The Assessment of Clinical Skills: Thinking Outside of the Box

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Agenda

• Background: Overview of USMLE Step 2 Clinical Skills Exam
• Factors to consider when building a clinical skills assessment
• Examples
USMLE Step 2 Clinical Skills Exam

- Required for licensure in the United States
- Examinees perform 12 Standardized Patient (SP) encounters
  - 15 minute focused H&P
  - 10 minute patient note
- Examinees are given 3 scores:
  - Integrated Clinical Encounter
  - Communication and Interpersonal Skills
  - Spoken English Proficiency
- 35,000 examinations per year
Many things contribute to a standardized exam

- Cases developed by national academic faculty and experienced internal staff
- Case performance pretested and monitored during live exam
- Limited number of testing centers
- SPs undergo standardized training and QC
- Board Certified physicians undergo standardized training and QC to rate the patient notes
- Psychometric analysis (reliability, validity)
The USMLE is a single examination program consisting of three Steps designed to assess an examinee’s understanding of and ability to apply concepts and principles that are important in health and disease and that constitute the basis of safe and effective patient care. Step 2 is designed to assess whether an examinee can apply medical knowledge, skills, and understanding of clinical science essential for the provision of patient care under supervision, including emphasis on health promotion and disease prevention. The inclusion of Step 2 in the USMLE sequence is intended to ensure that due attention is devoted to principles of clinical sciences and basic patient-centered skills that provide the foundation for the safe and competent practice of medicine. There are two components to Step 2: a Clinical Knowledge (CK) examination and a Clinical Skills (CS) examination. This report represents results for the Step 2 CS examination only. Results of the examination are reported to medical licensing authorities in the United States and its territories for use in granting an initial license to practice medicine. The overall Pass/Fail outcome provided below represents your result for the administration of the Step 2 CS on the test date shown above. For examinees who failed the test, a graphical performance profile is provided on the second page of this report.

The overall outcome for Step 2 CS, reported above, is based upon the minimum passing levels set by USMLE for the three Step 2 CS subcomponents. The three subcomponents are Integrated Clinical Encounter (ICE), Communication and Interpersonal Skills (CIS), and Spoken English Proficiency (SEP). It is necessary to pass all three subcomponents in order to obtain an overall passing outcome on the Step 2 CS. Results for the three Step 2 CS subcomponents are reported below.

<table>
<thead>
<tr>
<th>ICE</th>
<th>CIS</th>
<th>SEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAIL</td>
<td>PASS</td>
<td>PASS</td>
</tr>
</tbody>
</table>

The above Performance Profile is provided to aid in self-assessment. The shaded area defines a borderline level of performance for each subcomponent (ICE, CIS, SEP), borderline performance is comparable to a HIGH FAILLOW PASS on the subcomponent.

For the ICE subcomponent, additional information is provided for Data Gathering and for the Patient Note. Data Gathering represents performance on history-taking and physical examination tasks. Patient Note represents performance on completion of the post-encounter summaries.

Performance bands indicate areas of relative strength and weakness. Some bands are wider than others. The width of a performance band reflects the precision of measurement; narrower bands indicate greater precision. An asterisk indicates that your performance band extends beyond the displayed portion of the scale. Small differences in the location of bands should not be over interpreted. If two bands overlap, performance in the associated areas should be interpreted as similar.

Additional information concerning the Step 2 CS subcomponents can be found in the USMLE Step 2 CS Content Description and General Information.
Limitations

• Time
• Cost
• Inconvenience
Clinical Skills Assessment

Can we get outside the box?
Don’t Be Intimidated

• Your assessment will be part of a larger portfolio of physician performance
Define what clinical skills you want to evaluate
Considerations in building an assessment

• Data Collection
• Data Analysis
• Feedback
• Buy-in
Data Collection

• What is the format?

Face-to-face SP Encounter is observed

Essay response to a professionalism challenge

Examinee responds to a video showing a communication challenge

Observed Patient Encounter

Physician provides a video of an encounter with a patient

Telephone interview with a Standardized Patient
Data Collection

• What is the format? Get creative!
• Standardizable
• *Buy-in is important!*
Data Analysis

• What rubric will you use?
  – Do validated tools already exist?
• Who will do the rating/scoring?
• Buy-in: comparing physician performance to accepted standards increases buy-in and face-validity
Feedback

• Is this a strictly formative, or is there the opportunity for a summative assessment as well?
  – Both require validity
  – The more summative the feedback, the more reliability you need
  – The less summative the feedback, the more specific the feedback can be

• **Buy-in**: the more feedback you give to your examinees, the greater buy-in you will have
Let’s look at two examples
Example 1

• I want to assess a Emergency Medicine Physician’s ability to perform effective end-of-shift handoff and give the examinee feedback on their performance
Example 1: Data Collection

• At the oral exam, an examinee is given a theoretical patient to ‘hand off’ at the end of her shift. The examiner is the recipient.

• The following elements are standardized:
  – The clinical scenario
  – Examiner performance

• Data is recorded by oral examiner

• Video/audio recording is available
Example 1: Data Analysis

- Examinee performance is evaluated by the oral examiner based on a rubric/checklist
- Examiner has access to video/audio recording
- If a summative aspect is desired, you would need to determine how many encounters would be required
Example 1: Feedback

- Formative feedback provided
  - “You were more likely to include code status in your hand-offs than other examinees”
  - “You did not include pending laboratory tests or radiologic studies in the majority of your encounters”
- Examinees given a quintile rating of 1-5, with a rating of 3, 4 or 5 required to pass
Example 1: Advantages

- Uses an existing format
- Physician grading means greater buy-in
- A discrete tasks means that
  - The encounter is relatively standardizable
  - The rubric could be validated and easily implemented
  - Meaningful information can be obtained about an examinees performance in a relatively low number of encounters
Example 1: Disadvantages

- Extends testing time, or requires reduction in testing of other skills
- Requires some additional training of examiners
- If summative information is desired, multiple scenarios would be required
Example 2

• I want to assess an orthopedic surgeon’s ability to obtain informed consent for a total knee replacement and give them feedback on their performance
Example 2: Data Collection

• The examinee interacts via Skype from with an SP in a 10 minute encounter during which the examinee obtains informed consent from the SP
• Prior to the encounter, the examinee is given an appropriate clinical scenario and is instructed to obtain informed consent for the procedure
• The following elements can be standardized:
  – The clinical scenario
  – SP performance
• Data is recorded by the SP
• Video/audio recording is available
Example 2: Data Analysis

- Examinee performance is evaluated by the SP, based on a scoring rubric/checklist
- Board certified physicians are available to SPs as a resource to help clarify performance questions
- SP has access to video/audio recording
Example 2: Feedback

• Formative feedback provided
  – “You were more likely to discuss alternative treatments than other examinees”
  – “You did not assess for patient understanding in the majority of your encounters”
Example 2: Advantages

- Convenient for the examinee
- Doesn’t require physicians to administer
- Discrete tasks means that
  - The encounter is relatively standardizable
  - The rubric could be validated and easily implemented
  - Meaningful information can be obtained about an examinee’s performance in a relatively low number of encounters
Example 2: Disadvantages

• Requires trained SPs to administer
• Physicians must be available for SP questions
Remember:

- Define who/what you want to assess
- Data Collection
- Data Analysis
- Feedback
- Buy-In

Don’t be intimidated!
Clinical Skills Can Be Assessed...

Go get creative!