recognition as models for other sites or preceptors. They are invited to share their ideas at preceptor development events, and are highlighted at our annual preceptor recognition events, in our school's newsletters, annual reports, and website. The quality of our sites is demonstrated by the high graduating student LOA (92%) on Q48 (*available APPE sites were of high quality*) (similar to national 92%, P=0.78).

Preceptor orientation, development and training specific to experiential education are imperative to assure the needs of the program are being met. Such training is a benefit offered by our school, provided *via* free online resources (**14.5.21**). Preceptor networking events in Colorado and at national meetings are held several times throughout the year. A preceptor recognition event is held annually, providing additional opportunities for networking, collaboration and professional development.

There are several curricular innovations in the experiential program including the Own Choice IPPE program, the community-based MTM certificate training and the aIPPE (explained in more detail in **14.5.17**). Our school is particularly proud of the aIPPE because it effectively integrates students into clinical practice sites before their P4 year, requires their direct involvement in patient care, promotes student self-reflection on level of practice skills, and prepares them for the following Capstone course. A quality improvement is OEP providing preceptors/sites with their evaluations after each rotation rather than annually, in addition to the regular preceptor/site visits conducted by the outreach coordinators.

Our graduating student LOAs were comparable to national (P>0.05) in the 79-99% range (**14.5.22**). Matching students to IPPE sites has improved, as shown in the progressive improvement in the LOAs of Q40 (*The process by which I was assigned sites for IPPEs was fair*) from 81% (2010) to 90% (2014). When considering their ability to apply patient care skills, our students felt adept in the variety of APPE settings, with LOAs being comparable for community pharmacy (Q41, 92%), ambulatory care (Q42, 96%), hospital/health-system pharmacy (Q43, 96%) and inpatient/acute care (Q44, 93%). Notably, our students' LOA for *ability to apply patient care skills in the hospital/health-system pharmacy setting* (Q43)

was higher than national (96% vs. 92%, P<0.01). Our alumni's LOA was comparable to national for Q27 (*Pharmacy-related elective courses met my needs as a PharmD student*) (79% vs. 83%, P=0.07) but less than national for Q25 (*The courses I took prepared me to enter my first pharmacy job*) (82% vs. 88%, P = 0.02). The fact that our graduating student LOA for Q84 (*I am prepared to enter pharmacy practice*) has been higher than national (97 vs. 95%, P=0.02) suggests that our courses are preparing students for their job. Our preceptor LOAs were comparable to (Q11, 18, 23, 24, 38, 38) or less than (Q12 [*I receive results from student evaluations of my rotation*], 19 [*The responsibilities as a preceptor has been defined at my site*], 20 [*The objectives for my pharmacy practice experience have been defined at my site*], 21 [*I use feedback about my site to make improvements to my student practice experience*]) national OEP has added 3 outreach coordinators to its staff to foster and improve communications with our large network of preceptors. This improvement, together with the development of more rotation-specific ABOs, should improve the LOAs for Q19 and 20. The provision of preceptor/site evaluations in a timelier manner (after the rotation) should result in improved LOAs for Q12 and 21.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

15. Assessment and Evaluation of Student Learning and Curricular Effectiveness

As a component of its evaluation plan, the college or school must develop and carry out assessment activities to collect information about the attainment of desired student learning outcomes. The assessment activities must employ a variety of valid and reliable measures systematically and sequentially throughout the professional degree program. The college or school must use the analysis of assessment measures to improve student learning and the achievement of the professional competencies.

The college or school must systematically and sequentially evaluate its curricular structure, content, organization, and outcomes. The college or school must use the analysis of outcome measures for continuous improvement of the curriculum and its delivery.

2. College or School's Self-Assessment

The college or school develops and carries out assessment activities to collect information about the attainment of desired student learning outcomes. The assessment activities employ a variety of valid and reliable measures systematically and sequentially throughout the professional degree program.	Satisfactory
The college or school's evaluation of student learning determines student achievement at defined levels of the professional competencies, in aggregate and at the individual student level	Needs Improvement
The college or school uses the analysis of assessment measures to improve student learning and the achievement of the professional competencies.	Satisfactory
The college or school systematically and sequentially evaluates its curricular structure, content, organization, pedagogy, and outcomes.	Satisfactory
The college or school uses the analysis of outcome measures for continuous improvement of the curriculum and its delivery.	Satisfactory
The college or school has developed a system to evaluate curricular effectiveness.	Satisfactory
The college or school ensures the credibility of the degrees it awards and the integrity of student work.	Satisfactory
The college or school has mechanisms to assess and correct underlying causes of ineffective learning experiences.	Satisfactory
The college or school's assessments include measurement of perceived stress in faculty, staff, and students, and evaluate the potential for a negative impact on programmatic outcomes and morale.	Needs Improvement

3. College or School's Comments on the Standard

Focused Questions

☑ A description of formative and summative assessments and measures used to evaluate teaching and learning methods and curricular effectiveness, including nontraditional pathway(s) leading to the Doctor of Pharmacy degree (if applicable)

☑ A description of the assessment measures and methods used to evaluate student learning and, achievement at defined levels of the professional competencies and educational outcomes, both in aggregate and at the individual student level

☑ How achievement of required competencies by all students is assessed and assured on completion of the program

☑ Comparisons with national data and selected peer-group programs (include a description of the basis for the peer-group selection) and trends over time

☑ How feedback from the assessments is used to improve student learning, outcomes, and curricular effectiveness

☑ The mechamisms in place to assess and correct causes of ineffective learning experiences, including the measurement of perceived stress in faculty, staff, and students and evaluation of the potential for a negative impact on programmatic outcomes and morale

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

Our school continuously assesses curricular effectiveness in an organized, highly structured process that ensures steady improvements in the way assessments are managed and the curriculum is evaluated. Recently, our school developed and implemented a comprehensive Programmatic Evaluation Plan (PEP) (see Standard 3) of which curricular effectiveness is an integral part. Our professional curriculum and its courses have been mapped to our school's abilities-based outcomes (ABOs) and ACPE Appendices B, C and D (Standard 12). These serve as the basis upon which attainment of student learning outcomes is evaluated.

The Assessment committee (AC) has the primary responsibility for evaluating data and informing stakeholders about curricular effectiveness. The Curriculum (CC) and DDP (DDPC) committees use these data to monitor curricular performance and guide continuous improvement in the curriculum and its delivery. Assessment occurs through methods and measures that allow internal and external benchmarking and evaluation, and at the following levels: (i) individual students, (ii) courses and (iii) program as described below.

Assessment of *student achievement* in the curriculum is the responsibility of course directors and instructors. Varied methods, including quizzes, exams, research poster presentations, case studies, self-reflection, and performance-based assessments, are employed to provide formative and summative feedback to assess student learning. Common measures are used across the curriculum to standardize expectations and assess progression of achievement. For example, part of the assessment for communication (ABO 12 and 13) uses a standard rubric with expectations increasing as students advance through the curriculum. Faculty also have the freedom to innovate and design unique learning experiences and assessments specific to their course, e.g., use of student debates in Applied Biological Chemistry to enhance critical thinking, self-learning and communication skills.

The aIPPE and the Capstone course provide students with the opportunity for self-assessment of their abilities; the experiences also allow the faculty to evaluate student readiness for APPEs. Both of these experiences are meant to comprehensively assess student ABO achievement and provide actionable feedback before students begin their APPE rotations.

APPE evaluation rubrics assess the student's ability to meet Appendix C objectives and ABOs applicable to each rotation. A minimal score of *Consistently Meets Expectations* serves as documentation of attainment of the desired knowledge, skills and values in a practice setting. A novel feature of our renewed curriculum is the intersession course (during rotation #6) that allows faculty to assess student progress and address areas for needed improvement. Within APPEs, poor student performance is monitored through the provision of low score notifications to the Experiential Education committee (EEC). A student receiving the evaluation *Needs Further Development and Guidance* or *Needs Significant Improvement* is required to meet with the EEC. A corrective action plan is developed and the student is monitored for improvement on subsequent APPEs.

Moving from student learning to assessment of curricular effectiveness, course and instructor improvements are guided by the review of evaluations by students (individually, focus groups), student performance and the course director's *post hoc* assessment of course performance.

For *course assessment*, course directors receive formative and summative feedback during and at the conclusion of each semester that is used in the course evaluation process (**15.8.1**) During the semester, course directors receive formative feedback through student focus groups (**15.8.2**) and an *ad hoc* process involving class leaders. At the end of each semester, course directors receive summative feedback through the online course evaluation (pooled data and unidentified individual responses) (**15.8.3**, **15.8.4**). This information, along with course grades, is evaluated by the course director(s) and the AC (or DDPC, as appropriate) at the end of each semester. These committees review course evaluations and grade distributions trend data (**15.8.5**), and develop feedback for each course. The AC provides its feedback to the course director(s) and the CC. The CC requires all courses to undergo reapproval each year, involving the course director(s) submitting a course review form (**15.8.6**) that responds to AC feedback. The CC provides constructive feedback, thereby ensuring course improvements and curricular effectiveness.

Each instructor in a course is evaluated at the end of each semester (**15.8.7**) and the pooled data (and individual comments) are provided to the instructor, course director(s), department chairs and Associate Deans for Professional Education and Academic Affairs. Course directors review individual instructor evaluations and are responsible for providing feedback to instructors to ensure appropriate teaching and learning methods, and curricular effectiveness. In the annual faculty evaluation, department chairs review instructor performance and may recommend different educational approaches and/or mentoring by a more experienced faculty member, if warranted. This approach has proven effective in instances when there has been poor performance.

Curricular effectiveness at a *programmatic level* is assessed through direct measures of student learning, survey data, and standardized exams. The ABOs are most comprehensively assessed by preceptor-completed rubrics in APPEs. The EEC reviews ABO achievement based on data from APPE preceptors provided during APPE rotations and shares the consolidated data with the AC; these data are then used to assess ABO achievement and areas for curricular improvements. After reviewing such APPE assessment data in 2014-15, it was determined there was a need to modify two ABOs (**15.8.8**) that were not appropriate for an entry-level pharmacist. APPE assessment data also indicated that

preceptors were unable to rate certain items because the required objective was not part of the rotation. This resulted in the creation of assessment tools that are specific to each rotation type. This process ensured that we collect valid and reliable ABO achievement data to improve curricular effectiveness.

Our school uses NAPLEX and MJPE data as an additional source for aggregate and individual evaluation of ELPD programmatic/educational effectiveness. AACP surveys and internal graduating student surveys provide indirect measures of curricular effectiveness. The January 2016 winter faculty retreat will focus on a review of the performance of the revised curriculum, including in the context of Standards 2016.

Our school conducts external comparisons (i.e., with peer and all other schools of pharmacy) through analysis of AACP survey data (graduating student, faculty, preceptors and alumni), and NAPLEX and MJPE scores. The Director of Assessment amalgamates the new data (SSPPS, national, and, when available, peers) into our existing database. The AC analyzes the data and monitors 5 year trends. These data are then summarized (and compared with national and peers) and salient differences are highlighted and provided to key stakeholders for feedback. When warranted by continual declining scores or sharp decreases to a score, the AC notifies the stakeholder and Executive committee requesting feedback to address the issue.

Currently, perceived stress of faculty, staff, and students and its potential for a negative impact on programmatic outcomes and morale is not objectively assessed by our school. We are in the process of evaluating methods to accurately assess factors in the academic pharmacy environment that will provide valid information on whether such factors affect curricular effectiveness.

The AACP surveys revealed our graduating students to be comparable to national in their LOA for Q28 (*The PharmD program prepared them to reflect critically and develop action plans when necessary*) (97% vs. 96%, P=0.06) (**15.8.9**). The effectiveness of our assessment processes is illustrated in the higher LOA expressed by our faculty (82% vs. 76% national, P=0.02) with Q27 (*The college/school uses programmatic assessment data to improve the curriculum*). The LOA of our preceptors was similar to national for Q22 (*I am aware of the mechanism to provide feedback to the college/school regarding the PharmD curriculum*) (74% vs. 77%, P=0.11) and Q24 (*The assessment tools provided to me for my site are suitable for measuring student performance*) (88% vs. 90%, P=0.14). With respect to the latter, we anticipate the change in the ABOs (and resultant rubric changes) will increase the LOA in future. The LOA of our alumni (57%) for Q17 (*Since graduation, the college/school has solicited my input/feedback for programmatic improvement*) was comparable to national (61%, P=0.4). Nevertheless, we continue to make purposeful efforts to engage our alumni in school affairs.

4. College or School's Final Self-Evaluation

☐ Compliant	☑ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

Our renewed curriculum has one year before its first class of graduates. As a result, it is not yet possible to fully evaluate our renewed curriculum's ability to meet its designated outcomes. This will be done at the completion of the 2015-16 when the full four years of the renewed curriculum have been completed.

Our school's evaluation of student achievement at defined levels of the professional competencies, in aggregate and at the individual student level, is part of the new programmatic evaluation plan (PEP) that is in its first year and has not yet been fully implemented. The assessment committee has developed a systematic process by which achievement of each abilities-based outcome (ABO) will be evaluated at various levels of performance. The committee will begin this new more robust assessment process in the 2015-16 academic year and evaluate its effectiveness prior to implementation throughout the curriculum.

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16. Organization of Student Services

The college or school must have an organizational element(s) devoted to student services. The administrative officer responsible for this organizational element must oversee and coordinate the student services of the college or school.

2. College or School's Self-Assessment

The college or school has an organizational element(s) devoted to student services.	Satisfactory
The organizational element(s) devoted to student services has an administrative officer responsible for overseeing and coordinating them.	Satisfactory
The budget assigned to student services is sufficient to provide needed services.	Satisfactory
The college or school has an ordered, accurate, and secure system of student records which are confidential and maintained in compliance with the Family Educational Rights and Privacy Act (FERPA).	Satisfactory
Student services personnel are knowledgeable regarding FERPA law and its requirements.	Satisfactory
The college or school provides students with financial aid information and guidance, academic advising, career-pathway and other personal counseling, and information about post-graduate education and training opportunities, e.g., residencies, fellowships, and graduate school.	Needs Improvement
The college or school offers access to adequate health and counseling services for students. Appropriate immunization standards exist, along with the means to ensure that such standards are satisfied.	Satisfactory
The college or school has policies in place so that students who have off-campus classes or pharmacy practice experiences fully understand their insurance coverage and where and how to access health and counseling services.	Satisfactory
The college or school has a policy on student services, including admissions and progression, that ensures nondiscrimination as defined by state and federal laws and regulations, such as on the basis of race, religion, gender, lifestyle, sexual orientation, national origin, or disability.	Satisfactory
The college or school ensures that students in all degree program pathways and geographic locations have equal access to and a comparable system of individualized student services (e.g., tutorial support, faculty advising, counseling).	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ A description of student services offered and, if applicable, how the college or school ensures that students in all degree program pathways and geographic locations have equal access to and a comparable system of individualized student services (e.g., tutorial support, faculty advising, counseling)

☑ A description of the sections of the student handbook that deal with specific requirements of the standard and guidelines

☑ How the college or school provides students with financial aid information and guidance, academic advising, career-pathway and other personal counseling, and information about post-graduate education and training opportunities

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

Student services are provided to our ELPD students by Office of Student Services (OSS) and to our ITPD and NTPD students by the DDP Office. The Associate Dean for Student Affairs and DDP Director serve as the administering officers overseeing student services for these programs, respectively, in accordance with applicable state and federal laws regarding non-discrimination (**16.5.1**). Both offices have adequate personnel and resources to undertake their responsibilities (**16.2.1, 16.1.2**). Staff members in both units are required to complete FERPA training upon hiring and reinforcement occurs annually thereafter. All student records are maintained in an ordered, accurate, and secure manner, in full compliance with FERPA.

Our school uses central campus facilities to provide financial aid information/guidance, student billing (Bursar's Office), counseling (Student Mental Health/Wellness Service, SMHWS), disability support (Disability Resources), inclusion promotion (Office of Inclusion & Outreach), conflict resolution (Ombuds Office), registration (Office of the Registrar), veteran support (Veteran Student Services) and writing services (HSL Writing Center). All students (ELPD, ITPD, NTPD) are required to have a specified level of health insurance, which includes coverage for mental health services (student health insurance). The Office of Financial Aid hosts orientation and exit counseling sessions and administers loans, scholarships and other resources in accordance with university and federal guidelines. One staff member is dedicated to pharmacy students.

