

2019

Incorporation of the Ottawa Clinical Assessment Tool Scale (OCAT) to Measure Entrustability in Clinical Clerkships

Fidelma Rigby

Virginia Commonwealth University

Follow this and additional works at: https://scholarscompass.vcu.edu/med_edu

Part of the [Medicine and Health Sciences Commons](#)

© The Author(s)

Downloaded from

https://scholarscompass.vcu.edu/med_edu/52

This Oral is brought to you for free and open access by the School of Medicine at VCU Scholars Compass. It has been accepted for inclusion in Health Sciences Education Symposium by an authorized administrator of VCU Scholars Compass. For more information, please contact libcompass@vcu.edu.

OTTAWA CLINICAL ASSESSMENT TOOL SCALE

2019 VCU Health Sciences Education
Symposium

Fidelma B. Rigby, MD



Incorporation of the Ottawa Clinical Assessment Tool Scale (OCAT) to Measure Entrustability in Clinical Clerkships

MICHAEL RYAN, MD, MEHP
ELIZABETH WATERHOUSE, MD
BENNETT LEE, MD
BENNETT LEE, MD
FIDELMA RIGBY, MD
BRIEANNE DUBINSKY, MD
JOEL BROWNING
SALLY SANTEN, MD, PHD
NICOLE M DEIORIO, MD
STEVEN BISHOP, MD



▶ **Participating Institutions**

- Columbia University
- Florida International University
- Michigan State University
- New York University
- Oregon Health & Science University
- University of Illinois
- University of Texas at Houston
- Vanderbilt University
- Virginia Commonwealth University
- Yale University

AAMC CORE EPA PILOT SCHOOLS

Decorative white lines consisting of several parallel diagonal strokes in the bottom right corner of the slide.



FIELD OF DREAMS: IF YOU BUILD IT
THEY WILL COME

How can we accomplish an
easy way to assess these
core competencies?

POE: POINT OF EPA ASSESSMENT




Core Entrustable Professional Activities (Core EPAs)

- For entering residency
- Direct observation in workplace
- Need for “Entrustability” Scales

PURPOSE AND BACKGROUND

CORE EPAS

- 1) Gather a History and Perform a Physical Exam
 - 2) Prioritize a Differential Diagnosis Following a Clinical Encounter
 - 3) Recommend and Interpret Common Diagnostic and Screening Tests
 - 4) Enter and Discuss Orders and Prescriptions
 - 5) Document a Clinical Encounter in the Patient Record
 - 6) Provide an Oral Presentation of a Clinical Encounter
 - 7) Form Clinical Questions and Retrieve Evidence to Advance Patient Care
 - 8) Give or Receive a Patient Handover to Transition Care Responsibility
 - 9) Collaborate as a Member of an Interprofessional Team
 - 10) Recognize a Patient Requiring Urgent or Emergent Care and Initiate Evaluation and Management
 - 11) Obtain Informed Consent for Tests and/or Procedures
 - 12) Perform General Procedures of a Physician
 - 13) Identify System Failures and Contribute to a Culture of Safety and Improvement
- 
- Decorative white lines consisting of several parallel diagonal lines extending from the bottom right towards the top right of the slide.

- Demonstrated Validity
- Used in graduate medical programs in Surgery and Medicine(Canadian GME)

OTTAWA CLINIC ASSESSMENT TOOL
(OCAT)

- Incorporated OCAT across all core clerkships within VCUHS
- Use of a mobile-friendly workplace-based assessment (WBA) instrument
- Discuss the feasibility and descriptive data
- Adoption 2018-2019 Academic Year

CORE EPA PILOT PROGRAM

- Internal Medicine Pilot 2017-8019 Academic Year
- Modified and incorporated across all eight of required clerkships 2018-2019 year

DESCRIPTION OF PRACTICE

- Descriptor of Patient Encounter
- Rating of Complexity
- Modified Version of OCAT scale
- Section for Comments

