



An Oral Presentation Tool for Pediatric Clerkship Student Peer Assessment

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Disclosure of Financial Relationships

- No Disclosures

Background

- Successful formative feedback measures learner performance against established performance standards.
- Previous research indicates students find peer assessments beneficial, reporting enhanced self-reflection as a main strength.
- Rubrics are useful assessment tools for self- and peer assessments. These assessments are promoted by embedding them into existing course processes.
- We hope that our innovative tool will contribute to the limited literature on teaching and assessing pediatric clerkship student oral presentations.

Innovation

- Pediatric clerkship students are expected to present pertinent and organized case presentations on inpatient rounds.
- Many students struggled with this expectation and provided feedback that expectations varied amongst pediatric hospitalists.
- An innovative tool, the Oral Presentation Tool (OPT), was created to establish interval case presentation expectations and encourage peer assessments and feedback.

Expectations

Core Entrustable Professional Activities for Entering Residency		AAMC
EPA 6: Provide an oral presentation of a clinical encounter		
1. Description of the activity	<p>The day 1 resident should be able to concisely present a summary of a clinical encounter to one or more members of the health care team (including patients and families) in order to achieve a shared understanding of the patient's current condition. A prerequisite for the ability to provide an oral presentation is synthesis of the information, gathered into an accurate assessment of the patient's current condition.</p> <p>Functions</p> <ul style="list-style-type: none"> • Present information that has been personally gathered or verified, acknowledging any areas of uncertainty. • Provide an accurate, concise, and well-organized oral presentation. • Adjust the oral presentation to meet the needs of the receiver of the information. • Assure closed-loop communication between the presenter and receiver of the information to ensure that both parties have a shared understanding of the patient's condition and needs. 	
2. Most relevant domains of competence	<input checked="" type="checkbox"/> Patient Care <input type="checkbox"/> Knowledge for Practice <input checked="" type="checkbox"/> Practice-Based Learning and Improvement <input checked="" type="checkbox"/> Interpersonal and Communication Skills	<input checked="" type="checkbox"/> Professionalism <input type="checkbox"/> Systems-Based Practice <input type="checkbox"/> Interprofessional Collaboration <input checked="" type="checkbox"/> Personal and Professional Development
3. Competencies within each domain critical to entrustment decisions <small>(See Appendix C)</small>	PC 2 P 1 PBL 1 P 3 ICS 1 PPD 4 ICS 2 PPD 7	

Objectives

1. Standardize interval case presentation expectations for pediatric clerkship students
2. Improve pediatric clerkship student comfort level with interval case presentations and EPA6
3. Improve pediatric clerkship student skill level with interval case presentations

Methods

- Standardize Expectations
- Implementation and Assessments
- Evaluation and Analysis of Process



Standardizing Expectations

OPT Development

1. Brainstorming and drafting by clerkship leaders with input from a senior resident on a teaching elective
2. Revisions by focus groups of hospitalists, residents, and students
3. Consensus about OPT layout/content

Oral Presentation Tool (OPT)

Oral Presentation Tool (use for follow-up presentations) Date: _____ Presenter: _____ Evaluator: _____

S	Patient summary statement ("the 1-2 liner") ✓ Age, sex, pertinent past medical hx, and working dx or dxs ✓ Clear two sentences (max) Update on events since team last rounded ("24 hour update") ✓ Succinct, complete (no omissions/concerns/consults) ✓ Comparison to previous day (better/worse/same)	Developing	Proficient	Exemplary	N/A
O	Vital signs ✓ Report vital signs from last 24 hrs ✓ Interpretation or trend (e.g. patient's fevers are decreasing) Fluid balance ✓ Intake/output from last 24 hrs in age appropriate format (e.g. formula intake=kg/day) urine output(cc/kg/hr) ✓ Interpretation if intake and output are age appropriate ✓ Comparison to previous day (better/worse/same) Focused physical exam ✓ Report positive and negative exam findings, succinct, focusing on the patient's problem ✓ Comparison to previous day (better/worse/same) Labs/Tests ✓ Lab/test results from last 24 hrs ✓ Pertinent values and trends (e.g. Na is 155, which is elevated, but decreased from 12 hours ago when it was 160) ✓ Pending labs/tests (e.g. cultures, send-out labs)	Developing	Proficient	Exemplary	N/A
A	Assessment ✓ Clinical status update and thought process behind the update (is patient improved/worse/unchanged and why?) ✓ Working dx or potential dxs, and a list of any other problems, including those that keep the patient hospitalized	Developing	Proficient	Exemplary	N/A
P	Focused plan by systems ✓ Pertinent diagnoses/problems only (non-pertinent systems are excluded) ✓ Evidence-based, supported by pediatric knowledge ✓ Discharge criteria	Developing	Proficient	Exemplary	N/A