Both offices of student services are responsible for student recruitment and, in collaboration with our Admissions, DDP and Scholastic Advancement and Appeals committees, manage the admissions, progression and advancement processes. The offices are committed to success of all students and serve as student advocates. Student academic progress is monitored through electronic access to student scores on the learning management system and direct communication with course directors. This permits early intervention, discussion (face-to-face, telephone or email) regarding the nature of the difficulties and referral to resources (e.g., instructor, tutor, study group, etc.). OSS and DDP manage free tutoring for courses that historically have been challenging or for students who request assistance (**16.5.2, 16.5.3**).

OSS and DDP provide assistance with awards and scholarships, enrollment and degree verification, commencement and other events, including information about, assistance with and implementation of accommodations for disabilities. OSS and DDP play an important intermediary role in ensuring that an accommodation meets the student's needs while ensuring that it does not alter the fundamental nature of the curriculum. By facilitating communication between faculty members and Disability Resource Services staff, our school effectively and efficiently supports students who have an acknowledged disability while maintaining the academic integrity of our program.

During application, students are required to acknowledge their understanding of the technical standards (**16.3.1**) and immunization, substance abuse, drug testing, transportation, rural rotations, satisfaction of prerequisites, release of NAPLEX and MPJE scores, and professional dress and appearance policies, as applicable (**16.5.4**). Immunizations, CPR certification and intern or pharmacist licensure are required (**16.5.5**). Students participating in experiential sites outside of the Denver Metro area are expected to have insurance that covers their health needs. The staff of OSS and DDP is available to provide advice, guidance and resources in these circumstances

During orientation, P1 students are informed about campus and school resources, health insurance requirements, financial aid, expectations of professionalism, the ethics and conduct code, and the scholastic advancement and appeals processes (**16.5.6**). Instruction is provided regarding the technologies used in our programs and on campus. Incoming ITPD students are required to attend a 2-day orientation that covers similar content, with more emphasis on technology and less on the physical resources of the campus. New NTPD students are strongly encouraged to attend; however, they can engage in an online orientation.

To foster professional development, OSS organizes career and internship fairs, and interview days, and circulates intern and employment opportunities to students. Both OSS and DDP oversee student organizations (**16.5.7**) and OSS hosts an annual leadership retreat for Student Council officers. OSS approves student organization events, and assists in the coordination of internship, residency/fellowship and resume/CV writing workshops. Faculty liaison programs exist for ELPD students (**16.5.8**) and are being developed for ITPD/NTPD students.

Specific requirements for this standard in relation to necessary student information are available on our website at the URLs listed in**16.5.9**. More general information for our students is provided in the SSPPS and DDP student bulletins (**16.4.1, 16.4.2**) and the handbook for AMC students, available online (AMC handbook).

Our school has several notable achievements, innovations and quality improvements.

- To support students in the final class of the existing ELPD curriculum and in the first class of the renewed curriculum, our school introduced facilitated group study sessions. Thus far, these two classes have achieved the lowest rates of academic attrition since the implementation of the ELPD in 1999 (**16.5.10**).
- Office functions in OSS were migrated to electronic formats with robust back-up systems and strict adherence to confidentiality. This increased our efficiency associated with space and rapid information retrieval; it also prepares our school for emergencies, allowing for continued operation and returning to normal operations as soon as possible.
- Our school has made significant investments in security systems were made by our school, along with procedures and emergency preparedness surrounding safety for personnel and any students in the student services areas of our school.
- Our school was one of the first in the country to develop policies to address medical and recreational marijuana, and successfully implemented practices to prohibit its use and possession by student pharmacists (**16.5.11**). Drug testing of P4 students prior to the start of APPEs has been in place for many years (**16.5.12**). To assure safe and competent practice among all student pharmacists, our school implemented drug testing in the fall of 2012 for the entire student body, which occurs at the beginning of each academic year. Our school was the first on AMC to initiate such a comprehensive policy, as well as develop procedures to address the variety of circumstances that resulted from it, e.g., student fees, educating students about the process, negative dilute or positive results, etc.

- To further recruitment efforts, our school has engaged with the student organization, HOSA – Future Health Professionals, (primarily high school students) to create a national pharmacy competition **(16.5.13**).

AACP surveys show our graduating student LOAs regarding student services were exceeding (Q56 *Financial aid advising met my needs*), comparable to (Q58, 59, 63) and less than (Q53, 54, 55 and 57) national **(16.5.14**). For the latter, it is important to recognize that the low LOA for Q53 (60%), 54 (43%), 55 (36%) and 57 (50%) reflect the high proportion (29-35%) of our students selecting “did not use” or “unable to comment.” It should be noted that recent data on tutoring services has increased in the “strongly agree” and “agree” categories and decreased in the “”did not use” category, likely reflecting new tutoring programs. When percentages are recalculated using only those students providing an answer, they increase to 84, 66, 88 and 77% (vs. 82, 71, 80 and 88% for national), respectively. After this reanalysis, only Q57 is less than national (*Student health and wellness services met my needs*), (77 vs. 88%, P=0.01), likely due to not having a student health services on campus. However, a campus-based student health clinic, including both medical and mental health services, has been approved, funded and is scheduled to open in fall 2015. For statements relating to the student experience (Q58, 59 and 63), our graduating student LOA was similar to national (P=0.47) and in the range 89-93%. The LOA of our alumni with Q26 (*Information was made available to me about additional educational opportunities (e.g., residencies, fellowships, graduate school)*) was lower than national (85 vs. 90%, P<0.01). Our school has a number of valuable options allowing students to learn about additional educational opportunities; however, they may appear disconnected to students due to the various groups providing them, i.e., student organizations. To address this issue, we are launching an effort to package and consistently brand these messages, so students can better understand and recognize these threads of information, support services and resources throughout our program.

4. College or School's Final Self-Evaluation

☐ Compliant	☑ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

Monitoring for this standard relates to the need to further develop our overall career counseling and job opportunity services. Our school currently conducts career fairs, employer interview days and informal career counseling. Our plan is to establish a more structured, robust system that enhances the opportunities for our students for job placement and competitiveness for pharmacy positions. To this end, we already are collaborating with another school on campus that is establishing a similar program.

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17. Admission Criteria, Policies, and Procedures

The college or school must produce and make available to students and prospective students criteria, policies, and procedures for admission to the professional degree program. Admission materials must clearly state academic expectations, required communication skills, types of personal history disclosures that may be required, and professional standards for graduation. As a component of its evaluation plan, the college or school must regularly assess the criteria, policies, and procedures to ensure the selection of students who have the potential for academic success in the professional degree program and the ability to achieve the professional competencies and to practice in culturally diverse environments.

Student enrollment must be managed in alignment with available physical, financial, faculty, staff, practice site, preceptor, and administrative resources. The dean and a duly constituted committee of the college or school must share the final responsibility for enrollment and selection of students.

2. College or School's Self-Assessment

The college or school produces and makes criteria, policies, and procedures for admission to the professional degree program available to students and prospective students.	Satisfactory
Admission materials clearly state academic expectations, required communication skills, types of personal history disclosures that may be required, and professional technical standards for graduation.	Satisfactory
As a component of its evaluation plan, the college or school regularly assesses the criteria, policies, and procedures to ensure the selection of students who have the potential for academic success in the professional degree program, the ability to achieve the professional competencies, and the disposition to practice in culturally diverse environments.	Satisfactory
Student enrollment is managed in alignment with available physical, financial, faculty, staff, practice site, preceptor, and administrative resources.	Satisfactory
The dean and a duly constituted committee of the college or school share the final responsibility for enrollment and selection of students.	Satisfactory
Written and verbal communication skills are assessed for student admissions in a standardized manner.	Satisfactory
Interviews are structured to consistently address key admission criteria for each applicant.	Satisfactory
Interviewers have appropriate credentials and are trained in successful interview strategies and techniques.	Satisfactory
Evaluation of professional attitudes and behaviors is a component of the student selection process.	Satisfactory
The college or school develops and employs admission criteria that set performance expectations for admission tests, evaluations, and interviews used in selecting students who have the potential for success in the professional degree program and the profession.	Satisfactory
The admission evaluation of students is documented and records are maintained by the college or school.	Satisfactory

Admission criteria, policies, and procedures are not compromised regardless of the size and quality of the applicant pool.	Satisfactory
In accordance with United States Department of Education regulations, the college or school has a process in place through which the college or school establishes that the student who registers in a distance education course or program is the same student who participates in and completes all course or program requirements and receives academic credit.	Satisfactory
Consultation with ACPE occurs at least six months before recruiting students into new pathways or programs.	Satisfactory
The college or school ensures that early assurance students are at least as well qualified as students accepted for direct entry into the first professional year. Early assurance agreements and policies allow the college or school to manage student enrollment in alignment with physical, financial, faculty, staff, practice site, preceptor, and administrative resources.	N/A

3. College or School's Comments on the Standard

Focused Questions

☑ Admissions and enrollment Information, highlighting how specific requirements of the standards and guidelines are met, including those for early admission agreements or policies, if applicable

☑ How admission evaluations of students is documented and how records are maintained.

☑ A description of the college or school's recruitment methods

☑ A description of methods used to assess verbal and written communication skills of applicants to the program

☑ How enrollment is managed in alignment with available physical, financial, staff, faculty, practice site, preceptor and administrative resources

☑ How curricular outcomes data are correlated with admissions data

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

Our school has clearly outlined prerequisites, admission criteria, and performance expectations for success in pharmacy school. Our school’s prerequisites are outlined in **17.1.1**. Applications are made *via* PharmCAS (ELPD students) system or a school-based process (ITPD/NTPD). The Admissions (ELPD) or DDP (ITPD/NTPD) committees review candidates after having set performance expectations and developed rubrics for all application and interview parameters (**17.2.1** - **17.2.7**). This process ensures the selection of students who have the potential for academic success in professional programs, including achievement of the professional competencies. Overall, our school’s low attrition and high NAPLEX pass rates validate the efficacy of the current admissions procedures. Our school’s philosophy to develop practitioners who have the ability to practice in culturally-diverse environments is put into practice by

inclusion of a diversity issue in the interview process and matriculation of a diverse student population (**17.15.3**) into each class.

The dean delegates responsibility for selection of students to the Admissions and DDP committees. Faculty members provide input to the Admissions committee and collaborate in development of prerequisites, interview and admissions criteria. These criteria are available to prospective students on our website (PharmD and iPharmD Admissions). Admissions materials clearly state academic expectations, required communication skills, personal history disclosures and professional standards for graduation (**17.15.4**).

Our Admissions and DDP committees (**17.15.5**) consider applications and invite candidates to interview based on assessment of PCAT scores (ELPD), GPA (ELPD) and English proficiency (ELPD & ITPD). In addition, each candidate's complete application (includes letters of recommendation, professional sponsor (ITPD), background information, and personal essay) is reviewed. Throughout the admissions process, expectations for all parameters are designed to select students who can be successful in our professional programs and, by extension, the profession. Information regarding criteria for interview and admissions decisions are documented in Admissions and DDP committee minutes and individual applicant data are maintained in the WebAdmit® system.

No student is admitted to our school without participating in an on-campus visit (ELPD) and interview (all pathways) (**17.15.6**). Faculty members are trained in the interview process each year by an overview at faculty and committee meetings, and detailed memos that describe the process. New faculty members participate in small group or one-on-one interview training with the appropriate staff. Admissions procedures take into account scholastic accomplishments, communication skills, respect for diversity, commitment to patient care and professional attitudes and behaviors. Professional attitudes and behaviors are assessed in the applicant's personal essay, their letters of recommendation and their engagement during the faculty interviews and group activity (ELPD) on interview day. Each part of the interview contributes to a score that, along with assessor comments, is considered by the Admissions or DDP committee. The score produces an initial priority ranking that may be adjusted based upon committee discussion, and is used to make admissions decisions. The data are maintained within the WebAdmit® database throughout the cycle and ultimately archived on school-based servers. Over the past 5 admissions cycles, the average GPA of matriculated students was 3.29 and the average PCAT composite score was 72. Our analysis of admission and matriculated student data showed their correlation with academic performance in the curriculum, supporting our conclusion that the admissions process is effective in identifying competent students (**17.15.7**). Furthermore, these criteria support each student's potential to become a self-directed lifelong learner and an effective health care professional.

Written and verbal communication skills are assessed *via* a variety of mechanisms, including relevant PCAT scores, a group exercise (ELPD), and an essay and interview with a faculty member (all pathways). Our English as a Second Language (ESL) program is a unique aspect that assesses verbal communication skills in all of our admissions processes (**17.15.8**). To assure our international applicants are prepared for US-based learning, the DDP program recently updated its cultural competency training based on feedback in an NTPD/ITPD student survey. Information gained from this survey led to enhanced ITPD orientation and classroom activities, as detailed in **17.15.9**.

In DDP, students' abilities, commitment and motivation to succeed in an online environment are assessed in a pre-interview questionnaire (NTPD), letters of recommendation and live interview process. Higher order questions are asked about the applicant's ability to learn online. Technical skills of all

students, ITPD in particular, are informally assessed through the applicant's ability to navigate the admissions process.

The final decision regarding the enrollment number for each class is made by the dean (in consultation with the faculty) and is well aligned with available physical, financial, faculty, staff and practice site, preceptor and administrative resources. The education facilities on campus were designed to accommodate class sizes of up to 200 students. However, the dean has capped ELPD enrollments at 160. This class size has been successfully matriculated and accommodated within the AMC facilities throughout implementation of the renewed curriculum, and in spite of the opening of a new school of pharmacy within the state. Therefore, the levels of enrollment are well managed. It is important to note that admissions criteria, policies and procedures are not compromised regardless of the size and quality of the applicant pool. The Admissions committee sets criteria and evaluates candidates for whom questions arise during the process.

Reflecting national trends, our ELPD application numbers have steadily declined over the past 5 years. Nevertheless, we have reached our target enrollments through the entering class of 2014. Our gender distribution also reflects national trends in health care professions with # 60% female and 40% male students. Our school continues to benefit from a diverse student population. After receiving 656 applications for the 2015 entering class and conducting 330 interviews, the class size will likely be #140, despite an admissions goal of 160 because the dean, Admissions committee and faculty are not comfortable making additional offers to less qualified candidates.

Prior criminal and other activities that may portend a risk for future unprofessional behavior and thereby restrict a student’s ability to access experiential sites or have the potential to affect the student’s eligibility for future licensure, are identified by self-reporting on the Supplemental Application, which includes wording similar to that used in the Colorado Board of Pharmacy application for intern licensure (**17.15.10**). An independent national or international background check is performed at the point of acceptance to our school. Identified discrepancies are investigated, discussed with the student, considered on a case-by-case basis by the Admissions or DDP committee and may be referred to our Student Ethics and Conduct process, Peer Assistance Services, or the State Board of Pharmacy for further consideration or intervention. Every offer of admission is extended conditionally upon completion of a successful criminal background check and in egregious cases, the offer may be rescinded. International applicants must also obtain an F-1 visa, which has its own background checks.

Our school recognizes the importance of recruitment in its future success and is developing more robust and proactive recruitment processes. To this end, our school has invested resources to add two new positions (Director of Admissions-ELPD; Admissions Coordinator-DDP) and one upgraded position (Recruitment and Outreach coordinator-ELPD). These additions allow our recruitment efforts to move from simply responding to requests to active development of a variety of recruitment programs (**17.15.11**). Examples of noteworthy programs in this area include:

- development and analysis of a database to assess potential pre-pharmacy predictors of future success and make evidence-based decisions about admissions procedures, as well as offers of admission.
- initiation of a pharmacy student ambassador program that employs current P2 and P3 students to develop and implement recruitment and summer program activities for prospective students.
- participation on the Anschutz Marketing and Research committee, a collaborative group of all health profession and biomedical science programs on campus, to develop and implement recruitment programs across all health professions. Our school has played an integral role in offering a 3 day conference for high

school and college level counselors and health professions advisors and planning an all-campus open house scheduled for September 2015.
- development of a more robust school-based marketing and branding program.

The AACP surveys revealed our graduating students to be identical to national in their LOA for Q64 (*The admissions process of the school of pharmacy was well organized.*) (91% vs. 91%, P=0.59) (**17.15.12**)**.**

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

18. Transfer of Credits and Waiver of Requisites for Admission with Advanced Standing

The college or school must produce and make available to students and prospective students transfer credit and course-waiver policies, based on rational procedures and defensible assessments.