FOUR ITEM INSTRUMENT

- I had to do it
- I had to talk them through it
- I had to direct them from time to time
- I needed to be available just in case
- (I did not need to be there)

MODIFICATION FROM 5 POINT TO 4
POINT SCALE



► Mobile Friendly

eCurriculum - Geriatric Management System Dashboard

Doe, Jane
Ambulatory (Novia)
Stein, Frank N
Assigned: 4/9/2018
Status: Assigned

EPA 10 : Recognize a Patient Requiring Urgent or Emergent Care and Initiate Evaluation and Management

Age: Birth to 1 month
Gender: Female
Environment: In-patient
Note: Abruption

Tasks

- Recognize a patient requiring urgent care
- Collaborate as a Member of an Interprofessional Team
- Initiate evaluation and management of patient requiring urgent care

Patient Management, Tests, & Procedures

- Fever
- Electrolyte disorder

An entrustable student is able to:

- Recognize normal and abnormal vital signs as they relate to patient and disease-specific factors as potential etiologies of a patient's decompensation
- Recognize severity of a patient's illness and indications for escalating care and initiate interventions and management
- Initiate and participate in a code response and apply basic and advanced life support
- Upon recognition of a patient's deterioration, communicate situation, clarify patient's goals of care, and update family members

EPA Oriented

Was the encounter complex for medical decision-making or another reason?

Yes
 No

Indicate how much you had to guide the student in completing the work:

I had to do it
 I had to talk them through it
 I had to direct them from time to time
 I needed to be available just in case

What does this student need to work on to become more independent?

SUBMIT

Direct Observation

WORKPLACE-BASED ASSESSMENTS (A.K.A. POE): POINT OF EPA ASSESSMENT

Student requests
feedback of
performance on
a discrete activity

Evaluator
receives a text
message (or
email) containing
a request to
complete
feedback

Evaluator
completes the
evaluation

Student can
immediately
review feedback

- Contains **student identifiers**
- Contains **patient identifiers**
- Describes the activity student is looking for feedback on
- Outlines what the **optimal** student performance “looks” like for that activity

The screenshot displays a user interface for a Clerkship Management System. At the top, the breadcrumb navigation reads "eCurriculum > Clerkship Management System Dashboard". Below this, a user profile for "Doe, Jane" is shown, including a placeholder icon, her name, and details: "Ambulatory (Inova)", "Stein, Frank N", "Assigned: 4/9/2018", and "Status: Assigned".

The main content area features a section titled "EPA 10 : Recognize a Patient Requiring Urgent or Emergent Care and Initiate Evaluation and Management". This section includes a table of patient characteristics:

Age:	Birth to 1 month
Gender:	Female
Environment:	In-patient
Note:	Abruption

Below the table, there are two sections: "Tasks" and "Patient Management, Tests, & Procedures".

Tasks

- Recognize a patient requiring urgent care
- Collaborate as a Member of an Interprofessional Team
- Initiate evaluation and management of patient requiring urgent care

Patient Management, Tests, & Procedures

- Fever
- Electrolyte disorder

At the bottom, a section titled "An entrustable student is able to:" lists specific competencies:

