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Assessment Tools for Clinical Training

**SUMMATIVE
EVALUATIONS**

CONCLUSIONS

**SUMMATIVE
EXAMS**

**ASSESSMENT
BASICS**

**OBJECTIVES
AND
OVERVIEW**



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Member of the NBOME Board of Directors and National Faculty

**Overview of
today's
program**



OBJECTIVES

- Describe various assessment tools used during the clinical years of undergraduate medical training
- Explain how the assessments work together to create a comprehensive picture of performance
- Build skills to easily complete clinical assessments in real time

Overview of
today's
program



Overview

TOPICS

Reivew the basics of assessment terminology

Explore types of summative exams used during the clinical training years

Describe how summative exams fit together to provide a comprehensive picture of performance

Explain assessment strategies for completing summative clinical evaluations

Review principles of writing summative and formative comments for clinical trainees

ASSESSMENT DRIVES LEARNING

EVALUATION
SYSTEMS

SUMMATIVE
ASSESSMENTS

FORMATIVE
ASSESSMENTS





Evaluation systems provide frameworks for medical trainees

What is to be evaluated

What kind of observations or assessments are useful to allow judgements

How these should be compared to the standard of what is to be achieved by the learner

AAME Guide No. 78, Med Teach (2013)



Assessment frameworks drive learning

Provide students with a guide for what is expected

Enhance consistency and reliability in ratings across staff and settings

Determine content and resources needed to achieve consistency of application

AAME Guide No. 78, Med Teach (2013)



Intended to improve performance incrementally

- 1 End-of-shift cards
- 2 Daily huddles for feedback
- 3 Mid-rotation evaluations
- 4 Workplace-based assessments



Cumulative evaluations
associated with progression to the
next level

1 Rotation grades and evaluations

2 End of service exams
(COMAT and SHELF)

3 OSCE

4 Licensure exams

ASSESSMENT TIMELINE



Clinical
Rotations
and COMAT/
SHELF

In-training
exam and
rotation
grades

Licensure
exam series
(COMLEX-
USA/USMLE)

Board exam
and specialty
certification

Why Exams
Matter

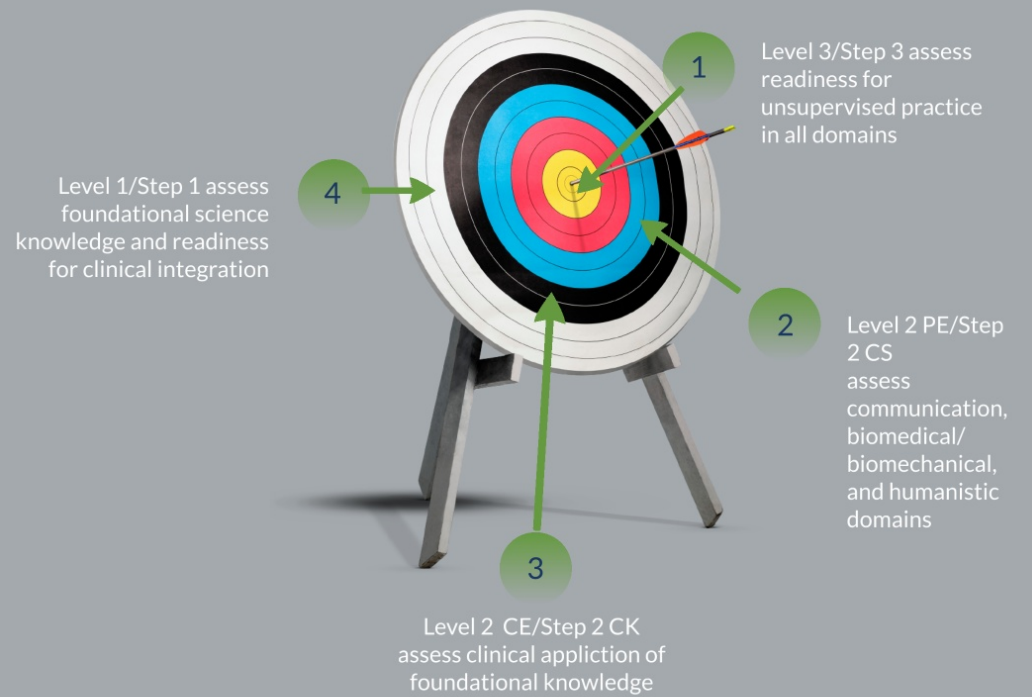
Predictive
Value of
Exams

All exams intend to provide evidence for the trainee to ultimately independently deliver safe, clinical care to patients