2. College or School's Self-Assessment

The college or school produces transfer credit and course-waiver policies, based on rational procedures and defensible assessments and makes that information available to students and prospective students.	Satisfactory
The college or school implements policies and procedures for the evaluation of the equivalency of educational courses (preprofessional or professional) prior to admission or transfer to the professional degree program.	Satisfactory
Requisites are only waived based upon an educationally sound assessment of the professional competencies (as set forth in Standard 12) that have been achieved through continuing pharmacy education, other postgraduate education and training, and previous pharmacy practice experience.	Satisfactory
The college or school has established and implemented policies and procedures for students who request to transfer credits or who wish to change from one program pathway to another.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ The number of transfer students, including (if applicable) international students or graduates of other professional degree programs admitted with advanced standing, and an assessment of the correlation between the criteria in the transfer policy and success in the program. If applicable, comparative performance data should be provided

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

(School comments begin here)

Our school does not accept transfer students with advanced standing, waivers for advanced standing, or credit transfers for the ELPD program. Every student must participate in and successfully complete the ELPD program in its entirety. Policies and procedures for the evaluation of the equivalency of *prerequisite* courses (**18.2.1**) are strictly enforced and practiced during transcript evaluation by the Director of Admissions, the Recruitment and Outreach Coordinator and the Program Assistant. Candidates may submit their transcripts to the OSS (**18.2.2**) and courses will be evaluated on a course-by-course basis. Either the director, coordinator or program assistant will then assess courses for completion and notify the candidates and make recommendations regarding prerequisite courses. Course equivalencies have been established and are continually updated for all feeder colleges and universities in Colorado. Courses completed at out-of-state colleges and universities are evaluated based upon course number, title and credit hours. In instances where course titles or content need

further evaluation, candidates are asked to provide course descriptions and/or syllabi to verify their equivalency for prerequisites. Applicants to our school must complete all of the required course work prior to admission to the ELPD program.

Transfer credit from ACPE-accredited programs is accepted in the NTPD program (**18.1.1**). In the NTPD program, a portfolio-based challenge process permits academic credit for up to 18 of 30 credit hours of APPE rotations in the renewed curriculum. Additional challenges may be submitted for APPE elective rotations only. This is based on the student's professional pharmacy experience and, to be considered, the experience must have occurred within 6 years of beginning the NTPD program.

An innovation developed by our school has been the introduction of the Bachelor of Science in Medical Science (BS in Medical Science) degree. This program was implemented in the spring of 2013 for students who did not have a bachelor's degree prior to matriculating to our school. It serves as a valuable academic asset for a student wanting to further his/her education in programs that require a bachelor's degree. In addition, it rewards the efforts of a student who leaves aun undergraduate degree program prematurely to pursue a PharmD degree or can also provide an academic credential to a PharmD student who does not complete the program. Details about the BS in Medical Science are provided in **18.2.3**.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

19. Progression of Students

The college or school must produce and make available to students and prospective students criteria, policies, and procedures for academic progression, academic probation, remediation, missed course work or credit, dismissal, readmission, rights to due process, and appeal mechanisms.

2. College or School's Self-Assessment

The college or school produces and makes available to students and prospective students criteria, policies, and procedures for academic progression, academic probation, remediation, missed course work or credit, dismissal, readmission, rights to due process, and appeal mechanisms.	Satisfactory
The college or school's system of monitoring student performance, based on formative assessments of learning outcomes provides for the early detection of academic difficulty.	Satisfactory
The college or school maintains a record of student retention, attrition, and on-time graduation, identifies and analyzes trends, and makes programmatic adjustments as needed.	Satisfactory
The college or school ensures that all students have comparable access to individualized student services such as comprehensive academic success counseling, tutoring and faculty advising.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ How student matriculation, progression and graduation rates correlate to admission and transfer policies and the college or school's mission

☑ The academic counseling and/or student support staff available to work with students seeking to retain or regain good academic standing, and how extensively they are utilized

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

Our school has well-established criteria, policies, and procedures for students' academic progression, academic probation, dismissal, readmission, rights to due process, and appeal mechanisms. While the ELPD and ITPD/NTPD have different educational delivery systems and student populations, all attempts are made to ensure parity between the programs with respect to policies and resources available.

All policies and procedures are closely followed and undergo continuous review by the Scholastic Advancement and Appeals Committee (SAAC) in collaboration with OSS and DDP. The Scholastic Advancement and Appeals Policy (SAAP) (**19.1.1**, **19.1.2**) is published on the school's website. To mitigate any problems that might have arisen with ELPD student progression during the transition from

the previous to the renewed curriculum, an interim progression policy was developed (**19.3.1**). The SAAC meets regularly to provide feedback to other committees proposing policies that may impact student progression, improve procedures involving student progression (e.g., leave of absence), and review students who are academically at-risk in order to make determinations regarding their academic standing and progression in accordance with the SAAP. All students identified as at-risk and/or facing delayed progression or dismissal meet with OSS or DDP staff who serve as advocates in reviewing the SAAP and ensuring understanding of policies and procedures that govern progression in the program. An appeals system provides a student's due process rights involving decisions that determine academic progression (**19.1.1**, **19.1.2**).

Our faculty approved significant changes to the SAAP that were implemented in 2012, the same year the renewed curriculum was introduced. However, it was implemented for all students in the school at that time, in both the prior and renewed curricula. The parameters that define probation and dismissal were redefined to be stricter. For example, the new policy allows for only one grade of D in the entire curriculum (vs. one D per semester previously) without advancement consequence. To provide more support and oversight to students under the new policy, requirements were implemented to promote the progression of students who fell into these at-risk categories. Students are required to prepare an Academic Improvement Plan (AIP) **19.3.2**) that sets forth measures and strategies designed to improve academic success. Beginning in the spring 2015 semester, students must also engage in a reflective self-assessment of their study habits as part of their AIP. The SAAC reviews and approves all AIPs and may require modifications prior to approval. OSS and DDP personnel meet with students and monitor compliance with the AIP terms to ensure sufficient progress is being made to return the student to good academic standing.

All students are governed by our Student Ethics and Conduct Code (SECC) (**19.3.3**) that is published on our website. The SECC exists to promote professional conduct and academic integrity of all students and delineate the expectations of a student pharmacist. The SECC outlines sanctions that may be imposed, which range from disciplinary probation to dismissal, and describes the appeals system that provides a student's due process rights involving ethics or conduct decisions. The SEC committee membership includes both students and faculty. OSS and DDP staff assists students in overcoming obstacles associated with potential misconduct or professionalism.

Our school strives to promote student success by monitoring student performance, detecting student academic difficulty early, and providing appropriate support and intervening to reduce barriers to success. An additional OSS staff person was hired in 2014 to provide student academic advising and support academic progression. Each student's performance on formative assessments and interim summative evaluations are tracked. Course directors are also frequently contacted regarding student performance. OSS personnel meet individually with students who show a pattern of poor performance to identify any underlying causes, and provide appropriate recommendations or interventions. Students are encouraged to meet with the course director to obtain guidance regarding how he/she can improve performance. However, additional steps may be recommended, such as tutoring, English language programs, or referral to disability, student wellness and mental health (for issues such as coping skills or test anxiety) resources.

Our school offers an ELPD tutoring program that is available to all students at no charge. It includes regularly scheduled, facilitated group discussions and individual tutoring provided by upper-class pharmacy students. In addition, the Rho Chi chapter conducts weekly drop-in tutoring sessions. Students demonstrating ineffective written and oral communication skills may be referred to a faculty member who

has Masters-level communications skills training. In addition, the library includes a writing center that provides assistance.

DDP provides student services based on the needs of non-traditional (i.e., ITPD/NTPD) students and all DDP student policies are published on the school's website (iPharmD URL). Two new staff members were hired (Academic Advisor and Admissions Coordinator) to enhance advising and foster academic progression, student support, and retention.

Student performance on formative assessments and online learning activities are monitored by DDP student advisors, allowing for early detection of academic difficulty. Course directors alert advisors about students who appear to have academic difficulty. Advisors reach out to students at the beginning of drop-add periods, the semester mid-point prior to course withdrawal deadlines, and just prior to the conclusion of the course. This level of attention ensures students are progressing appropriately. Advisors also reach out to students at their 4th, 5th, and 6th year points to ensure they are on track to graduate or discuss options based on their circumstances.

Tutoring resources have been improved through the initiation of online tutoring service (NetTutor®) provided through CU Online. This service, which provides general tutoring assistance free of charge, was initially associated with didactic courses that had been identified as being more challenging. In spring 2015, NetTutor® was made available as a resource for all didactic courses and to all ITPD/NTPD students. In spring 2015, the DDP office also introduced peer tutoring. Eligible peer tutors (who had completed a similar course with a grade of A or A-) were identified. This service is currently aimed at at-risk students, i.e., those who receive a grade of C- or lower in one or more didactic courses. The DDP office also promotes student retention by holding regular "town hall" teleconferences on various topics, including curriculum requirements. They are recorded and made available to students.

Pharmacy practice experiences (offered through the OEP) present unique challenges to some students that can adversely impact their progression. To prevent this from happening, student performance in pharmacy practice experiences are monitored by OEP, a process facilitated by preceptor feedback relating to student progress (**19.3.4**). Personnel from OEP, DDP and OSS meet weekly to review cases involving students experiencing challenges in the experiential curriculum and implement interventions designed to help students succeed. This may involve the student developing an action plan that outlines the steps to be taken by the student to promote improvement and future success. The OEP Director works individually with students to ensure they are implementing the measures outlined in their action plan. Through this process, students are held accountable for improvements in their performance in the practice environment.

Our school also strives to improve the quality of its services and program by analyzing trends in student advancement, retention, and attrition. Our student attrition data (**19.3.5**) reveal decreases in academic interruption and dismissal for classes entering in 2011 and beyond; they are at their lowest levels since inception of the ELPD. This suggests changes made by our school have had a positive effect on student success. Online programs commonly have high attrition rates. Our data indicate a higher retention rate for NTPD students since 2009 when many changes occurred, including increased student services support (**19.3.6**). Recognizing the extracurricular demands on our students and yet maintaining the accountability of our students' contemporary skills and knowledge, the NTPD 6-year degree completion and extension policy (**19.3.7**) was introduced in 2010. It allows students to continue in the program beyond 6 years, but with updated coursework. By design, since implementation, the mean time to

graduate has *decreased* from 5.25 years to 3.25 years (for those students admitted pre- and post-policy, respectively).

The AACP survey revealed our faculty has a comparable LOA to national for Q61 (*The college/school effectively manages poor academic performance of students*) (78% vs. 77%, P=0.76) **(19.3.8).**

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

20. Student Complaints Policy

The college or school must produce and make available to students a complaints policy that includes procedures to be followed in the event of a written complaint related to one of the accreditation standards, student rights to due process, and appeal mechanisms. Students must receive information on how they can submit a complaint to ACPE for unresolved issues on a complaint related to the accreditation standards.

2. College or School's Self-Assessment

The college or school produces and makes available to students a complaints policy that includes procedures to be followed in the event of a written complaint related to one of the accreditation standards, student rights to due process, and appeal mechanisms.	Satisfactory
Students receive information on how they can submit a complaint to ACPE for unresolved issues on a complaint related to the accreditation standards.	Satisfactory
The college or school includes information about the complaint policy during student orientation.	Satisfactory
The college or school maintains a chronological record of student complaints related to matters covered by the accreditation standards and allows inspection of the records during on-site evaluation visits by ACPE.	Satisfactory
The college or school informs ACPE during an on-site evaluation if any of the student complaints related to the accreditation standards have led to legal proceedings, and the outcomes of such proceedings.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ How the complaint policy is communicated to students

☑ The number of complaints since the last accreditation visit and the nature of their resolution

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

Our school has a policy on grievances or complaints that covers a variety of situations that might arise at a School of Pharmacy (**20.3.1**). It provides students with resources depending upon the nature of their grievance and encourages resolution at the most proximal level (e.g., between student and faculty or staff member), but recognizes that some problems will need to be addressed by our school's administration, such as those affecting multiple students. The policy includes procedures to be followed in the event of a written complaint related to one of the ACPE accreditation standards (**20.1.1**) and provisions for due process and mechanisms for appeal. In general, recommendations in response to a

complaint are provided by our appropriate school committees and decisions are made at the associate dean level with the opportunity of appeal to the dean. In addition to these policies, processes are in place in our school to make the administration aware of issues affecting more than one student, such as end-of-semester online program review, focus groups, Student Council, dean's advisory committee and Student Council President participation on Executive committee (see Standard 22).

Information on the policy regarding complaints (as well as other policies and procedures to follow) is presented to students as they enter the program during student orientation. Each student is required to read through these policies and submit online documentation indicating that he/she has read and understands the policy. In addition, the policy is available in the Student Bulletin and on our school's website. At the start of each academic year (ELPD program) or semester (ITPD/NTPD programs), students are required to verify that they have reviewed the policies and understand them *via* online documentation. Data from the AACP graduating student survey (Q61) indicates that our graduating students were aware of the process for raising issues with the school/university, expressing a LOA (80%) identical to national (80%; P=0.6) (**20.3.2**).

A chronological record of student complaints related to ACPE standards is maintained in OSS and DDP. These records will be made available for inspection by the site visit team.

Our school continuously monitors its complaint process and takes steps to reflect, re-evaluate, and modify it through student focus groups and overall student feedback. A student academic coordinator was hired to address student complaints/concerns and to evaluate and modify student policies, as necessary, for quality improvement.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

21. Program Information

The college or school must produce and make available to students and prospective students a complete and accurate description of the professional degree program, including its current accreditation status.

2. College or School's Self-Assessment

The college or school produces and makes available to students and prospective students a complete and accurate description of the professional degree program, including its current accreditation status.	Satisfactory
Admissions policies, procedures, and practices fully and clearly represent the conditions and requirements related to distance learning, including full disclosure of any requirements that cannot be completed at a distance.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

A complete and accurate description of the professional degree program, including its current accreditation status, is provided on our school's website (SSPPSwebsiteURL). It provides the majority of information about its programs including academic programs, continuing education programs, departments, and faculty. In addition, recruitment brochures, flyers and business cards made available to prospective students provide program and accreditation information (**21.3.1**, **21.3.2**, **21.3.3**).

A link for current students in the ELPD (ELPDstudentURL), and ITPD and NTPD programs (iPharmDstudentURL) provides access to the following information: student orientation information; PharmD resources (which includes student policies; academic calendar, academic assistance; graduation requirements and student services information), description of on-campus and online components of the pathways; PharmD class and exam schedules, experiential programs, student organizations and calendar, and technology services. In addition, the website contains multiple student policies and forms (e.g., Professional Dress and Appearance code, Substance Abuse policy, Student Ethics and Conduct code, Scholastic Advancement and Appeals policy, Student Complaints policy, Leave of Absence form, Academic Improvement Plan form). Tuition and financial aid information is provided under the Admissions section of our school's website (SSPPSadmissionsURL). NTPD and ITPD program admissions policies (iPharmDadmissions), procedures, and practices (iPharmDproceduresprac tices) are also posted on our website.

Information specified in guideline 21.1 is accessible from our website (**21.5.1**). Students can obtain their records (e.g., tuition, financial aid, class schedules) *via* their individual UCDaccess portal. Current job opportunities provided to the OSS are distributed to students and alumni by email distribution lists, posts on Facebook and to the school's blog and tweets through our Twitter feed.

Our school's website is maintained and updated on an ongoing basis and was substantially revised in 2010 and again recently in 2015. It serves as an important source of information for students, alumni and external stakeholders. On the website, we have improved the "About Us" section to include more information, such as Points of Pride, News and Events, School of Pharmacy newsletters (i.e., Pharmacy Perspectives and eScripts), Continuing Education resources, information about our community (e.g., community partners), a blog site (for stakeholders to exchange opinions and post ideas) and becoming a pharmacist videos (e.g., Become a Pharmacist video and Pharmacist Hunter video), educational training videos for alumni and students (Million Hearts campaign), as well as videos highlighting our students and why they selected our program. Our website home page engagement and featurette areas highlight recent news and events while focusing attention on preceptors, students, prospective students and alumni.