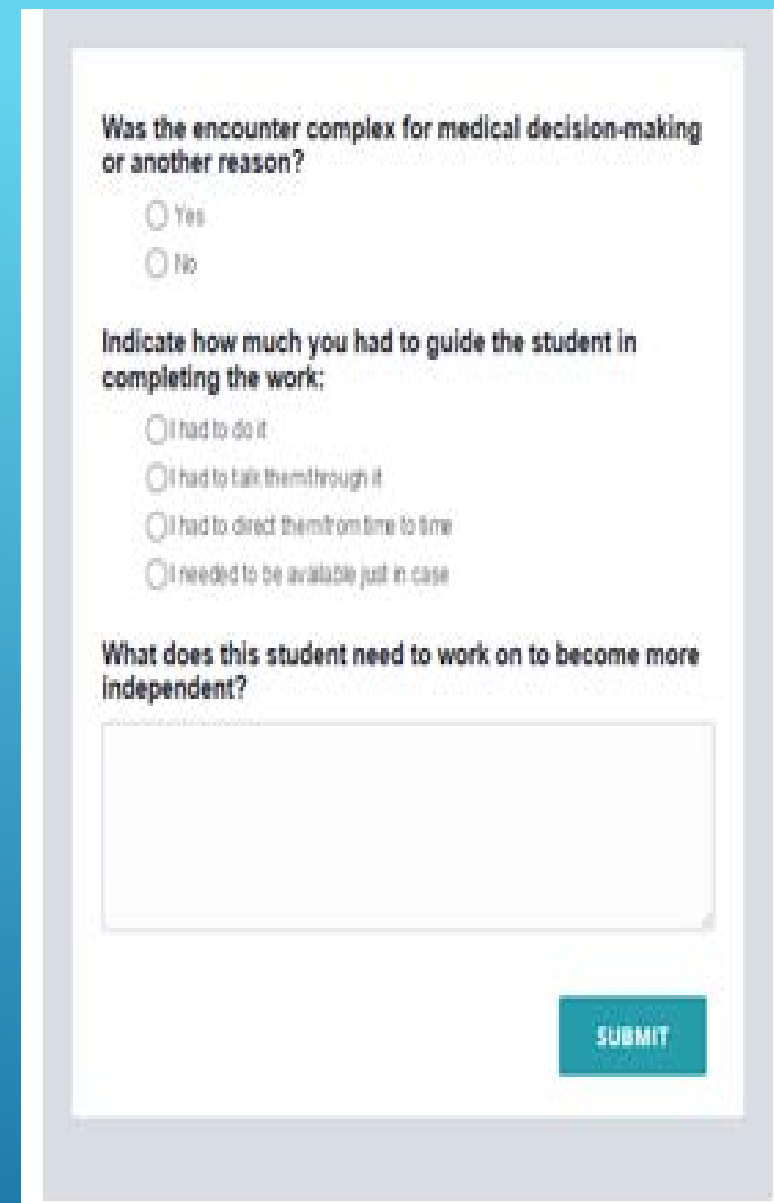
- Recognize normal and abnormal vital signs as they relate to patient and disease-specific factors as potential etiologies of a patient's decompensation
- Recognize severity of a patient's illness and indications for escalating care and initiate interventions and management
- Initiate and participate in a code response and apply basic and advanced life support
- Upon recognition of a patient's deterioration, communicate situation, clarify patient's goals of care, and update family members

WHAT DOES THE POE LOOK LIKE FOR THE EVALUATOR?

Evaluator completes 3 prompts:

1. Determines if the encounter was **complex** (for any reason)
2. Describes, using a 4-point scale, how much **supervision** he/she needed to provide during the student's performance of the activity
3. **Comments** on what the student can do to become more independent

WHAT DOES THE EVALUATOR DO?



Was the encounter complex for medical decision-making or another reason?

Yes

No

Indicate how much you had to guide the student in completing the work:

I had to do it

I had to talk them through it

I had to direct them in real time

I needed to be available just in case

What does this student need to work on to become more independent?

