P.R.A.C.T.I.C.E. (Presentation and Review of Active Cases To Improve Clinical Education) for Clerkship Students

PAUL TRAN M.D.

FELLOW OF PEDIATRIC GASTROENTEROLOGY, HEPATOLOGY, AND NUTRITION

Introduction



- Pediatric Clerkship students develop clinical knowledge through chance clinical exposures and lectures
- Not all students are able to integrate knowledge and practice progression within the RIME framework

Introduction

Develop, implement, and evaluate an interactive multi-modal curriculum for clerkship students to learn and apply knowledge of pediatric concepts within a framework of a standard clinical experience





Pre-Session

- Read caseRecord a FlipGrid
- diagnoses and next management step

differential

Video presenting

Rounds Discussion

Session

- Watch FlipGrids in small groups
- Develop group differential and plan
- Review concepts in facilitated large-group

Document

Post-Session

- Write a modified SOAP note
- Complete session survey with Likert scale questions and open-ended prompts.
- Review "Attending" note

Methods

Two comprehensive cases were developed with general pediatric and GI concepts

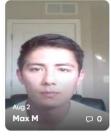
Case 1: 1 month old with Trisomy 21, vomiting, GERD, failure to thrive, formula mixing, cow's milk protein intolerance

Case 2: 13-month-old Trisomy 21, constipation, hematochezia, abdominal pain, anemia





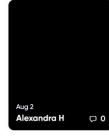




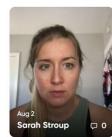












Methods

Flipgrid Video

- 1. Introduction to case (One liner) patient age/gestational age, diet if applicable, relevant history, presenting problems
 - a. 0 Not present
 - b. 1 Present
- 2. Primary diagnosis
 - a. 0 No primary diagnosis stated
 - b. 1 Primary diagnosis stated but not reasonable
 - c. 2 Reasonable primary diagnosis stated
- 3. Differential diagnoses
 - a. 0 No other diagnoses presented
 - b. 1 1 reasonable differential diagnosis
 - c. 2-2 or more reasonable differential diagnoses
- 4. Supporting/refuting evidence
 - a. 0 No supporting/refuting evidence
 - b. 1 Supporting/refuting evidence for some of differential diagnoses
 - c. 2 Supporting/refuting evidence for most differential diagnoses
- 5. Next Step (workup and/or management)
 - a. 0 No evaluation or management presented
 - b. 1 Reasonable workup or management presented

Different checklists for included clinical elements:

- FlipGrid
- Note

Results





- 104 third year medical students across six unique pediatric clerkship rotations with four facilitators
- 87 submitted both FlipGrid video and post-session note

Case 1: 55 students

Case 2: 32 students

Flipgrid element score (out of 8):

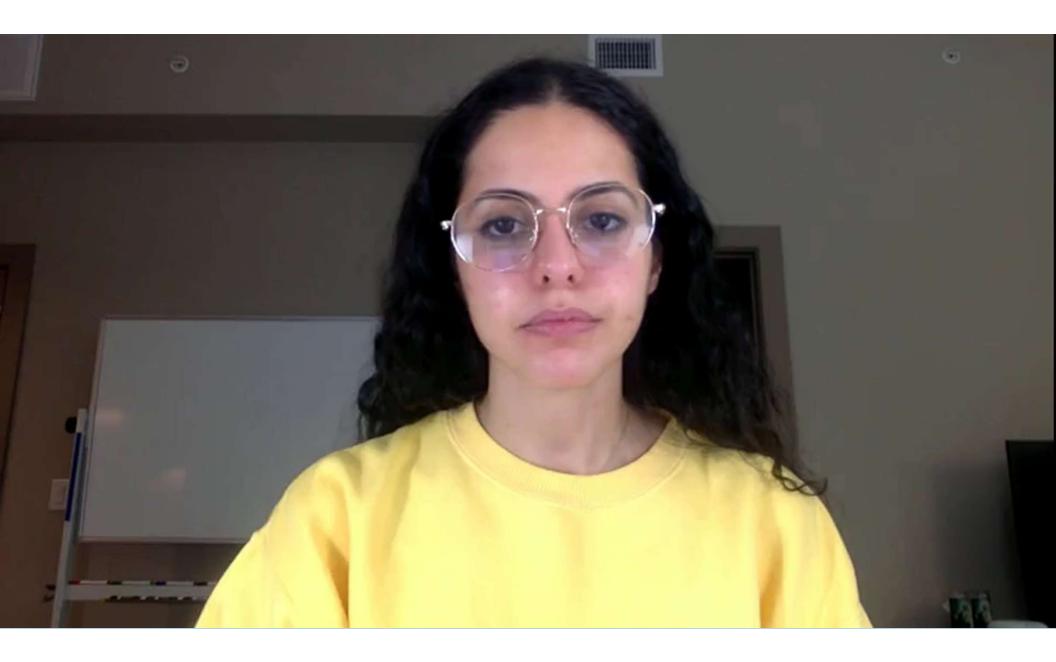
77/87 students with ≥ 7 components

Most missed point: reasonable diagnosis

Note element score (out of 11):

63/87 students with ≥9 components

Most missed points: *problem list and reasonable diagnosis*



Results: Session Structure

"The **format** in which it was presented (i.e. forming a differential/presentation, discussion in small and large group, and then writing a note) **felt fairly realistic to the clinical setting**"

"I think that this process is key to clerkships, but it is often not sufficiently emphasized using a traditional didactic "lecture-based" format. I thought that the FlipGrid, facilitated discussion, and assessment and plan note really pushed us into an application-based mindset."

Results: Engagement and Practice

"I really liked the **combination of teaching modalities**. It kept me **engaged** the entire session..."

"I liked how this session ... was designed to **push us** to be better and identify where we have **opportunities to grow**."

"I liked the pre-work and the ability to try to **practice my thought process** before coming to the session because that way it sticks better in my head"

"It was a great way to learn the relevant GI material while **practicing** our **reporter**, **interpreter**, and **manager skills**

Conclusions



Students appreciate the engaging and interactive curriculum.



Students value the practice of developing clinical skills in a lowstakes learning session.



This multi-modal approach can support learner development within reporter, interpreter, and manager categories of the RIME framework.



FlipGrid is valuable technology for practicing oral presentations and obtaining feedback

Future Directions

- 1. Use of curriculum to allow for evaluation of longitudinal development of skills
- 2. Evaluation of the types of clinical concepts that are best learned in this format
- 4. Comparison of the clinical elements in oral presentations with those in written notes in a clinical context
- 3. Development of additional GI and other subspecialty cases in this format

Acknowledgements

- Stephanie Hum MD
- Christine Waasdorp-Hurtado MD
- Meghan Treitz MD







Teaching Scholars Program

- Chad Stickrath MD
- Mary Jane Rapport
- Helen Macfarlane
- All of my friends and colleagues in my Teaching Scholars Program Cohort!

Questions?