In addition to the website, our school distributes content through newsletters (electronic and print), a student-produced podcast (available through iTunes, our blog site and website), social media (Facebook, LinkedIn, YouTube and Twitter feeds), and media relations efforts. A bi-monthly electronic newsletter (eScripts) distributed by email to alumni, students, faculty and staff highlights immediate or breaking news, while our award-winning twice -yearly newsletter (Pharmacy Perspectives) provides more in-depth coverage. The newsletter is printed and distributed to our constituents *via* mail, email and a mobile app. Media relations efforts have increased visibility of the school (more than 200-fold) while establishing our faculty as expert resources.

While our website has recently undergone a transformation in terms of design and content, our school is constantly updating it to address the needs of our stakeholders. A recent focus group session with current students, in conjunction with our self-study, brought to our attention areas in need of further exploration and coverage (student life, organizations, housing, etc.). In response, we are expanding sections of the website to highlight these areas.

The effectiveness of our school in communicating with our students is reflected in the high LOA expressed by our graduating students in AACP survey Q58 (*The school of pharmacy provided timely information about news, events, and important matters within the school of pharmacy*) (91% vs. 91% for national, P=0.92), and 70 (*I was aware of expected behaviors with respect to professional and academic conduct.*) (99% vs. 98% national, respectively, P=0.36) (**21.5.2**).

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

22. Student Representation and Perspectives

The college or school must consider student perspectives and include student representation, where appropriate, on committees, in policy-development bodies, and in assessment and evaluation activities.

2. College or School's Self-Assessment

The college or school considers student perspectives and includes student representation, where appropriate, on committees, in policy-development bodies, and in assessment and evaluation activities.	Satisfactory
The college or school involves student representatives on appropriate program committees, as well as in accreditation self-studies and strategic planning activities.	Satisfactory
The pharmacy students feel their perspectives are heard, respected, and acted upon in a fair and just manner.	Satisfactory
A clear process exists for students to follow to raise issues with the college or school administration.	Satisfactory
The college or school administration responds to problems and issues of concern to the student body.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ The participation and contribution of students on college or school committees

☑ The organization, empowerment, and implementation of a student government association or council

☑ The other methods (e.g., focus groups, meetings with the Dean or other administrators, involvement in self study activities, review of student complaints) used to gather student perspectives

☑ Examples of quality improvements in the college or school that have been made as a result of student representation and perspectives

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

Perspectives of students are obtained through multiple means. Our Student Council (StC) meets monthly and comprises elected class and student organization leaders (**22.2.1**, **22.2.2**). At StC meetings, student issues and activities are discussed. Student senators represent our students on the campus Student Senate, the student governance body representing all AMC students to the AMC, UCD and University of Colorado system administrations.

The StC president informs the Executive committee (EC) about student activities and issues, and reports EC information to the StC. This allows our school’s leadership to be aware of and address issues arising

from the student body. The Dean's Student Advisory committee comprises the Dean and the Associate Dean for Student Affairs and the presidents and vice-presidents of the P1-P3 classes. It meets 2-3 times each semester to discuss broader issues affecting student experiences.

ITPD/NTPD students placed a low priority on participation in the StC; 40% wanted recently-proposed student activity fees to go to an activity other than StC; 35% students advocated for a DDP-specific StC.

Several key school committees have a student membership requirement, with elected representatives from each ELPD class (**22.1.1**). NTPD/ITPD students serve as members on the DDP and SEC committees, i.e., those affecting their program pathways. ITPD and NTPD students will be added to the Experiential Education and Assessment committees in the next academic year.

Committee chairs ensure engagement of student members by scheduling meetings at times convenient for student members and actively recruiting their opinions during meetings. The involvement of students on committees is critical in policy development and decision-making, e.g., during revision of the PharmD curriculum and approval of courses by the Curriculum committee.

AACP surveys of graduating students provide feedback on our faculty, the curriculum and program, student services, facilities and resources, pharmacy practice experiences and achievement of competencies. Relevant faculty and units review the survey results (e.g., pharmacy practice experiences by the OEP) for quality improvement purposes.

For curricular assessment and evaluation activities, student focus groups and online surveys provide perspectives relating to the curriculum, specific courses and educators (see Standard 15).

Student volunteers are members of the accreditation self-study steering and various self-study committees (**22.2.3**). As such, they have had an active role in contributing to and reviewing this self-study document. The steering committee, StC members and an *ad hoc*student group of students from all pathways participated in the development of our school's mission, vision, values and goals, and the strategic plan.

Student feedback has served to improve courses, the curriculum and the program as a whole. A particularly important example was the revision of the PharmD curriculum wherein new courses were developed and the timing/sequencing of the courses in the curriculum was decided. Drawing upon the experience of students on the Curriculum committee who had matriculated in the program previous to the renewal (and therefore could comment on its strengths and areas for improvement) and from comments made by students in annual course evaluations, the revised curriculum was implemented more smoothly and provides improved learning experiences. Similarly, student feedback promoted the establishment of the honors (research) program and the introduction of new or expanded elective courses. Other examples are provided in **22.2.4**).

A summary of the processes by which students communicate with the school is available to our students to help them identify the most effective means to provide their perspectives (**22.2.5**).

Our graduating students expressed a LOA that exceeded national for Q62 (*I was aware that student representatives served on school committees with responsibility for curriculum and other matters*) (94 vs. 91%, P=0.01), 65 (*The school had a student government that effectively communicated student opinions and perspectives to the faculty or administration*) (88 vs. 83%, P=0.02) and 66 (*The school made use of a variety of means to obtain student perspectives on curriculum, student services, faculty/ student relationships and other aspects of the program*) (94 vs. 90%, P=0.02) (22.2.6). They expressed

a comparable LOA as national on Q60 (*The school's administration responded to problems and issues of concern to the student body*) (79 vs. 81%, P = 0.54) and 61 (*I was aware of the process for raising issues with the school administration*) (80 vs. 80%, P=1.0).

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

23. Professional Behavior and Harmonious Relationships

The college or school must provide an environment and culture that promotes professional behavior and harmonious relationships among students, faculty, administrators, preceptors, and staff. Faculty, administrators, preceptors, and staff must be committed to developing professionalism and fostering leadership in students and to serving as mentors and positive role models for students.

2. College or School's Self-Assessment

The college or school provides an environment and culture that promotes professional behavior and harmonious relationships among students, faculty, administrators, preceptors, and staff.	Satisfactory
Faculty, administrators, preceptors, and staff are committed to developing professionalism and fostering leadership in students and to serving as mentors and positive role models for students.	Satisfactory
The college or school develops, via a broadly based process, a policy consistent with university policies on student, faculty, preceptor, and staff professionalism that defines expected behaviors and consequences for deviation from the policy, as well as due process for appeals.	Satisfactory
The activities undertaken by the college or school to promote professional behavior are effective.	Satisfactory
The activities undertaken by the college or school to promote harmonious relationships are effective.	Satisfactory
The activities undertaken by the college or school to promote student mentoring and leadership development are effective.	Needs Improvement
Faculty receive support from peers to participate in student mentoring and leadership development activities, and these efforts are viewed favorably by college or school administration.	Satisfactory
The college or school supports students, faculty, administrators, preceptors, and staff participation, where appropriate, in pharmacy, scientific and other professional organizations.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ Strategies that the college or school has used to promote professional behavior, and the outcomes

☑ Strategies that the college or school has used to promote harmonious relationships among students, faculty, administrators, preceptors, and staff; and the outcomes

☑ Strategies that the college or school has used to promote student mentoring and leadership development, and the outcomes

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

Our school is committed to promoting professionalism in all of its students. It is expected throughout the curriculum; many courses identify professionalism standards (**23.2.1**). Throughout all pharmacy practice experiences, preceptors consistently evaluate professionalism. Our Student Ethics and Conduct Code (**23.1.1**) outlines expected behaviors, consequences and processes related to professional and ethical behavior. The LOA of graduating students with Q70 (*I was aware of expected behaviors with respect to professional and academic conduct*) 99% (vs. 98% national, P=0.4) speaks to our effectiveness in identifying professional expectations (**23.2.2**). The LOAs for Q67 (*Faculty, administrators and staff were committed to serving as positive role models for students.*) (92% vs. 92% national, P=0.8) and 68 (*Preceptors modeled professional attributes and behaviors in the pharmacy practice experiences*) (98% vs. 96% national, P=0.07) support the effectiveness of our faculty, preceptors and staff serving as positive role models.

Faculty and staff members are subject to University of Colorado policies related to professional responsibilities, including the Faculty Handbook. The Board of Regents "Principles of Ethical Behavior" policy applies to all university employees as well. Our faculty employment letters include a section on expected professional behavior, and annual evaluations are used as a mechanism to note any issues. Our faculty LOA with Q58 (*The school provides an environment and culture that promote professional behavior among students, faculty, administrators, preceptors and staff*) was comparable to national (88% vs. 90%, P=0.6).

Our school has worked hard to promote harmonious relationships between its faculty and students. Multiple opportunities exist for students to engage with senior students, faculty and practitioners (**23.2.3**). Student organizations host informal discussions and mentoring sessions with faculty members. Our alumni association also offers career exploration discussions with students, thereby promoting additional networking and mentoring opportunities. A summary of other items that contribute to harmonious relationships are provided in **23.2.4**.

Our students are provided foundation knowledge and skills on leadership in our curriculum (Standard 9) and have opportunities to practice leadership in student governance, organizations, school committees and professional associations. Our school encourages student participation in student government and extracurricular professional opportunities (including local, state, and national pharmacy organizations) through financial and operational support. The Student Council (StC) is given $50K annually and a $45K minimum must be used for professional development of our students, e.g., to attend national meetings. Course directors accommodate student participation in national meetings by scheduling assessments around meetings or allowing assessments to be administered at meetings. Our graduating student LOA for Q73 (*School's faculty and administration encouraged me to participate in regional, state or national pharmacy meetings*) was similar to national (86% vs. 91%, P=0.10). The LOA has been increasing since efforts were made to ensure that important course-related activities did not coincide with meetings likely to be attended by students.

Our students are active in professional organizations, as reflected by the student organization chapters operating in our school; this engagement frequently includes service projects, awards and national positions (**23.2.5**). Our classes are scheduled with open times to facilitate organizations meetings.A recent DDP survey revealed 84% NTPD student respondents were current members of professional

organizations. Only a minority (25%) were interested in school-wide student chapters. Our school is very supportive of its student organizations, reflected in the high graduating student LOA with Q74 (*The school of pharmacy was supportive of student professional organizations*) (94% vs. 95% national, P=0.53).

Prominent figures in pharmacy, health care and policy and research are invited to present at the required Dean's convocations which are held 3 - 4 times each semester to the on-campus students (**23.2.6**). This serves to broaden the professional horizons of our students and provide them with issues that may influence their future careers.

Students are exposed to scientific inquiry, the relevance of research and scholarly aspects of pharmacy *via* a variety of opportunities (**23.2.7**). They learn about residency and postgraduate training opportunities at annual career events. The DDP office also provides its students with information on career and professional development opportunities offered by professional organizations, such as ASHP. The graduating student LOAs for Q75 (*I was aware of opportunities to participate in research activities with faculty*) (80% vs. 76%, P=0.22) and 59 (*Information was made available to me about additional educational opportunities (e.g., residencies, fellowships, graduate school*) (89% vs. 91%, P=0.48) demonstrated that the large majority of our students are aware of residency, research and postgraduate training opportunities.

Each year, the StC holds a leadership retreat to initiate new leadership for the student governance group and student organization officers. A student leadership manual (**23.2.8**) assists new class officers understand how to run a student organization on campus and the responsibilities of a leadership position. P4 and P3 officers partner with their P2 and P1 counterparts to serve as mentors.

In addition to fostering student involvement in professional organizations, our school encourages faculty participation in professional organizations. Faculty professional development funds ($3,000) are provided to all faculty members to help offset the costs of these endeavors. Faculty members also hold memberships in professional organizations in their areas of expertise and regularly serve in leadership capacities. They serve as role models for students through their involvement in these organizations and their service as academicians, clinicians, educators and scholars.

Our graduating student exit surveys suggest that students maintain positive views that the school is supportive of student professional organizations (98% LOA) and encourages participation in local, state and national professional meetings (95% LOA) (**23.2.2**).

In early 2015, a student-run clinic (DAWN) was established to provide health care to the under-served population in Aurora, the area around AMC. Several of our students played key roles in establishing the clinic. Students (as well as a regular group of faculty members) rotate through it weekly.

P2 and P3 student pharmacists host 200 area 4th-graders annually for the Pharmacist for a Day program. The children learn about the importance of accurate measurements, labeling, compounding and that being a pharmacist involves more than counting medication.

Our alumni expressed LOAs that were less than national for Q18 (*The school provided an environment and culture that promoted professional behavior and harmonious relationships among students, faculty, administrators, preceptors and staff*) (84% vs. 92%, P=0.02), 19 (*The faculty, administrators, and staff were committed to developing professionalism, fostering leadership, and to serving as mentors and positive role models*) (86% vs. 94%, P=0.01) and 30 (*The faculty displayed respect for their colleagues*

and students) (85% vs. 93%, P=0.01). These results conflict with the graduating student data for Q67/68 that had high LOAs. This disparity may relate to the graduating student survey having a higher response rate and only surveying respondents from each class once, i.e., annually. Alumni response rates are dramatically lower and an alumni may respond to the survey repetitively over the years. To address this possibility, we intend to send the survey only to alumni who graduated 2 years previously. Graduating student LOAs relating to our school effectively managing academic (Q71) and professional (GS Q72) misconduct was 72-73%, values not different from national (73% for each). Our faculty LOAs for these areas (Q59 and 60) were also not different from national (academic: 85% vs. 78% national, P=0.2; professional: 75% vs. 71% national, P=0.4). The lower student perception may relate to the required confidentiality associated with student ethics and conduct code (SECC) violations, i.e., the student population is not made aware of case outcomes. This is will not change in the future. Generalities of SECC cases and outcomes are presented to our faculty at quarterly faculty senate meetings. The SECC is currently undergoing revision. One part of this process is likely to be recalibration of the disciplinary actions associated with violation categories. Our preceptors LOA was less than national for Q13 (*I know how to utilize the process that exists within the college/school to effectively manage academic misconduct (e.g., plagiarism) by students*) (69% vs. 78% national, P=0.01) and 14 (*I know how to utilize the process that exists within the college/school to effectively manage professional misconduct (e.g., repeated tardiness/absences, drug diversion) by students*) (74% vs. 83% national, P=0.01). Our OEP has developed preceptor training opportunities that highlight these areas**.**

4. College or School's Final Self-Evaluation

☐ Compliant	☑ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

Our school has made purposeful efforts to improve upon this standard in relation to professional behavior and has made considerable progress as evidenced by more recent graduating student surveys. Our plan is to continue our efforts to assure that we move in an even more positive direction. One goal is to develop better measures of effectiveness of professionalism that go beyond university professionalism standards.

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

24. Faculty and Staff - Quantitative Factors

The college or school must have a sufficient number of qualified full-time faculty and staff to effectively deliver and evaluate the professional degree program, while providing adequate time for faculty development, research and other scholarly activities, service, and pharmacy practice.

2. College or School's Self-Assessment

The college or school has a sufficient number of qualified full-time faculty to effectively deliver and evaluate the professional degree program, while providing adequate time to ensure that the following are achieved:	Satisfactory
effective organization and delivery of the curriculum through classroom, small group, laboratory, practice simulation, service learning, and oversight and provision of experiential education	Satisfactory
faculty mentoring	Satisfactory
student advising and mentoring	Needs Improvement
research and other scholarly activities	Satisfactory
faculty development as educators and scholars	Satisfactory
professional/community service and pharmacy practice (where indicated by their position)	Satisfactory
participation in college or school and university committees	Satisfactory
assessment and evaluation activities	Satisfactory
The college or school has a sufficient number of qualified full-time staff to effectively support the delivery and evaluation of the professional degree program.	Satisfactory
Faculty receive adequate support staff resources.	Satisfactory
The college or school periodically conducts faculty workload and needs assessments, at appropriate intervals.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ A description of the process and interval for conducting faculty workload and needs assessments

☑ An analysis of teaching load of faculty members, including commitments outside the professional degree program

☑ The rational for hiring any part-time faculty, and the anticipated duration of their contract

☑ Evidence of faculty and staff capacity planning and succession planning

☑ A discussion of the college or school's student-to-faculty ratio and how the ratio ties in with the college or school's mission and goals for the program

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms.