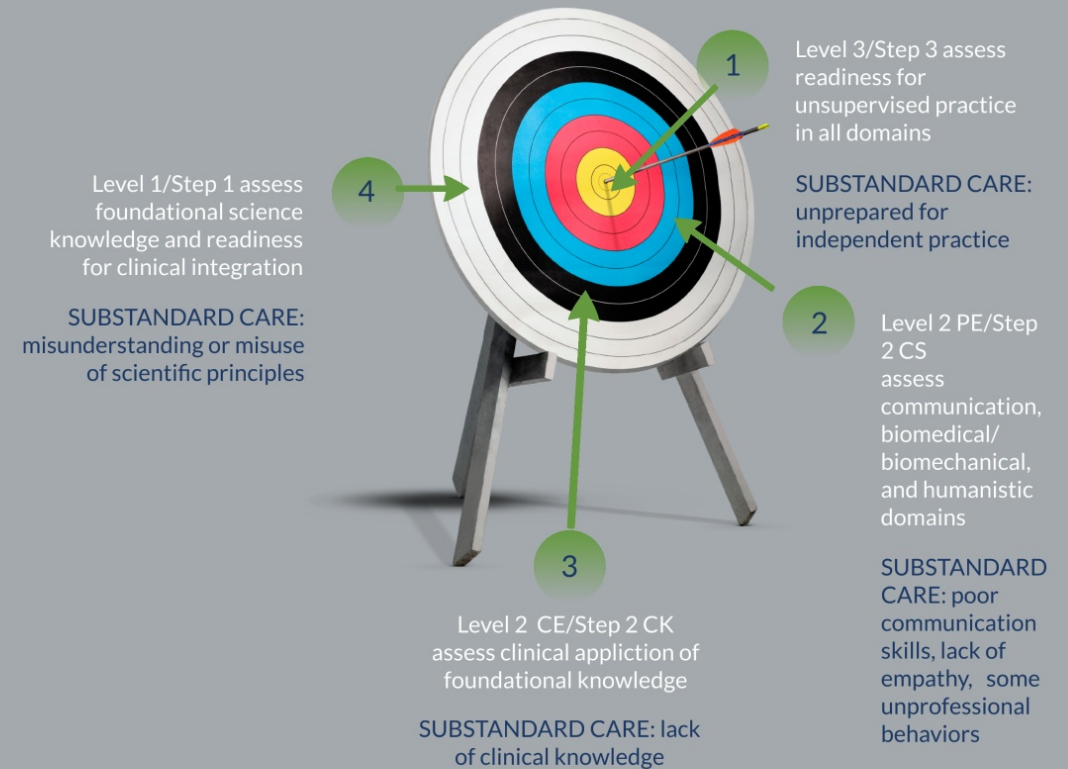


All exams intend to provide evidence for the trainee to ultimately independently deliver safe, clinical care to patients





Reasons for board actions addressed through exams



All exams intend to provide evidence for the trainee to ultimately independently deliver safe, clinical care to patients

How do recent changes in the standardized licensure exam series impact patient safety?





**Do licensure exams
predict clinical
performance?**

Level 1/Step 1



USMLE
United States
Medical
Licensing
Examination



USMLE Step 1: no
correlation between
board action and
score

Exploring the Relationships Between USMLE Performance and Di...:
Academic Medicine. Accessed October 26, 2022. https://journals-lww.com.proxy.pnwu.org/academicmedicine/Fulltext/2017/12000/Exploring_the_Relationships_Between_USMLE.41.aspx

Level 1/Step 1

■ Pass/Fail Transition



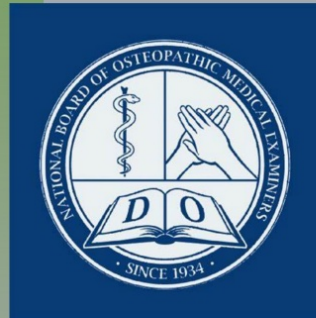
Potential increased weight on COMAT/STEP exam scores

Increased weight on Step 2CK, school pedigree



Pontell ME, Makhoul AT, Ganesh Kumar N, Drolet BC. The Change of USMLE Step 1 to Pass/Fail: Perspectives of the Surgery Program Director. J Surg Educ. 2021;78(1):91-98. doi:10.1016/j.jsurg.2020.06.034

Level 2 CE/Step 2 CK



USMLE Step 2: higher score --> lower odds of board action

25% decrease for 1-SD increase

Exploring the Relationships Between USMLE Performance and Di...: Academic Medicine. Accessed October 26, 2022. https://journals-lww.com.proxy.pnwu.org/academicmedicine/Fulltext/2017/12000/Exploring_the_Relationships_Between_USMLE.41.aspx

Level 2 PE/Step 2 CS



USMLE
United States
Medical
Licensing
Examination



COMLEX Level 2 PE:
higher score in
biomedical/
biomechanical
domain--> lower
odds of board action