Developing	Proficient	Exemplary
Omits key characteristics Less organized Less accurate Less complete Less focused Info/details is less prioritized Provides little evidence for clinical reasoning	Most key characteristics are included Organized Free inaccuracies Usually complete Usually focused Info/details is evenly prioritized Provides some evidence for clinical reasoning	All pertinent key characteristics included Well organized Consistently accurate Consistently complete Concise Info/details is consistently prioritized Provides good evidence for clinical reasoning

Please provide constructive feedback, including strengths and areas for improvement:

Two strengths (what the presenter did well)	Two areas for improvement (suggestions for next presentation)

Patient Age: _____ Diagnosis: _____ Attending: _____

Implementation and Assessment

OPT Workshop



INSTRUCTIONAL VIDEO
Students watch a video reviewing OPT background, form layout, expectations, and peer assessment sections

INTERVAL CASE PRESENTATION VIDEO
Students watch an example presentation and practice giving a peer assessment

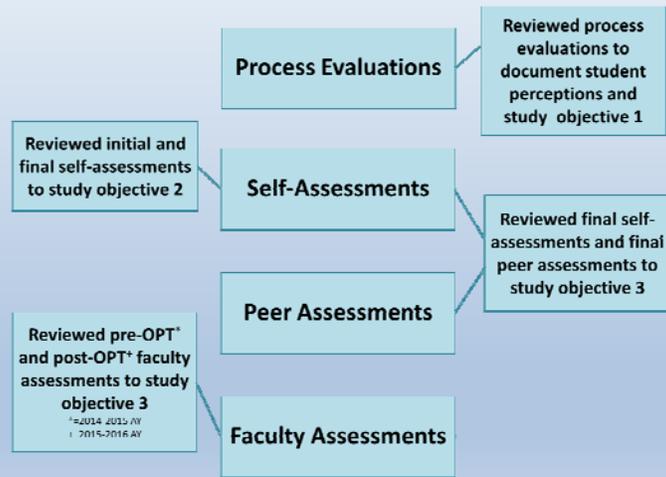


Inpatient Rotation

- Students complete at least 2 peer assessments for each student on their team.
- Students fill out final self-assessments and final process evaluations.
- Hospitalist summative assessments of oral presentations were collected for the 2014-2015 and 2015-2016 academic years.

Evaluation and Analysis of Process

Overview of Data Analysis



Descriptive and inferential statistics were used to analyze results

Results

- Self-assessments, peer assessments and process evaluations were collected for 117 students during the 2015-2016 academic year.
- Faculty assessments of student oral presentations were collected for the 2014-2015 and 2015-2016 academic years.



Process Evaluations

- Most students felt peer assessments improved presentations.

“They ‘forced’ me to pay attention to others’ presentations and use them to evaluate and better my own. I evaluated myself as I was evaluating my peers.”

“The insight that I received from my peers allowed me to adjust and improve each day.”

Process Evaluations

- Many students voiced concerns that peer assessments often lacked honesty and criticism.

“It was hard to be brutally honest with classmates so I’m not sure I got appropriate feedback.”

“Many of us are still too nice to give frank constructive feedback.”

Results

Objective 1

Standardize Expectations for Interval Case Presentations

Process Evaluations

- Process evaluations clearly indicated that the OPT standardized presentation expectations and helped students filter/focus information.