(School comments begin here)

As of June 30 2015, the number of regular (i.e., tenured, tenure-track or tenure-eligible) and clinical teaching (CT) track faculty members in DOCP and DOPS were 54 and 25, respectively (**24.7.1**). These are the core faculty responsible for ensuring the school fulfills its mission areas. They teach the majority of ELPD program and are also involved in the graduate (PhD), the PGY1 and PGY2 residencies and the NTPD and ITPD programs. A few faculty members also teach in other AMC professional degree programs but this is minimal (**24.7.2**). They also have scholarly activity, patient care and university and professional service responsibilities.

Each faculty member submits an annual Scholarly and Professional Activities Report (SPAR) to the department chair that includes documentation of actual time devoted and productivity related to education, research and scholarly activity, patient care, service and professional development (see Standard 26). Faculty members meet with their department chair to discuss activities and workload, goals for the coming year and issues that affect their performance or job satisfaction. Based upon these discussions, the distribution of effort (DOE) of each faculty member is modified by the department chair to ensure that the school is successful in each mission area, including effective delivery of the curriculum, faculty mentoring, student advising, research, faculty development and service. Thus, expectations placed on individual faculty members vary between departments and from person to person.

Our annual evaluation process is highly effective as reflected in the high LOA of our faculty (87-94%) with AACP survey questions 14 (*allocation of effort clearly stated*), 15 (*criteria for my performance assessment*), 17 (*formal feedback on my performance*) and 18 (*performance feedback is effective*) that exceeded national (P # 0.01) (**24.7.3**). New strategic plan initiatives are taken into account as faculty workloads are evaluated, e.g., as occurred for the revised ELPD curriculum. In the AACP faculty surveys, the LOA for time spent was comparable to (Q62; teaching (84% vs. 81%, P=0.36); Q65 clinical service (86% vs. 82%, P=0.1)) or exceeding (Q63 research (Q63: 72% vs. 62%, P=0.03); Q64 service (87% vs. 76%, P<0.01)) national averages (**24.7.4**). This speaks to the effectiveness of our annual evaluation process in successfully individualizing distributions of effort such that faculty members have adequate time to fulfill their responsibilities.

Historically, very few faculty members (1/79) have been hired on a part-time basis (< 0.5 FTE as defined by ACPE). In addition, 3 education instructors have appointments between 0.5 and 1 FTE. As untenured positions, the contract is at-will and as long as needed. A school policy allows full-time faculty members at the associate or professor level to reduce their FTE when approved by the department chair and dean. Three faculty members in the past 5 years have utilized this policy.

In addition to the 79 regular and clinical teaching track (CT) faculty members, our school has 6 staff members (per ACPE definition) (**24.1.1**) and 38 support staff (**24.1.2**). The average annual turnover of faculty (4.4%) has not been an issue, particularly given the gains in faculty numbers over this same period (10.2%) (**24.4.1**). Staff turnover has been 0% (**24.5.1**) and support staff annual average turnover has been 11% (**24.5.2**). Recruitment and hiring of new or replacement faculty and staff is driven by the needs of the school’s mission and modulated by the resources available. New initiatives developed by the faculty or the Executive committee may be funded if budget projections allow. Examples include increases in support staff, faculty positions or creation of leadership/administrative positions.

Prioritized initiatives by the Executive committee are vetted for support by the faculty. No internal succession planning occurs for staff; our school hires the best person available as a replacement. Faculty succession involves recruitment of a candidate who is qualified to fulfill the responsibilities of the vacated position. Whenever possible, our school ensures redundancies exist in the expertise of our faculty to accommodate expected (e.g., retirement) or unexpected departures. The low turnover of faculty and staff, coupled with the continued success of the school in achieving its mission areas, indicates that the procedures used to recruit (and retain) qualified faculty and staff are effective.

For the purposes of calculating student-faculty ratios, both the number of students and faculty FTEs were determined at the start of the fall semester (August 1) for that academic year. The student (ELPD + ITPD/NTPD) to faculty (regular + CT track) ratio decreased from 17.4 (09-10) to 12.9 (14-15) (**24.7.5**). The reasons for this decrease are the total population of students decreased 14% from 986 (09-10) to 853 (14-15) and faculty FTEs increased 17% from 56.6 (09-10) to 66.1 (14-15). It should be noted that DDP lecturers (all part-time) are not included in the faculty count because regular and CT track faculty have ultimate responsibility for the professional programs. Using 2013-14 AACP roster and faculty salary surveys, the ratio of first professional students (= our ELPD) to faculty FTEs varies from 4.4 to 32.7. Including only ELPD students in the calculation, our ratio would be 9.6, a value comparable to the national median of 9.3. Our ratio is in the higher levels of the 9 peer schools identified by our Assessment committee, which range from 4.7 to 10.6 (7.7 ± 2.0 (mean ± SD)). The decrease in our student-to-faculty ratio over the past 6 years has ensured that students in our professional programs continue to receive the appropriate oversight, mentoring and training to be successful. The ratio of all PharmD (ELPD+NTPD+ITPD) students to preceptors has decreased from 2.1 (09-10) to 0.9 (14-15) (**24.7.6**). This favorable ratio likely underlies the LOA of our graduating students on survey Q69 (*Overall, preceptors provided me with individualized instruction, guidance and evaluation that met my needs as a Doctor of Pharmacy student*) was comparable to national (97% vs. 96%, P=0.26).

In 2014, our school expanded its faculty mentor program to promote further success of our faculty, with an emphasis on scholarly activity. This has involved each junior faculty member being assigned a mentor and co-mentor and having regular meetings (at least once in 6 months) to discuss the progress and goals of the faculty member. Collegiality and collaboration between our two departments has been fostered by interspersing departmental faculty member offices throughout our building.

Our faculty AACP survey scores were similar to national for Q20 (*I receive adequate support staff resources*) (77% vs. 73%, P=0.05). Our school was below national in the LOA for Q28 (*the program's resources can accommodate present student enrollment*) (57% vs. 74%, P=0.02). This perception is thought to be associated with the introduction of the renewed curriculum, the planning for which began in 2009 and the first year started in 2012. This caused increased teaching (e.g., teaching in both the existing curriculum and renewed curriculum) and assessment burdens on the faculty as the existing curriculum was phased out. Our faculty's low LOA with Q27 (*The school has a sufficient number of qualified faculty*) (59%), a level not different from national (71%, P=0.18) but similar in magnitude to the sentiment expressed in Q28. Importantly, the LOA has increased markedly for both Q27 (39% in '09; 81% in '14 exceeding national) and 28 (44% in '09; 74% in '14) reflecting increased faculty hiring. As these surveys were completed prior to the hiring of an additional 10 faculty members in the 14-15 academic year, we anticipate both Q27 and 28 will improve given the recent influx of faculty members and the sun-setting of the existing curriculum from teaching and assessment responsibilities.

In summary, through annual faculty evaluations, the departments and school are able to assess the workload of each faculty member in relation to the mission areas of the school. This ensures that adequate time is made available for each faculty member to engage in education (teaching, course directing, assessment and evaluation activities), research/scholarly activity, patient care, service (including school and university committees) and administrative responsibilities as is appropriate for his/her position. A composite of all DOEs allows an overall determination of how the school is meeting its mission and areas that may need additional attention or development. The generally high retention rate of faculty and staff speaks to the effectiveness of these processes in ensuring equitable distribution of individual faculty efforts and balancing the needs of the school with the professional development goals of the faculty member.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

We believe that we are compliant with this standard. However, we did check "needs improvement" in our school's self-assessment for "student advising and mentoring." We have developed many opportunities for mentoring for students but we feel that we need to bolster student advising given the current status of employment opportunities. One goal is to develop better resources for students interested in specific areas of pharmacy practice and link students with faculty members who have interests in these areas.

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

25. Faculty and Staff - Qualitative Factors

The college or school must have qualified faculty and staff who, individually and collectively, are committed to its mission and goals and respect their colleagues and students. Faculty must possess the required professional and academic expertise, have contemporary knowledge and abilities in current educational philosophy and techniques, and be committed to the advancement of the profession and the pursuit of research and other scholarly activities. Faculty whose responsibilities include the practice of pharmacy must satisfy all professional licensure requirements that apply to their practice. The college or school must foster the development of its faculty and staff, commensurate with their responsibilities in the program.

2. College or School's Self-Assessment

The college or school has qualified faculty who, individually and collectively, are committed to its mission and goals and respect their colleagues and students.	Satisfactory
The college or school has qualified staff who, individually and collectively, are committed to its mission and goals and respect their colleagues and students.	Satisfactory
Faculty possess the required professional and academic expertise, have contemporary knowledge and abilities in current educational philosophy and techniques, and are committed to the advancement of the profession and the pursuit of research and other scholarly activities.	Satisfactory
Faculty generate and disseminate knowledge through scholarship. Scholarship by faculty members, including the scholarship of teaching, is evident and demonstrated by productive research and other scholarly activities.	Satisfactory
Faculty whose responsibilities include the practice of pharmacy satisfy all professional licensure requirements that apply to their practice.	Satisfactory
Pharmacy practice faculty possess additional professional training (residency, fellowship, or equivalent experience)	Satisfactory
Pharmacy practice faculty either have or are working toward additional credentials (for example, specialty certification) relevant to their practice and teaching responsibilities.	Satisfactory
The college or school ensures that policies and procedures for faculty recruitment, promotion, tenure (if applicable), remuneration and retention are established and applied in a consistent manner.	Satisfactory
The college or school ensures that the faculty composition, including any contributions from internal and external relationships, encompasses the relevant disciplines within the biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences to meet the education and research needs as defined by the mission statement.	Satisfactory
Faculty, regardless of their discipline, have or are developing a conceptual understanding of current and proposed future pharmacy practice in a variety of settings.	Satisfactory
Faculty members have the capability and continued commitment to be effective teachers. Effective teaching requires knowledge of the discipline, effective	Satisfactory

communication skills, and an understanding of pedagogy, including construction and delivery of the curriculum, and a commitment to learning outcomes assessment.	
The college or school provides, or is affiliated with institutions that provide, postgraduate education and training, including accredited residency and fellowship programs.	Satisfactory
The college or school fosters an environment that encourages contributions by the faculty to the development and transmission of knowledge.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ The process used to assess and confirm the credentials of faculty and staff, and to assure that faculty credentials are appropriate for their assigned teaching responsibilities

☑ How the college or school ensures that the faculty composition, including any contributions from internal and external relationships, encompasses the relevant disciplines within the biomedical, pharmaceutical, social/ behavioral/administrative, and clinical sciences to meet the education and research needs as defined by the mission statement

☑ How the college or school ensures that faculty members, regardless of their discipline, have a conceptual understanding of current and future trends in the scientific basis of the biomedical, pharmaceutical social/ administrative and clinical sciences

☑ How the college or school ensures that faculty members, regardless of their discipline, have a conceptual understanding of contemporary pharmacy practice and future trends in a variety of settings

☑ A description of the college or school's policy or expectations regarding research productivity for faculty, including timeline for new faculty

☑ Evidence that faculty are generating and disseminating knowledge through productive research and scholarship, including the scholarship of teaching

☑ A description, if applicable, of how faculty, instructors, and teaching assistants involved in distance education are qualified through training or experience to manage, teach, evaluate, and grade students engaged in distance learning

☑ How the college or school provides, or is affiliated with institutions that provide, postgraduate education and training, including accredited residencies and fellowship programs

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms.

(School comments begin here)

Our faculty is well qualified, with 97% having a terminal degree (100% at the rank of assistant professor or above). Of these, 93% completed a residency, fellowship or postdoctoral research training. Our faculty is well-balanced, with 24 assistant, 18 associate and 22 full professors. Of our 42 clinical faculty holding a PharmD, 93% hold one or more specialty certifications (**25.6.1**). For ITPD and NTPD programs, 96% of instructors hold a terminal degree; of those holding a PharmD, 62% hold one or more specialty

certifications (**25.6.2**). Within the ranks of our clinical faculty serving as preceptors, 72% hold a PharmD degree, 14% hold a BS Pharmacy degree and 12% hold an MD degree. All staff members have degrees in their areas of expertise (**25.6.3**)

Faculty members in the tenure-eligible or clinical teaching tracks are hired to meet the educational, clinical and research mission areas of our school. Our departments decide on the practice and/or research areas for new faculty recruitment based on strategic planning and faculty input. Processes for hiring all employees (faculty or staff) must follow policies and guidelines specified by the University of Colorado Denver, including a commitment to non-discrimination) and diversity. All search committee members complete online training that emphasizes effective recruitment of faculty through development of a diverse applicant pool. The commitment to diversity is affirmed by our school in the charges to search committees and in letters of offer to successful candidates (**25.6.4**). The credentials and experience of faculty candidates are reviewed by the search committee in the context of the position description; promising candidates are invited to interview. Upon application, candidates must sign a statement verifying the information they are providing, including their education credentials, are true to the best of their knowledge. Discovery that a current employee made false statements is grounds for termination. All potential new hires are screened for criminal records. The results of our recruitment efforts has led to a faculty that is evenly balanced with respect to gender, i.e., 38 female, 41 male. Progress is being made in the diversity of our faculty, with 14/79 being non-Caucasian.

Our faculty represents the broad areas of expertise and specialties within the sciences and pharmacy practice, thereby providing students with expert knowledge, skills and values relevant to pharmacy education, practice and research. Hiring of new faculty members also takes into account coverage needs for education, clinical practice and research. The Appendix B areas of expertise of our faculty are summarized in **25.6.5**. More specific details of the discipline areas of our faculty members are provided in their CVs (on-site). Similarly, areas of expertise or specialties are the driving factors when external members of our community, whether internal or external to the university, are recruited to teach specific areas within courses or experiential learning (**25.6.6**).

Our faculty has frequent opportunities for interaction and collaboration which provide basic science and clinical faculty members with conceptual understanding of scientific and clinical advances as well as contemporary pharmacy practice. Examples that establish a tangible outcome are provided in **25.6.7**. Such faculty collaborations promote understanding of contemporary practice, advance pharmaceutical and pharmacological concepts, encourage ideas for implementing innovative and new teaching methods, and promote scholarship of teaching.

Our school has an established policy for faculty appointment, reappointment, promotion and tenure (ARPT) that was approved by the Board of Regents (**25.1.1**). The university ensures that these policies are applied in a consistent manner, and decisions at the school level are reviewed at the campus and chancellor level prior to final decision. To meet the expectations of annual performance evaluations as well as promotion, tenure and post-tenure reviews, faculty members must maintain productivity and up-to-date expertise in their fields and demonstrate their ability to provide contemporary education to our students. The expectations and time-line for establishing their research/practice placed on a faculty member varies according to his/her appointment rank and the criteria and time-line for promotion and/or tenure is stated in the ARPT policy.

Our faculty is committed to the generation and dissemination of knowledge and has a robust research and scholarly activities program. In 2013-14, research generated $15.5 million and our faculty published

180 peer-reviewed papers in 2014 (**25.6.12**). Contributions relating to the scholarship of teaching are included in **25.6.13**. Our school receives significant funding from non-federal sources (**25.6.14**). In the latest rankings (2014) by the Blue Ridge Institute for Medical Research, our school was #4 among all US pharmacy schools for NIH-funded research and #5 for total research funding among all US pharmacy schools by AACP ranking, indicating the high level of research activity and productivity of our faculty.

Excellence in education is an expectation of our school. As educational methods have evolved in pharmacy education, faculty members use more student-centered instructional methods that improve motivation and retention and meet the demands of increasingly electronically-oriented students. Faculty members have incorporated contemporary knowledge and abilities to enhance the learning environment for students. Examples include adoption of technologies (e.g., audience response systems, use of interactive features in the learning management system), active-learning strategies (e.g., standardized patients, debates, small group discussions, peer teaching, case- and problem-based learning), or other innovations, such as flipped classrooms and synchronous or asynchronous teaching strategies. Student (*via* CoursEval® and focus groups) and faculty peer teaching assessment feedback (**25.6.15**) are used to evaluate and help develop the educational skills of faculty members. Assessment results are reviewed by the faculty member and department chair during annual evaluations (Standard 26).

Instructors participating in ITPD/NTPD programs are carefully selected to ensure that they are qualified to provide instruction in their subject areas. While the majority of these instructors have previous teaching experience, they are provided further training through the Course Assessment Process (CAP) and Best Learning Assessment and Strategies Training (BLAST, starting fall 2105) training programs to ensure that they are able to manage courses and teach and evaluate students (**25.6.16**).