An Investigation of the Relationship Between COMLEX-USA License...:
Academic Medicine. Accessed October 26, 2022. https://journals.lww.com/academicmedicine/Fulltext/2020/06000/An_Investigation_of_the_Relationship_Between.41.aspx

Level 2 PE/Step 2 CS



USMLE
United States
Medical
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Examination



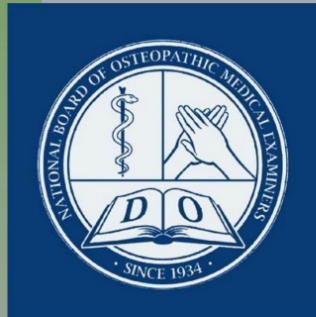
For residency directors, failure was more impactful than passing, and predicted risk for:

- Low NBME scores
- Low OSCE scores
- Poor faculty ratings

First-time pass rate 94% for US/ Canadian candidates

The United States Medical Licensing Exam Step 2 Clinical Skills Examination: Potential Alternatives During and After the COVID-19 Pandemic - PMC. Accessed October 26, 2022. <https://www.ncbi.nlm.nih.gov.proxy.pnwu.org/pmc/articles/PMC8092027/>

Level 3/Step 3



COMLEX Level 3:
higher score --> lower
odds of revoked
license, imposed
limitations to practice,
other acitons

Exploring the Relationships Between USMLE Performance and Di...:
Academic Medicine. Accessed October 26, 2022. https://journals-lww.com.proxy.pnwu.org/academicmedicine/Fulltext/2017/12000/Exploring_the_Relationships_Between_USMLE.41.aspx

YOUR ASSESSMENT MATTERS



Licensure exam changes are leading residency programs to seek objective data for filtering candidates

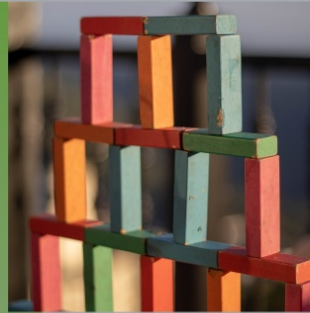
Trends towards competency-based training may shift focus for training and remediation towards clinical assessments

**Documenting
Success**

**Assessing
Clinical
Trainees'
Success**

**EPAs in
UME**

■ ■ EPAs in UME and increasing objectivity in clinical assessment

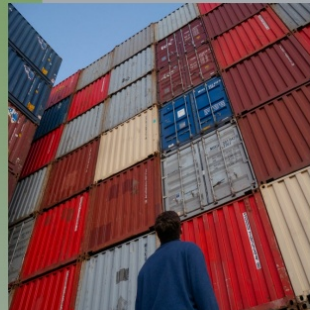


Observable, measurable units of practice

Require actionable and concrete skills

Integrate multiple competencies

Entrustable once trainee has demonstrated satisfactory unsupervised performance



Ten Cate, O., Chen, H. C., Hoff, R. G., Peters, H., Bok, H., & Van der Schaaf, M. (2015). Curriculum development for the workplace using Entrustable Professional Activities (EPAs): AMEE Guide No. 99. Medical Teacher, 37(11), 983-1002. doi:10.3109/0142159x.2015.1060308

EPA 1: Gather a history and perform a physical exam

Pre-Entrustable

Errors of omission or commission in gathering info

Incorrectly perform physical maneuvers or miss key exam findings, inaccurately describes findings

Difficulty filtering, prioritizing or connecting pieces of information to each other, prior clinical encounters, or existing factual knowledge

Entrustable

Routinely gather focused and accurate information in all settings including urgent, emergent or consultation

Accurately perform complete and focused exam, identify abnormal findings and describe findings to team members

Analytic reasoning and ability to activate prior foundational knowledge and clinical experience inform the choice of information gathering type, breadth and extent

Evaluation Rubrics for Clinical Trainees



Systems to help guide:

- What should be evaluated
- What kind of observations are useful to allow judgements
- How the observations should be compared to the standard that the trainee should achieve

Evaluation Rubrics for Clinical Trainees

What level is preceptor operating at?

Director

Facilitator

Consultant

What level is learner operating at?

Reporter

Interpreter

Manager

Educator

What is the level of proficiency?

Knows

Knows how

Shows how

Does

Dreyfus model. Med Educ Online. 2010.

RIME model. Family Medicine. 2007.

Miller's Pyramid. Academic Medicine. 1990.

Principles for writing comments about performance




Be specific to the student

Provide quantifiable comparisons



Include examples of both hard and soft skills

Formative comments provide a path for improvement



Thank you for
teaching the
next generation
of physicians!

■ Questions?

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