- Students had to REQUEST a minimum number of WBAs
- Specified by the clerkship

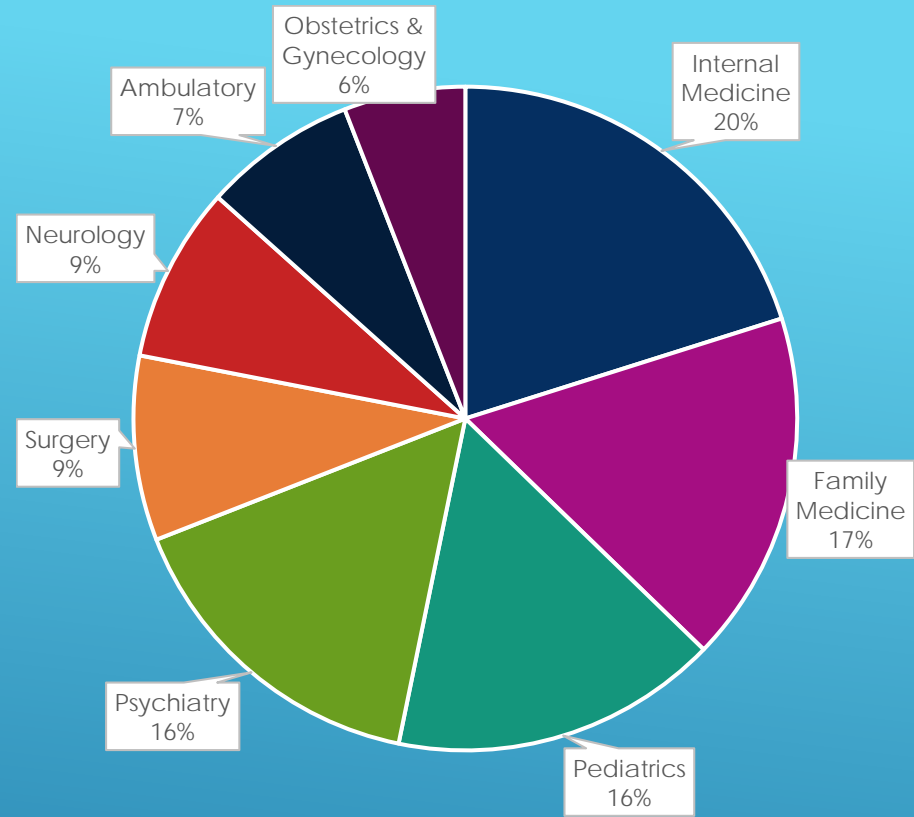
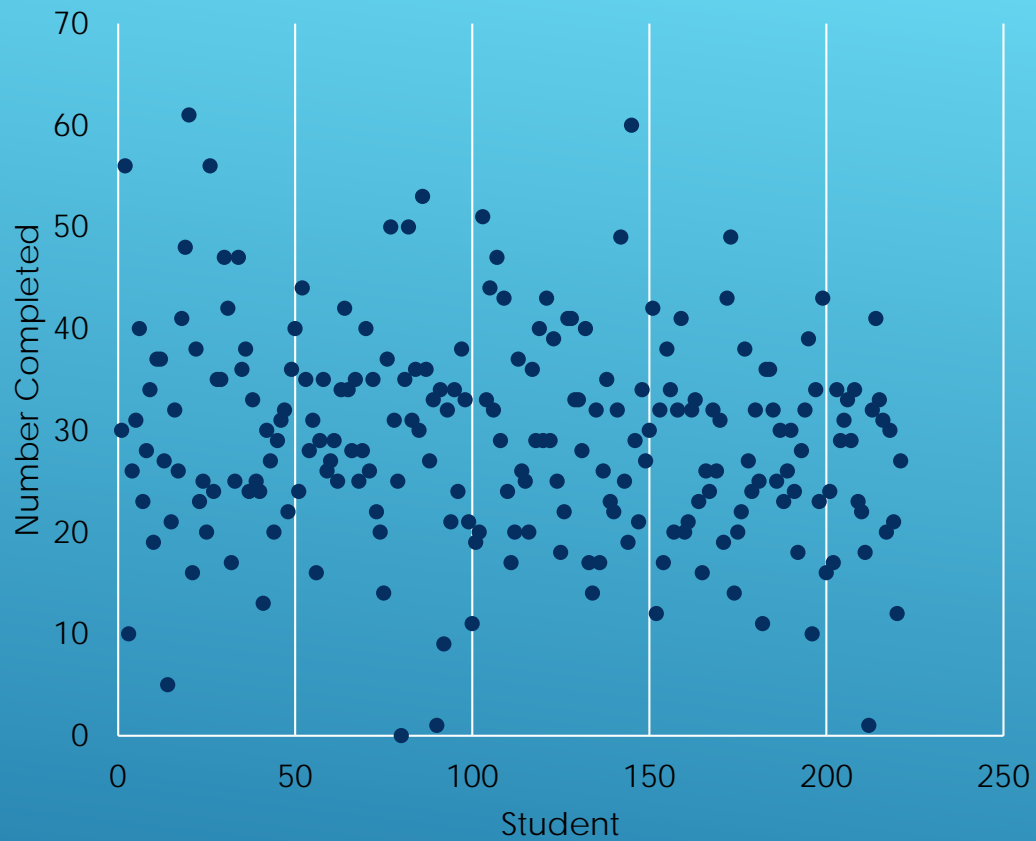
EACH CLERKSHIP DIRECTOR SELECTED
4- 9 EPAS