Our school has a distinguished history of residency training (**25.6.17**), e.g., our school has trained PGY1 residencies with University of Colorado Hospital since 1993. PGY1 and PGY2 residencies and fellowship programs offered by our school and our affiliates are included in **25.6.18**). Our Teaching/Learning Certificate Program (**25.6.19**) has been completed by 166 residents since 2010 (**25.6.20**).

There are many notable achievements by our faculty (**25.6.21**). Highlights for awards include Dr. Saseen received the 2014 ACCP educator of the year (Dr. Saseen), 2013 ASHP Best Practices Award (Drs. Anderson, Marrs and Vandegriend). In addition, Drs. Fish, Kiser, Maclaren and Mueller were authors of the most accessed article in the journal *Pharmacotherapy* in 2014. Finally, Dr. P Anderson was an author of a highly-regarded NEJM article reporting on chemoprevention of HIV.

In the AACP surveys, the faculty LOA was greater (Q11: *effective faculty recruitment process* [84% vs. 76%, P=0.04]; Q34: *Funds to support faculty development* [85% vs. 71%, P<0.01]) or comparable to (Q33: *adequate guidance on career development* [70% vs. 68% national, P=0.69]) than national (**25.6.22**). Our graduating students had a similar LOA to national for Q69 (*Overall, preceptors provided me with individualized instruction, guidance and evaluation.*) [97 vs. 95%, P=0.12]. Our alumni asserted that our faculty were effective teachers (Q29, LOA 93% vs. 93% national, P=0.7). However, they expressed a slightly lower LOA than national for Q30 (*faculty respect for colleagues and students*) (86% vs. 93%, P=0.01) but their Q45 comments did not provide guidance into this area. Our preceptors noted a lower LOA than national for Q37 (*I receive needed support from the OEP*) (80% vs. 84%, P=0.04). Two main themes from written preceptor comments relating to this issue surfaced: access to library resources and timely student feedback. Both of these issues have been addressed: preceptors now have library access and OEP is providing feedback after each rotation (rather than annually). As such, we anticipate improvements in this area for our preceptors.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

26. Faculty and Staff Continuing Professional Development and Performance Review

The college or school must have an effective continuing professional development program for full-time, part-time, and voluntary faculty and staff consistent with their responsibilities. The college or school must review the performance of faculty and staff on a regular basis. Criteria for performance review must be commensurate with the responsibilities of the faculty and staff in the professional degree program.

2. College or School's Self-Assessment

The college or school fosters the development of its faculty and has an effective continuing professional and career development program for full-time, part-time, and voluntary faculty consistent with their responsibilities.	Satisfactory
The college or school fosters the development of its staff and has an effective continuing professional and career development program for full-time and part-time staff consistent with their responsibilities.	Satisfactory
Faculty and staff are assisted in goal setting by their administrative reporting authority	Satisfactory
The college or school reviews the performance of faculty and staff on a regular basis.	Satisfactory
Criteria for performance review are commensurate with the responsibilities of the faculty and staff in the professional degree program.	Satisfactory
The college or school has or provides support for programs and activities for faculty and preceptor continuing professional development as educators, researchers, scholars, and practitioners commensurate with their responsibilities in the program.	Satisfactory
Faculty receive adequate guidance and support on career development.	Satisfactory
Faculty are able to attend one or more scientific or professional association meetings per year.	Satisfactory
Faculty development programs are available to enhance a faculty member's academic skills and abilities.	Satisfactory
The performance criteria for faculty are clear.	Satisfactory
Expectations on faculty for teaching, scholarship and service are appropriate and commensurate with academic and professional development.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ A description of the performance review process for full-time, part-time and voluntary faculty (including preceptors) and staff

☑ A description of the relationship between faculty, preceptor, and staff continuing professional development activities and their performance review

☑ A description of faculty development programs and opportunities offered or supported by the college or school

☑ A description of staff development programs and opportunities offered or supported by the college or school

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms.

(School comments begin here)

Per institutional guidelines, faculty and staff employed by the university undergo formal annual performance reviews by their department chairs or immediate supervisors, respectively. (For the purposes of the self-study, staff are defined as directors who are not considered to be faculty.) Preceptors receive formal feedback on their performance provided by students and the OEP (see Standard 14).

All regular and clinical teaching track faculty members are required to submit a Scholarly and Professional Activities Report (SPAR) to their department chair at the end of the calendar year; it includes documentation of time devoted and productivity related to education, scholarly activity, patient care, service and, importantly, professional development (see **26.2.1** for examples). It also includes activities that contribute positively to student morale, student evaluations and professional goals for the upcoming year. The department chair reviews the SPAR prior to and during a face-to-face meeting with the faculty member. In the meeting, the faculty member discusses his/her activities and workload, plans for the coming year and any other issues that affect his/her performance or job satisfaction. The chair and faculty member discuss the expectations for the coming year, the faculty member's career goals and progress toward promotion and tenure, where appropriate. Feedback from the annual performance review is a critical element in the professional development program for faculty. Each faculty member is assigned a distribution of effort (**26.4.1**) that outlines the time that the faculty member is expected to commit to education, research/scholarly activity, patient care, service and professional development.

After reviewing all SPARs, the department chair applies a score (0-5) for each category of the DOE for the previous year; the score is multiplied by the % effort for that area, leading to the creation of a composite performance score. This is then converted to an SSPPS and university rating (**26.4.2**). The chairs review the composite performance scores of all faculty members with the dean before faculty members are provided with their composite score, DOE for the coming year and a written summary of performance. Administrators submit SPARs to the dean. Input from the faculty and staff are requested by the dean and included in the administrator review process. The dean undergoes annual review by the provost.

Preceptors are evaluated by students who have completed their rotation (see Standard 14). At the end of each rotation, the OEP develops a composite of the student feedback for each preceptor that relates effectiveness at mentoring, providing feedback and modeling professionalism. This evaluative information (after removing student identities) is provided to the preceptor to promote self-reflection and development. The OEP discusses with the preceptor, as appropriate, any issues that arise from the evaluations by telephone or personal visits to the site. Online training modules are also offered by our school to promote preceptor development. Volunteer faculty instructors engaging in didactic coursework of our programs are evaluated by the students using CoursEval®. This information is reviewed by the director of the course and shared with the volunteer faculty member.

Staff members are evaluated annually by their supervisors who review a summary of accomplishments; the DOE is tailored to the position. The dean reviews the composite performance scores of all staff before each staff member is provided with his/her final composite score, DOE for the coming year and a written summary of his/her performance from his/her supervisor.

Each faculty member is accountable for his/her professional development. It is a component of the faculty member's DOE that is evaluated by his/her department chair (**26.4.2**). Continuing Education (CE) is also required for continued licensure of pharmacists in Colorado. Our school supports professional development through the annual allocation of funds to each faculty member. Directors of academic programs and administrative faculty members may receive supplemental professional development allowances based on their position requirements. Additional monies are provided to the associate deans and two faculty members (i.e., the elected faculty delegate and alternate) to attend the AACP annual meeting and for the faculty member accompanying students participating in the National Patient Counseling competition at the annual APhA meeting. In addition, the associate deans can provide financial support for faculty members engaging in programs that benefit our school and the faculty member, e.g., AACP Institutes (**26.4.3**). Faculty members are expected to be actively involved in their professional organizations. Indeed, each faculty member attends at least one scientific or professional association meeting in their area of expertise or interest each year (**26.4.4**). Many serve as officers, organizers, chairs of sections or committees, invited speakers, and are recognized as fellows for their outstanding professional service (see faculty profiles).

All staff members are encouraged to participate in development programs that improve their ability to fulfill their responsibilities. The university and State of Colorado offer development programs (**26.4.5**). In addition, staff members are encouraged to attend meetings in their area of expertise, e.g., Educause (Director of IT), AACP (Director of Student Services and Associate Dean for Finance, Budget and Administration). Support staff members can take advantage of development opportunities through application to a centralized pool of money made available by our school for this purpose.

Our school also offers professional development programs for all preceptors, including online programs for preceptor training and development (e.g., cultural competency and sexual harassment training). In addition to programs offered by national professional organizations, our school offers programming, such as the biennial AHEC interprofessional preceptor conference, CE at the annual Colorado Pharmacist Society meeting, online CE programs and the annual Advances in Pharmacy Practice (live and simulcast CE to rural Colorado locations).

Faculty members are given flexibility to determine what professional development opportunities best meet their individual needs. Many available opportunities and individualization of professional development make this an effective model to improve skills of our faculty and staff. Various programs offered by our school, the university, the state and pharmacy organizations (e.g., AACP) are available to promote the development of our faculty in education, scholarly activity, clinical skills and leadership (**26.4.6**). For example, our university offers training on education and learning through the Center for Faculty Development. Live and online instructional presentations are provided by our school relating to the use of the Learning Management System and new educational technologies. Instructional designers are available to assist faculty in course development and the use of technology, particularly for online and distance education. An important component of faculty development is peer assessment of teaching that provides formative feedback to improve a faculty member's teaching effectiveness (**26.4.7**). The Office of Research Development and Education (ORDE) offers training on grant submissions and obtaining funding. The campus LiTeS (LiTeS) and CCTSI (CCTSIed) programs offer career development

and leadership in research. Our school provides research strategies workshops that foster career development skills, e.g., scientific writing and grantsmanship. Professional development for clinical faculty occurs through faculty mentoring, CE programs and career development programs offered by national professional organizations. Sabbaticals serve as another important component of career development for faculty members.

Mentoring is another important element of professional development. Our mentoring and development program was established to meet faculty needs. A survey of our faculty indicated their mentoring priorities were career mentoring, mock grant review, scientific writing/editing, midcareer mentoring and peer mentoring (**26.4.8**). In our revised program, each junior faculty member meets with two faculty mentors each year (one from each department) to help foster the skills necessary for career success (**26.4.9**). Our faculty LOA was comparable (Q16, 33 and 37) or exceeding (Q12, 13, 15, 17, and 18; $P < 0.05$) national AACP survey results (**26.4.10**). While the LOA for the other questions were in 84-97%, the LOA for questions relating to career development (Q33, 37) were in the 70-73% range. Revision of our faculty development processes resulted in higher LOAs in the past year: Q33, 82% vs. 72% national; and Q37, 93% vs. 73%. Preceptor survey results indicated lower LOAs than national ($P<0.05$) for Q15 (*harassment and discrimination policy use;* 68% vs. 77%), and 17 (*criteria for evaluating my performance*; 71 vs. 78%). For Q17, this appeared to be related to timing of receiving evaluations, leading OEP to change feedback provision from annual to per rotation. For Q15, all preceptors are now required to complete online training modules on these policies; 84% of preceptors have completed the training thus far.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

27. Physical Facilities

The college or school must have adequate and appropriate physical facilities to achieve its mission and goals. The physical facilities must facilitate interaction among administration, faculty, and students. The physical facilities must meet legal standards and be safe, well maintained, and adequately equipped.

2. College or School's Self-Assessment

The college or school has adequate and appropriate physical facilities to achieve its mission and goals.	Satisfactory
The physical facilities facilitate interaction among administration, faculty, and students.	Needs Improvement
The physical facilities meet legal standards and are safe, well maintained, and adequately equipped.	Satisfactory
Physical facilities provide a safe and comfortable environment for teaching and learning.	Satisfactory
For colleges and schools that use animals in their professional course work or research, proper and adequate animal facilities are maintained in accordance with acceptable standards for animal facilities.	Satisfactory
Animal use conforms to Institutional Animal Care and Use Committee (or equivalent) requirements. Accreditation of the laboratory animal care and use program is encouraged.	Satisfactory
Space within colleges and schools dedicated for human investigation comply with state and federal statutes and regulations.	Satisfactory
All human investigations performed by college or school faculty, whether performed at the college or school or elsewhere, are approved by the appropriate Institutional Review Board(s) and meet state and federal research standards.	Satisfactory
Students, faculty, preceptors, instructors, and teaching assistants have access to appropriate resources to ensure equivalent program outcomes across all program pathways, including access to technical, design, and production services to support the college or school's various program initiatives.	Satisfactory
Commensurate with the numbers of students, faculty and staff, and the activities and services provided, branch or distance campuses have or have access to physical facilities of comparable quality and functionality as those of the main campus.	Satisfactory
Faculty have office space of adequate size and with an appropriate level of privacy.	Satisfactory
Faculty have adequate laboratory resources and space for their research and scholarship needs.	Satisfactory
Computer resources are adequate.	Satisfactory
Laboratories and simulated environments (e.g. model pharmacy) are adequate.	Satisfactory
Facilities encourage interprofessional interactions (e.g., simulation laboratories)	Satisfactory
Access to quiet and collaborative study areas is adequate.	Satisfactory
Common space for relaxation, professional organization activities and events, and/or socialization is adequate.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions
☑ A description of physical facilities, including available square footage for all areas outlined by research facilities, lecture halls, offices, laboratories, etc.
☑ A description of the equipment for the facilities for educational activities, including simulation areas
☑ A description of the equipment for the facilities for research activities
☑ A description of facility resources available for student organizations
☑ A description of facilities available for student studying, including computer and printing capabilities
☑ How the facilities encourage and support interprofessional interactions
☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
☑ Any other notable achievements, innovations or quality improvements
☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

The AMC and our building are state-of-the-art facilities for education, research and patient care on one of the nation's newest health sciences campuses. The campus was designed into thematic zones, *viz.* education (Ed1 and Ed2 buildings), research (RC1 and RC2 buildings) and clinical (University of Colorado Hospital, Barbara Davis Center, Children's Hospital) to intentionally foster interprofessional interactions between and among students and faculty (**27.5.1**).

The SSPPS building is 171,416 gsf (**27.5.2**) with ~~4~~ floors and a partial basement (**27.1.1**).Located throughout the building are offices, meeting spaces, department offices, DDP, OEP and OSS and Dean's suites. A large break room allows faculty, staff and students to interact in a social environment. Full-time administrators and faculty members are assigned furnished offices with a computer and printer. On floors 2-4, the offices of faculty from both departments are interspersed, facilitating interactions and collaborations. Staff have workstations and private or shared offices, depending upon their responsibilities. Part-time and clinical track faculty have access to a "landing zone" office with computer and printer facilities. Our school provides budgeted support for computer and information technology (3 FTEs) for faculty, staff and students. Office resources available meet the needs of our faculty as demonstrated by the LOA on AACP survey Q21 (*adequate office space*) (97% vs. 90% national, P<0.01) and 24 (*adequate computer resources*) (95% vs. 90% national, P=0.01) (**27.5.3**). Mission-critical faculty and staff files are backed up on the AMC centralized server that is backed up daily to an off-campus location. Other less critical files are backed up on CrashPlan Pro, a cloud-based server. Both systems allow restoration of data as necessary. CU Online, a UCD center, oversees the learning management system (Canvas®) and provides support and training in its operation and functionalities. In addition, it organizes symposia relating to the effective use of technology in education (**27.5.4**) and serves as a resource relating to online education. Our instructional design staff (2 FTEs) in DDP is available when needed by our faculty.

SSPPS research is primarily conducted in the SSPPS building and at clinical sites. Our research labs are well equipped with a broad array of research equipment (**27.5.5**). Our school manages four major

core facilities (**27.5.6**).On-campus collaborations utilize the services of Colorado Clinical & Translational Sciences Institute (**27.5.7**) and can take place in other AMC buildings, e.g., Cancer Center (**27.5.8**), Clinical and Translational Research Center (**27.5.9**), Clinical Research Support Center (**27.5.10**). A Campus Space committee (the dean and Associate Dean for Research & Graduate Programs are members) reviews lab space and allocates it based on funding (**27.5.11**).

Research at AMC meets the highest standards of ethical and regulatory compliance and is overseen by committees for animal care and use, biosafety, human subjects, research, and radiation safety (**27.5.12**). Our university complies with federal requirements for research contracts and grants, including reporting conflicts of interest and commitment, and research misconduct. All research involving humans or animals must be approved by the AMC Colorado Multiple Institution Review Board (**27.5.13, 27.3.4**) or Institutional Animal Care and Use Committee (**27.3.1**). AMC has a central grants & contracts office and an AAALAC-accredited, USDA-registered vivarium located in the research zone (**27.3.1**, **27.3.2**, **27.3.3**). Resources currently meet our faculty's needs as shown by the faculty LOA with survey Q22 (*adequate laboratory and/or clinical resources for my research and/or scholarship needs*) (76% vs. 68% national, P=0.12) and 23 (*adequate laboratory and/or clinical space for my research and/or scholarship needs*) (81% vs. 71% national, P = 0.01). The Health Sciences Library (HSL) serves as a central resource for accessing information from print and electronic resources. More details are provided in Standard 29.