“I have had trouble streamlining my presentations up until this point. However, the OPT gave me clear directions as to what to always include which really helped me.”

“The OPT made me actively think about the presentations and was a solid outline/expectation for presentations.”

Results

Objective 2

Increase Student Comfort with Interval
Case Presentations and EPA-6

Self-Assessments

- Wilcoxon Signed Rank tests compared initial and final self-assessments:
 - ✓ Student comfort increased for all presentation and EPA-6 components ($p < 0.05$).
 - ✓ Students starting with outpatient rotations had higher final self-assessment rankings ($p < 0.05$).

OPT: Oral Presentation Tool Self-Assessment Questionnaire		Name: PERIOD A STUDENTS			
		Date: 5/2015-6/2015			
<i>Please rate how comfortable you are with the following aspects of inpatient presentations?</i>					
Question	Not comfortable 1	Somewhat comfortable 2	Neutral 3	Comfortable 4	Very comfortable 5
Gather essential and accurate information about patients and their conditions through history-taking, physical examination and the use of laboratory data, imaging and other tests*		2.7 (I) 2.6 (O)		→ 4 (I) → 4.4 (O)	
Patient Summary: summing up the patient in 1-2 lines			3.3 (I) 3.2 (O)	→ 4.0 → 4.6	
Patient update: updating team on the last 24 hr events		2.5 (I) 2.6 (O)		→ 4.0 → 4.2	
Presenting pertinent vital signs			3.2 (I) 3.2 (O)	→ 4.2 → 4.2	→ 5
Fluids: presenting intake and output to the team in age-appropriate format	1.5 (I) 1.2 (O)			→ 4 → 3.8	
Presenting pertinent physical exam findings		2.5 (I) 2.6 (O)		→ 4.0 → 4.2	
Updating team on new, pertinent, and pending labs		2.0 (I) 2.6 (O)		→ 4.0 → 4.2	
Creating and presenting a succinct assessment based on clinical information		2.5 (I) 2.6 (O)	→ 3.8	→ 4.0	
Generating and presenting an appropriate plan by systems	1.8 (I)		→ 3.0 → 3.6		
Providing feedback to peers			3.5 (I) 3.0 (O)	→ 4.0 → 4.6	
Accepting and incorporating feedback from peers			3.4 (O)	4.0 (I & 2) → 4.6	
Identifying strengths, deficiencies, and limits in one's knowledge and expertise*			3.7 (I) 3.2 (O)	→ 4.0 → 4.4	
Communicate effectively with colleagues within one's profession or specialty, or health professionals, and health-related agencies*			3.3 (I) 3.6 (O)	→ 4.0 → 4.4	
Demonstrate self-confidence that puts members of the health care team at ease*			3.3 (I) 3.0 (O)	→ 4.0 → 3.8	

*Core Entrustable Professional Activities (EPAs) for Entering Residency

Self-Assessment Data* for Clerkship Period A

I=Started clerkship with inpatient rotation

O=Started clerkship with outpatient rotation

*Mean response trends are shown

Results

Objective 3

Improve Student Skill with Interval Case Presentations

Self- and Peer Assessments

- Spearman's rho indicated no correlation between final self-and final peer assessments (S: $r=-0.04$, $p=0.67$; O: $r=0.18$, $p=0.08$; A: $r=-0.02$, $p=0.89$; P: $r=0.02$, $p=0.83$).
- Independent samples t-test and Mann-Whitney U test showed no difference in faculty assessments for the pre-OPT and post-OPT AYs ($p=0.07$, $p=0.48$).

Conclusions

- The OPT appeared to successfully:
 - Establish interval case presentation expectations
 - Increase student comfort with all presentation and EPA-6 components
 - Implement peer assessments within the constructs of the existing clerkship
- The OPT did not appear to improve student presentation skill level.

Conclusions

- The OPT identified:
 - Need for more student education/training regarding effective peer assessments/feedback
 - Student desire for resident and attending OPT assessments

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