- Tracked total number of WBAs(Work Based Assessment)
- Mean OCAT performance ratings by EPA for each student
- Mean OCAT performance over time

ASSESSED OUTCOMES OF THIS SYSTEM

- 7189 WBAS among 238 students
- Mean of 30/ student
- MOST completed: CEPA 1 H and P :(29%)
CEPA 6 Oral presentation(27%)
- LEAST completed: CEPA 8,10 or 12 (Handover, Urgent, Procedure)

RESULTS



2018-2019: Total of 7189 assessments by faculty and/or residents
 Projected ~50 assessments/students/year across all 8 clerkships

WHAT HAVE WE FOUND?

- Mean OCAT rating 3.51 (SD=0.61)
- Excluding CEPA 4 (orders) mean OCAT ratings similar (3.46-3.67)
- CEPA 4 had lowest rating (3.03 mean, SD =0.9)
- This difference was clinically significant ($P < 0.5$)
- Weak positive correlation found between time completed and the rating (R squared =0.11)

RESULTS

■ ISSUES

- Modest correlation between timing and rating
 - Unclear whether students actually performing at that level
 - Or were faculty misinterpreting the scale?

DISCUSSION

- We built it AND they came (mostly)
- Volume of WBAs received
- Drawbacks
 - 2 CEPAs made up more than half of all WPAs
 - Several not assessed at all
 - Relatively high mean across CEPAs (other than CEPA4) : still lower than in residents
 - Perhaps discriminating between levels of training

CONCLUSIONS

- Continue to use WBAs to assist entrustment decisions
- Will modify based on these findings
 - Incorporate complete OCAT scale and a supervisory scale
 - Allow for head to head comparisons of the two scales
 - Suggest formal assessment of OCAT scale across institutions to determine
 - Validity and discriminatory ability of this instrument

MOVING FORWARD

1. Lomis K, Amiel J, Ryan MS, et al. Implementing an entrustable professional activities framework in undergraduate medical education: Early lessons from the AAMC core entrustable professional activities for entering residency pilot. *Acad Med.* 2017; 92: 765-770.
2. Rekman J, Gofton W, Dudek N, et al. Entrustability scales: Outlining their usefulness for competency-based clinical assessment. *Acad Med.* 2016; 91: 186-190.
3. Chen HC, van den Broek WE, ten Cate O. The case for use of entrustable professional activities in undergraduate medical education. *Acad Med.* 2015; 90: 431-436.
4. Rekman J, Hamstra SJ, Dudek N, et al. A new instrument for assessing resident competence in surgical clinic: The Ottawa clinic assessment tool. *J Surg Educ.* 2016; 73: 575-82. 5. Halman S, Rekman J, Wood T, et al. Avoid reinventing the wheel: implementation of the Ottawa Clinic Assessment Tool (OCAT) in Internal Medicine. *BMC Med Educ.* 2018; 19: 218.

REFERENCES