On-campus PharmD students take classes in education zone facilities that are shared with other AMC students. Ed1, a 115,251 gsf (**27.5.2**) 6-story building, houses small group learning rooms (SGLs), multipurpose classrooms (MPCs), 2 lecture theaters, specialized instructional and computer labs, student community spaces, skills labs for pharmacy, nursing and physical therapy programs (**27.1.2**, **27.5.14**). It also has the Center for Advancing Professional Education (CAPE) (**27.5.15**), a facility designed specifically for high level disciplinary and interprofessional simulations with standardized patients and high fidelity simulation mannequins. The 5-story Ed2 buildings (275,376 gsf) have education space on their lower 2 floors and contain classrooms, lecture theaters, computer labs, SGLs, student community spaces and a 600 seat auditorium (**27.1.3**, **27.1.4**, **27.5.16**).

In general, all education zone rooms are shared by the AMC schools and scheduled centrally by Classroom and Audio/Video Support (CAVS). Ed1 areas designated to SSPPS (**27.5.14**) include the Pharmaceutical Care Learning Center (PCLC), designed for highly interactive activities, formulation and practice simulation. It comprises 21 mobile desks (4 computers/desk), 84 computers, a model licensed dispensing pharmacy (**27.5.17**), a sterile technique room, 4 SGLs and 2 offices. The PCLC was renovated in 2014 to better accommodate compounding and formulation activities. The SGLs in the PCLC, Ed1 and CAPE are outfitted for AV capture and can be used to record student consultations/ interactions with standardized patients. Our school is given priority to a 3,286 asf open room (Ed1-3500) with moveable tables and chairs and a central moveable divider (**27.5.14**).

A unique feature of our program is the location of the AMC near the Baxa Skills Training and Resources Center (**27.5.18**), a national training center that provides our students with unparalleled access to and opportunity for professional education on sterile compounding, cleanroom principles and compliance with regulatory requirements.

ITPD and NTPD students, who complete the majority of their coursework online, have equivalent access to library resources, learning management system functionalities and IT support as on-campus students. Technology needs of the DDP program are met through multiple mechanisms (described in **27.5.19**).

Off-campus faculty involved in education of these students also have equivalent access to IT and education technology resources as on-campus faculty.

The majority of AMC meeting rooms, teaching labs and lecture theaters permit video projection of computer output. Larger classrooms have amplified sound systems and the capacity for AV lecture capture (Panopto®), allowing students to review classroom activities online. Computer labs are located in the HSL, Ed1, Ed2 and RC1 buildings. Multiple printing stations for students are in computer rooms in the education zone and HSL (**27.5.20**). CAVS (in Ed2N) maintains and develops technology associated with the education zone facilities, e.g., Panopto®, scantron analyses and video-conferencing. Free wi-fi is available across the entire campus. Canvas® is the learning management system used and supported by UCD.

AMC has numerous spaces (SGLs, MPCs, HSL, Intermission Café, outdoor seating areas) that allow students to study, interact and/or socialize in a comfortable and safe environment. In the Ed1 and Ed2 buildings, rooms are designated to AMC schools/colleges and interprofessional student communities. Ed2N-2211 is specifically reserved for SSPPS students and their professional organizations, a significant improvement over previous student space.

UCD e-mail accounts are provided to all AMC faculty, staff and students. To promote continued contact with alumni, students may keep their university email account after they graduate. A university-implemented RAVE notification system allows AMC personnel to receive email and/or text messages for emergency situations.

AMC provides a safe and favorable environment for student life. The Police Department comprises officers with full police arrest and enforcement powers and is complemented by unarmed uniformed security officers. Police dispatchers provide campus coverage 24/7 year-round. Physical security measures, including cameras, alarm systems and state-of-the-art building access control systems, ensure buildings are secure.

The AACP graduating student surveys indicated a high level of satisfaction with our physical facilities, with the LOAs for Q76-81 being 95-99%, all higher (P # 0.01) than national (**27.5.3**). Faculty LOAs were similar to (Q22, 29 and 39) or exceeded (P # 0.03) (Q21, 23, 24, 26, 30) national. We were above national in Q26 (*appropriate physical facilities*) (97% vs. 85% national, P < 0.01) but less than national (57% vs. 74% national, P = 0.02) for Q28 (*resources accommodate student enrollment*). A school-based survey demonstrated 89% LOA that *physical facilities can accommodate present student enrollment* (**27.5.21**). There was some concern about insufficient space for formulation labs, the PCLC not being large enough to accommodate exams for all students and a need for more SGLs. The PCLC renovation added sufficient space for formulation and additional computer workstations. A demand for SGLs is a campus issue shared by other AMC schools.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

28. Practice Facilities

To support the introductory and advanced pharmacy practice experiences (required and elective) and to advance collaboratively the patient care services of pharmacy practice experience sites (where applicable), the college or school must establish and implement criteria for the selection of an adequate number and mix of practice facilities and secure written agreements with the practice facilities.

2. College or School's Self-Assessment

The college or school collaboratively advances the patient-care services of its practice sites.	Satisfactory
The college or school establishes and implements criteria for the selection of an adequate number and mix of practice facilities.	Satisfactory
The college or school establishes and implements criteria to secure written agreements with the practice facilities.	Satisfactory
Before assigning students to a practice site, the college or school screens potential sites and preceptors to ensure that the educational experience would afford students the opportunity to achieve the required competencies.	Satisfactory
At a minimum, for all sites for required pharmacy practice experiences and for frequently used sites for elective pharmacy practice experiences, a written affiliation agreement between the site and the college or school is secured before students are placed.	Satisfactory
The college or school identifies a diverse mixture of sites for required and elective pharmacy practice experiences.	Satisfactory
The college or school has sites that provide students with positive experiences in interprofessional team-based care.	Satisfactory
The academic environment at practice sites is favorable for faculty service and teaching.	Satisfactory
There is adequate oversight of practice sites and efficient management and coordination of pharmacy practice experiences.	Satisfactory
The college or school periodically assesses the quality of sites and preceptors in light of curricular needs and identifies additional sites when needed. The college or school discontinues relationships that do not meet preset quality criteria.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ Capacity assessment (surplus or shortage) of the required and elective introductory pharmacy practice experiences (IPPEs) and advanced pharmacy practice experiences (APPEs) sites and preceptors for present and, if applicable, proposed future student enrollment

☑ Strategies for the ongoing quantitative and qualitative development of sites and preceptors and formalization of affiliation agreements

☑ How the college or school is collaborating with practice sites to advance patient care services

☑ How the college or school assesses the quality of sites and preceptors in light of curricular needs and discontinues relationships that do not meet preset quality criteria

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

Our school is supported by a large number of urban, suburban and rural community, health-system, specialty and other practice sites throughout and beyond Colorado. Collectively, they provide our school's quantitative and qualitative needs for IPPE & APPE training for ELPD, ITPD and NTPD students. In these experiences, students receive supervision and mentoring from pharmacist and non-pharmacist (MD, RN, CNP) preceptors. Training with the latter helps prepare students to be members of an interprofessional team, provides valuable insights into patient care from the perspective of other health care professionals and allows other health care professionals to appreciate the value of pharmacists to patient care. ELPD students are also required to complete one rural Colorado experience over the course of the program.

Our school has worked collaboratively with its practice partners for many years to advance patient-care services. The majority of DOCP faculty members have appointments in ambulatory, community and health-system practice sites where they provide clinical services. Students engage in IPPE and APPE patient care activities that include prescription and non-prescription medication counseling, disease prevention and health promotion counseling, immunizations and disease-state and medication therapy management programs (**28.2.1**, **28.3.1**). In addition, students at selected rural Colorado locations (Alamosa, Ft. Morgan, Brush, Colorado Springs, Pueblo, Pagosa Springs, Durango, Cedaredge) operate anticoagulation and disease state management (e.g., diabetes) clinics established jointly by the school and community pharmacies and clinics purposefully selected due to their large underserved population and limited access to health care resources. Services provided at these sites are largely student-run; without a continuous stream of our students, the sites would not be equipped to provide such services to these rural communities. Our school has established these sites as high quality, direct patient care training opportunities for students, and is committed to maintaining them in order to meet health care needs of the state.

Our school carefully selects practice facilities and makes all reasonable attempts to ensure an appropriate mix of quality sites. To this end, our school has established experiential program procedures for evaluation of potential new and existing sites (**28.5.1**). The evaluation process is designed to ensure the facility has adequate resources to train students for entry-level practice. In accordance with ACPE standards, our school requires written affiliation agreements with its practice sites (**28.1.1-28.1.8**). An OEP staff member is charged with administrative oversight of these agreements and ensures that students comply with requirements of the agreements, e.g., immunization status, drug screens, etc. She partners with a DDP staff member in assuring the same requirements are met for ITPD and NTPD students. Our school has established criteria and procedures for the selection and oversight of practice site facilities through an application process, on-site visits, site surveys based on exemplary criteria (**28.4.1-28.4.3**), and collection of curricula vitae/resumes from each provider who actively serves as a preceptor. Scheduled and unscheduled on-site visits are conducted on a routine basis by OEP

outreach coordinators (described below), assistant directors and/or director. An evaluation rubric is utilized during site visits (**28.5.2**) to ensure both the preceptor and site is meeting the educational needs of the students. Under circumstances in which a concern is raised regarding the quality of students' experiential education (either by on-site visit or student/preceptor feedback), OEP addresses the issues with the primary preceptor either by a site visit, telephone, or email. Should the site fail to address its deficiencies, its involvement as an IPPE or APPE site is placed on hold until the site or preceptor has resolved the issues. If additional preceptor training is suggested, OEP assists the preceptor in identifying (or provides) specific preceptor training opportunities. Strategies are also in place for the ongoing quantitative and qualitative development of sites and preceptors. These include development of online and live preceptor development and training programs. Online training modules will be available to all preceptors, including those who are out-of-state and international, *via* E*Value and the online continuing education learning management system, Lux®.

The provision of high quality required and elective IPPE and APPE sites and preceptors is an ongoing responsibility of OEP. Expansion of OEP since the last accreditation (see below) reflects both the importance of experiential education to our curriculum and the need to carefully cultivate, coordinate and evaluate sites, preceptors and student learning. Our school has also increased its preceptor recognition events to highlight preceptor efforts and provide a forum for networking and collaboration with other preceptors and our faculty.

With respect to notable achievements, innovations or quality improvements, our school has recently hired a new OEP director, established two Assistant Director of Experiential Programs faculty positions (one a community pharmacy background and the other a health-system background), and expanded OEP staff by seven positions, two of whom are dedicated to community pharmacy and health-system pharmacy outreach (OEP Outreach Coordinators) with primary responsibility to develop new sites, and one who is dedicated to developing new sites outside of Colorado, primarily to support DDP, making our OEP one of the largest in the US. Both assistant directors maintain an active practice site in each of their respective practice settings and one, Dr. W. Nuffer, is AACP's Experiential Education section Chair-elect. The integration of the Experiential Education committee (EEC) with the practice community and the student body has been improved by increasing the number of community pharmacy practice members (3 positions), external preceptor members (3 positions; representing health-systems and ambulatory care) and inclusion of 4 student members (one from each class). As part of its continuing quality improvement, the OEP in collaboration with the EEC, is developing a preceptor manual and a new site evaluation form.

Our school has invested in computer-based systems to improve the quality and efficiency of oversight programs, including the E*Value program. At the request of OEP faculty and staff, E*Value has incorporated multiple features that are now available to other colleges and schools. In addition, OEP staff have been invited to present user-perspectives at E*Value conferences. Preceptors can submit their practice site descriptions electronically and their evaluations of student performance, and provide feedback to our school on experiential matters. Students can view practice site descriptions, garner preceptor contact information, express practice site preferences and submit their evaluations of preceptors and practice sites electronically through E*Value. Investment in this technology has permitted implementation of systems that track student, preceptor and practice site performance longitudinally over multiple years. This investment correlates with positive changes in the ACPE graduating student survey responses.

The LOAs of graduating students to Q39, 40, 49, 51 and 52 were high (81-99%) and comparable to national (**28.5.3**). Investment in establishing positions within the OEP office and in the E*Value system correlates closely with an improvement in students' perceptions regarding fairness of IPPE and APPE practice site assignment process (Q 40, 49) and quality of IPPE experiences (Q39). The high LOA (# 97%) with Q51 and 52 provide evidence that our school's experiential programs are meeting ACPE standards with respect to interprofessional education (*collaboration with other health care professionals*) and *interactions with diverse patient populations*. Our faculty reported a lower LOA (57%) than national (74%, P=0.02) for Q28 (*The program's resources can accommodate present student enrollment*). This result is not related to experiential education but rather to the workload associated with the transition to the revised curriculum (e.g., double teaching; see Standard 24). The LOA of our alumni to Q28 (*the college/school provided an adequate number and mix of practice facilities for experiential education (rotations)* was less than national (79% vs. 89%, P< 0.01). Our efforts over the past few years to increase the capacity of the experiential staff and development of new sites has already addressed this perception as evidenced by the high LOA of graduating students. Our preceptors also were less than national in the LOA with Q15 (*I know how to utilize policies of the college/school that deal with harassment and discrimination*) (68% vs. 77%, P<0.01) and Q37 (*I receive needed support from the Office of Experiential Education*) (80% vs. 84%, P=0.04). The OEP has addressed these issues by creating a preceptor/site manual and providing online training modules (standard 26).

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

29. Library and Educational Resources

The college or school must ensure access for all faculty, preceptors, and students to a library and other educational resources that are sufficient to support the professional degree program and to provide for research and other scholarly activities in accordance with its mission and goals. The college or school must fully incorporate and use these resources in the teaching and learning processes.

2. College or School's Self-Assessment

The college or school ensures access for all faculty, preceptors, and students to a library and other educational resources that are sufficient to support the professional degree program and to provide for research and other scholarly activities in accordance with its mission and goals.	Satisfactory
The college or school fully incorporates and uses library and other educational resources in the teaching and learning process.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ The relationship that exists between the college or school and their primary library, including the level of responsiveness of the Director and staff to faculty, student, staff needs, and any formal mechanisms (e.g., committee assignments) that promote dialog between the college or school and the library.

☑ A description of how the college or school identifies materials for the library collection that are appropriate to its programs and curriculum and assesses how well the collection meets the needs of the faculty and students

☑ A description of computer technology available to faculty and students

☑ A description of courses/activities throughout the curriculum in which students learn about the available educational resources

☑ A description of library orientation and support for faculty and preceptors

☑ A description of how remote access technologies and mechanisms that promote use of library information from off-campus sites by faculty, students, and preceptors compare with on-campus library resources

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

(School comments begin here)

The Health Sciences Library (HSL) on the AMC (adjacent to SSPPS) is the largest (113,000 sq ft) biomedical research library in Colorado. It serves the clinical, research, educational and community outreach missions of all AMC schools, while working in partnership with the University of Colorado Hospital and Children’s Hospital Colorado. Support for our constituencies includes integration of library faculty into overall governance of the institution with the Library Director reporting to the Associate Vice-

Chancellor for Academic Affairs, and with library faculty serving on the AMC Faculty Assembly and other campus and University-wide committees. Since 2009, the HSL budget has increased 18% (**29.6.1**).

The library has available 30 group study rooms, wifi connectivity, open-access computer workstations, 4 large group conferencing and meeting areas, an art gallery, a dedicated reading room, 3 teaching labs, 24,000 linear feet of shelving (2nd and 3rd floors), 5 outdoor patios, a Special Collections Room, and capacity for 215,000 volumes. Affiliated faculty, staff, and students have 24/7 badge access to the HSL.

Librarians who act as primary contact and support for our school are all Masters of Library Science and trained in retrieval and appraisal of information for evidence-based practice. Lisa Traditi (**29.5.1**) serves as the library's liaison to our school, soliciting feedback from our faculty and our school's leadership on resources of interest, provision of services, and improving the overall quality of the library users' experiences. She teaches in our Drug Information and the Evidence Based Medicine courses. Lynne Fox has served the NTPD program curriculum since its inception and Ben Harnke teaches in both the ELPD and NTPD programs. Dr. Scoular serves as our liaison to the HSL in managing subscriptions to pharmacy-related resources, e.g., Lexicomp. These relationships ensure the library services meet the needs of our school and its stakeholders (see Library Liaison Guide).

Our faculty (including preceptors), students and staff have on-campus and remote access to HSL's digital resources, databases, online books and journals. The HSL provides access to over 160 databases, 32,000 online journals, 300 digital books, and 185,013 print and non-print book and journal volumes and audiovisual items. In addition, the HSL provides licenses for mobile device apps, e.g., Epocrates Rx, mobileMICROMEDEX, STATRef Mobile, UptoDate. Our school annually licenses the Accesspharmacy database (**29.6.2**) which provides students and faculty key online texts used for readings or background material in courses of our professional curriculum, e.g., DiPiro. An additional 95,685 volumes are available at the Preservation and Access Service Center for Colorado Academic Libraries (PASCAL) high-density storage facility, located at AMC. Faculty, staff and students may also borrow materials from any participating Prospector library. (Prospector is a unified catalog of 23 academic, public and special libraries in Colorado and Wyoming.) The HSL owns ~50% of the items listed by AACP in the June 2014 Basic Resources for Pharmacy Education and over 75 % of the "first purchase" items (**29.6.3**). The AACP list includes databases, indexes and abstracts; the HSL provides access to most of those resources including Medline, EMBASE, CINAHL, Micromedex, Chem Abstracts (*via* SciFinder) and Web of Science. The AACP Core List of Journals includes 214 titles and the HSL provides access to 207 (97.2%) of them (**29.6.4**). These resources represent critical elements in the education and research endeavors of our faculty and students. The use of online texts (i.e., AccessPharmacy) is embraced by students in P1, P2 and P3 classes (**29.6.5**).

The library collection undergoes constant review. The Library Collection Development Policy indicates how the library prioritizes its selections which aligns with the mission and goals of our school. Our school's stakeholders are able to provide feedback *via* http://hslibrary.ucdenver.edu/tell-us and can also make suggestions regarding specific resources. Recommendations for additions to the HSL catalog are made through Dr. Scoular and our Associate Dean for Academic Affairs. Importantly, the library notifies our school if major changes are being proposed that could impact our education or research missions.

The HSL provides exceptional quality customer services including reference and literature search services, a full complement of instructional courses focusing on searching for and identifying the best evidence, and interlibrary loan and document delivery services.

Library resources can be accessed from outside the HSL *via* the library's web site. Resources available online are comparable to those available on-campus, with the exception of books held on reserve at the library or older printed journals stored in PASCAL.

Library staff members are available during public hours of operation to address any access problems. Remote users may also use the Library's "Ask Us" service, which includes live chat, text, e-mail and web-forms for submitting inquiries. Answers to virtually-sourced questions are provided during regular business hours. Laptop computers and iPads are available for check-out by AMC students, faculty and staff.

Fifty computer workstations located at two "Information Commons" zones of the HSL provide MS Office, SPSS, EndNote, and various instructional software, plus audio/visual resources in online streaming and more traditional formats. There are three networked printers, one dedicated to students. Three HSL teaching labs offer 65 wired and wireless workstations with printing capabilities. The HSL supports wireless connectivity throughout the building, provides customer support services for wireless device users and programming and classes in the use of mobile devices (such as PDA's and smart phones), and licensed resources in formats appropriate for mobile devices.

During 2012-2013, the library provided the following services to just over 1990 SOP faculty, staff, and students: 5 orientations, 8 special classes, over 15 one-on-one consultations, and answered over 120 reference questions.

Our students learn about HSL resources in several ways. All incoming on-campus students receive a library orientation/online scavenger hunt and an Introduction to PubMed over two class periods during the ITPD Pharmacy Practice/Drug Information course. Since 2011, DDP has hosted an on-campus orientation each summer for all NTPD and ITPD students, which includes a separate library orientation session. In addition, Lynne Fox and Ben Harnke provide asynchronous training in PRDO 7440 (Evidence -Based Pharmacy Practice) in a series of tutorials, culminating in a graded assignment. Lisa Traditi provides synchronous, in-person training in PHRD 6065 (Evidence-based Medicine and Literature Evaluation) in one lecture and 4 follow-up hands-on sessions, culminating in a graded assignment. In addition, several web-based, asynchronous flash tutorials are made available to our on-campus and off-campus students, including getting started and searching for evidence. A SSPPS portal is available to our students that provides direction and the opportunity for feedback about HSL services and resources. A writing center is located in the HSL that provides one-on-one or small group assistance with a variety of writing personal statements, residency applications, proposals, assignments, etc.

Library orientations and consultations made available for our preceptors and faculty include an HSL Open House (twice a year), hands-on classes on library databases and resources (offered year-round), and one-on-one research consultations (available by appointment). These consultation sessions can take place at the HSL or in our faculty member's office.

There are several noteworthy achievements associated with the educational resources available at AMC. The HSL now has 24/7 building access and recently added treadmill desks outfitted for laptop users. In 2013, the University of Colorado identified a list of seven peers for the consolidated UC Denver. According to the Association of Academic Health Sciences Libraries (Association of Academic Medical Centers) *37th Annual Statistics 2013-2014,* when compared against our consolidation peers, the HSL ranked 1st for the total number of users served through the library's educational and outreach services and total collection of volumes (**29.6.6**).

Our graduating students did not identify any deficiencies in the library facilities in the AACP surveys, i.e., LOA were consistently higher than national for Q82 (*On-campus access to educational resources (e.g., library, electronic data bases, drug information center) were conducive to learning.*) (99 vs. 94%, P < 0.01) and Q83 (98 vs. 95%, P < 0.01) (**29.6.7**). The LOA of our faculty exceeded national in Q25 (*I have access to library and other educational resources)* (99 vs. 97%, P = 0.01) but was below national in Q28 (*The program's resources can accommodate present student enrollment*) (57 vs. 74%, P = 0.02). In a separate school-based survey that focused on library resources specifically, i.e., *library and educational resources can accommodate present student enrolment*, the LOA of our faculty was 98 % (45/46). Our preceptors have historically had a lower LOA than national for Q41 (*The college/school provides me with access to library and educational resource.*) (57 vs. 77%, P=0.02). Beginning July 2014, our preceptors were provided with library access. This likely underlies the improvement in the LOA 2014 to 79%, a value comparable to national. We anticipate this number will continue to increase in coming years.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)

University of Colorado / Skaggs School of Pharmacy and Pharmaceutical Sciences

30. Financial Resources

The college or school must have the financial resources necessary to accomplish its mission and goals. The college or school must ensure that student enrollment is commensurate with its resources.

2. College or School's Self-Assessment

The college or school has the financial resources necessary to accomplish its mission and goals.	Satisfactory
The college or school ensures that student enrollment is commensurate with its resources. Enrollment is planned and managed in line with resource capabilities, including tuition and professional fees.	Satisfactory
Tuition for pharmacy students is not increased to support unrelated educational programs.	Satisfactory
The college or school has input into the development of and operates with a budget that is planned, developed, and managed in accordance with sound and accepted business practices.	Satisfactory
Financial resources are deployed efficiently and effectively to:	Satisfactory
support all aspects of the mission, goals, and strategic plan	Satisfactory
ensure stability in the delivery of the program	Satisfactory
allow effective faculty, administrator, and staff recruitment, retention, remuneration, and development	Satisfactory
maintain and improve physical facilities, equipment, and other educational and research resources	Satisfactory
enable innovation in education, interprofessional activities, research and other scholarly activities, and practice	Satisfactory
measure, record, analyze, document, and distribute assessment and evaluation activities	Satisfactory
ensure an adequate quantity and quality of practice sites and preceptors to support the curriculum	Satisfactory
The dean reports to ACPE, in a timely manner, any budget cuts or other financial factors that could negatively affect the quality of the professional degree program or other aspects of the mission of the college or school.	Satisfactory
Business plans, including revenue and expense pro forma for the time period over which the change will occur and beyond, are developed to provide for substantive changes in programmatic scope or student numbers.	Satisfactory
The college or school ensures that funds are sufficient to maintain equivalent facilities (commensurate with services and activities) across all program pathways.	Satisfactory

3. College or School's Comments on the Standard

Focused Questions

☑ How the college or school and university develop annual budgets (including how the college or school has input into the process) and an assessment of the adequacy of financial resources to efficiently and effectively deliver the program and support all aspects of the mission and goals.

☑ An analysis of federal and state government support (if applicable), tuition, grant funding, and private giving

☑ A description of how enrollment is planned and managed in line with resource capabilities, including tuition and professional fees

☑ A description of how the resource requirements of the college or school's strategic plan have been or will be addressed in current and future budgets

☑ How business plans were developed to provide for substantive changes in the scope of the program or student numbers, if applicable

☑ An assessment of faculty generated external funding support in terms of its contribution to total program revenue

☑ How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard

☑ Any other notable achievements, innovations or quality improvements

(School comments begin here)

Each AMC school is supported financially by funds derived from the state, student tuition and fees, clinical activities, sponsored projects, auxiliaries (e.g., DDP program tuition and fees, conferences, fee-for-service accounts, CU Boulder campus-associated pharmacy revenues), facilities & administration (e.g., indirect cost recoveries from grants), gifts (e.g., donations) and endowment earnings. In addition, AMC schools receive financial support from tobacco company settlement funds and one-time monies from the CU President's office. The budget process for AMC and our school is described in **30.6.1**. **30.6.2**). The current level of state support remains only 56 percent of the amount our school received in 2002. In spite of this, our school has maintained adequate funding to successfully accomplish and ensure stable and sustainable programs in education, research and clinical service through generation of revenue from other sources (**30.6.3**). Through sound, sustainable policies and procedures, our school has managed to support, preserve, and improve management of assets under it's authority, e.g., facilities, educational opportunities, innovative enterprises.This is reflected in our budget expanding from $37.4M (2009-10) to $49.4M (2014-15) despite a challenging financial climate. In general, increases in tuition have made up for state funding decreases and led to increases in ELPD in-state and out-of-state tuition of 43% and 31% (respectively) since 2009-10 (**30.6.4**), andresulted in our tuition being higher than most of our peers (**30.2.1**, **30.3.1**). Similar increases occurred in the NTPD program. Nevertheless, we continue to have a highly selective process for qualified students.

Professional program enrollment is planned and managed in line with our school's resources. Enrollment in the ELPD program is managed on a long-term strategic basis and a short-term annual basis. Factors in enrollment decisions include (i) market conditions, (ii) projected budget needs of the school, (iii) competitive tuition rates relative to peer institutions, (iv) a mix of resident and non-resident students, and (v) faculty and staff resources needed to deliver the program and meet our school's mission. These factors are reviewed annually by the Executive committee which makes recommendations to the dean who makes the final decision on the annual enrollment and tuition rate that, in turn, drives the resources needed for an adequate number of faculty and staff to support the program.

To meet the needs of the current class size and revisions to the curriculum, our school invested additional resources to ensure the quality of its education activities were maintained or enhanced. Examples include: (i) additional personnel in OEP for recruitment, training and overseeing preceptors, and to manage new software (E*Value), (ii) additional teaching faculty, (iii) additional personnel in the OSS (student recruitment and support services), and (iv) additional instructional design personnel in DDP (to support learning through online modalities).

The DDP office and the dean annually review student enrollment, retention and graduation data for the ITPD and NTPD programs to ensure enrollment supports and are managed in line with resource capabilities. Prior to the creation of the ITPD program, a business plan was developed that defined the resources needed to support the program, including administrative staffing, faculty, finance, and technology, marketing and facilities costs. These costs allowed our school to predict revenue and define the total number of students that could be enrolled annually into the ITPD program and additional personnel required to run the program. The NTPD and ITPD programs are obliged by university policies on extended studies to be supported 100% from student tuition and to maintain an uncommitted reserve fund that would ensure students in the program are able to complete it should the program be discontinued. Uncommitted reserve fund currently exceeds $2M and is adequate for this purpose.

Our school's faculty play a key role in ensuring success of our programs and when turnover has occurred, it most often is unrelated to remuneration. This is likely a result of faculty salaries being 50-75th percentile relative to peer schools (**30.5.1**). In addition, there has been a 46% increase in faculty numbers since 2009 (Standard 24). The low faculty turnover ensures that delivery of the program is consistent and maintained at a high standard.

In spite of several years of challenging economic times, it is noteworthy that our school has maintained and augmented its uncommitted reserve (**30.6.5**) to ensure that it continues to be able to fulfill its mission in the future. Our school holds contingency funds in reserve to support large and/or unanticipated expenditures that support its mission. Examples for education include the recent remodeling of the Pharmaceutical Care Learning Center (PCLC), upgrading PCLC computer resources, contributing to AMC infrastructure that improves student learning (e.g., classroom technology equipment, advanced LMS functionalities, IPE activities in the AMC CAPE) or student life. Examples for research include the appointment of an Associate Dean for Research and Graduate Affairs, allocation of over $3M to him to support programs to stimulate research, the purchase of shared scientific equipment, provision of seed grants for collaborative or innovative endeavors, and support of research training and mentoring programs for faculty and students. Previously uncommitted ongoing funds have been budgeted to support program needs and initiatives in the 2015 strategic plan. For example, a Director of Assessment (**30.6.6**), a Student Academic Coordinator (**30.6.7**), and an additional FTE to facilitate student recruitment and admissions (**30.6.8**) have recently been hired to meet program needs.

Our school has made concerted efforts to broaden its base of financial support and/or support its mission areas. We have been successful in increasing our research grant support despite a downturn in research funding (**30.6.9**). In addition, our school ranked #4 among all schools of pharmacy in NIH funding in 2013/14 (the most recent AACP data available), ranked #4 among all pharmacy schools in the country in NIH funding in 2014 (2014 Blue Ridge Institute) and consistently ranks #1 or 2 among all basic sciences departments at AMC. In addition, our school secured a significant donation from ALSAM to start the Skaggs Scholars program, which provides competitive funding for research projects for our faculty collaborating with other Skaggs Schools of Pharmacy. Now in its 4th year, the program has distributed nearly $2M and the results are presented at the biennial L.S. Skaggs Biomedical Research Symposium.

In 2012, our school appointed a faculty member to serve as the Director of Business Development to encourage and assist with entrepreneurial endeavors. This has resulted in contracts with for-profit companies to provide specialized laboratory services that utilize the expertise of our faculty in areas such as particle counting, ultracentrifugation, measurement of drug levels and high resolution protein structural studies. Fee-for-service activities emanating from these endeavors provide educational opportunities for graduate students and funds to bolster our research enterprise. For clinical and education enterprises, our Director of Clinical Affairs has been successful in negotiating contracts with the state's Medicaid program to provide drug utilization review and with the university's self-insurance trust to provide MTM services. In addition, grants with safety-net clinics provide revenue to our school to support new faculty positions, as well as providing additional preceptor sites. Our school continues its affiliations with the University of Colorado Hospital, Denver Health, Children's Hospital Colorado, several HealthOne hospitals and other clinics (equivalent to 9.7 FTEs) and, thereby, receives significant funding for clinical services ($1.37M) and clinical practice sites for our faculty members. Our school has also partnered with chain drug stores, Kaiser and other affiliates to support residency and fellowship positions.

Our school has a part-time Principal Gifts Officer from the University Office of Development who is charged with generating donations to support the school. The University of Colorado system is actively engaged in fundraising initiatives such that fundraising goals and development priorities are components of the school and university operating plans. Over the past 5 years, $1M in gifts and pledge payments has been obtained annually by our school through fundraising efforts and over $0.6K awarded as scholarships annually.

All resources obtained by our school from extramural sources must comply with state and university fiscal policies and support the mission of our school, preventing revenue contracts from interfering with sound educational and ethical principles. Recognizing its responsibility to be an accountable steward of resources, our school ensures that all extramural funding is used in the manner for which it was provided and that it supports our mission.

Two aspects of our program are noteworthy. The first is the resilience shown by our school in maintaining high quality educational, clinical service and research programs and a significant reserve fund in challenging economic times. The second is the continuing success of our research enterprises as reflected in the increased levels of NIH funding and improved ranking in NIH funding relative to other pharmacy schools.

The success of our school's budgeting process is reflected in sufficient financial resources being available to support all aspects of our mission and goals.

4. College or School's Final Self-Evaluation

☑ Compliant	☐ Compliant with Monitoring	☐ Partially Compliant	☐ Non-Compliant

5. Recommended Monitoring

(School comments begin here)