“My clinical evaluations are so subjective!”
Evaluating Learners and Writing Helpful Clinical Performance Narratives
Part 1: Evaluation

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COI Disclosures

• None to report
Sample narrative comments
These are real!!

• “Pleasant to work with. Enthusiastic. Hard worker. Will make a great doctor. Needs to read more.”
• “Great team player. Wonderful bedside manner. Good knowledge base. Asked good questions.”
• “Functioning at the level of a seasoned intern.” [description of an early MS3]
• “Has a nice smile.”
• “Nice student. Got along well with patients and nursing staff. Good sense of humor. Well-groomed and attired. Will do well.”
Session Objectives

• Identify key components of teaching cycle that enable teachers to write informative evaluations
• Define evaluation
  – Distinguish types:
    • Formative vs. summative
    • Verb vs. noun
• Describe methods to evaluate trainees in the clinical setting
• Review a synthetic approach to evaluation of learners
• Q&A to discuss barriers to evaluation process
Our goals for you ... to become more discerning and descriptive
Your Roles as Clinical Teacher

• **Teacher**: disseminator of knowledge **and** a *facilitator* of learning → “Teaching is always occurring whenever there is learning taking place.”  Kelley Skeff, MD, PhD
  - Learning climate
  - Communication of goals
  - Supervisor: Evaluation & Feedback
Teaching Cycle

Learning Climate

Feedback

Communication of Goals

Evaluation
Communication of Goals

• An essential precursor to evaluation

• Definition
  – Establishment & explicit expression of teacher’s and/or learner’s expectations for the learner(s)

• Purpose
  – Let learners know what to master
  – Guide teacher in planning instructional process
  – Provide learners & teacher with basis for evaluation/assessment
Importance of goals...

IGNORANCE
It’s Amazing How Much Easier it is for a Team to Work Together When No One Has Any Idea Where They’re Going.
Communication of Goals

CONTEXT

TEACHER

LEARNER

CONTENT

Knowledge
Skills
Attitudes
Competencies
Milestones, EPA’s
Communication of Goals

• Types:
  - Ends goals
  - Means goals

• Timing (can occur before, during, after)

• Key components
  - Establishment of Goals = define
  - Expression of Goals = say/write it
  - Collaboration on Goals = check in with learners
Evaluation

• Definition:
  – The process by which the teacher assesses the learners’ knowledge, skills, attitudes, competencies, milestones, etc. based on criteria related to educational goals

• Purpose:
  – allows teacher to gauge academic progress (i.e., “know where the learner is”) → thereby (1) guides teacher to provide feedback for improvement, and (2) gives teacher a means for assessing effectiveness of previous teaching in accomplishing stated goals
Teaching Cycle

Learning Climate

Communication of Goals

Feedback

Evaluation
Evaluation

TEACHER

LEARNER

CONTENT
Weakest link vs. compensatory model
Evaluation

• Types
  ✓ Summative = final assessment of learner’s performance at the end of a learning experience (course, clerkship, rotation, etc.)
  ✓ Formative = occurs throughout teaching/learning process to assess learner’s progress towards educational goals
  ✓ Verb = assessing learner’s performance
  ✓ Noun = assessment form to fill out (AKA summative written feedback)

• Key components
  • Observation of learners
  • Questioning
  • Assessing self-assessment
Evaluation

Key components & specific behaviors

1. Observation of learners
   Teaching behavior:
   • Observe learner’s performance
     ✓ Direct observation of skills (communication, procedural, etc.)
     ✓ Read their notes & orders
     ✓ Listen to their presentations
Evaluation

Key components & specific behaviors

2. Questioning
   a. Forms of questions
      - Open-ended questions
      - Closed-ended questions
   b. Wait time
## Evaluation

2. Questioning

Teaching behavior:

- Ask questions to assess knowledge

### Levels of cognitive processing

<table>
<thead>
<tr>
<th>Recall</th>
<th>Fundamenta<strong>l</strong></th>
<th>Applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memorize/retrieve scientific/medical info</td>
<td>Apply recalled info to case or clinical scenario</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Analysis/Synthesis</th>
<th></th>
<th>Applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate higher cognitive processing</td>
<td>Apply analyzed/synthesized info to case or clinical scenario</td>
<td></td>
</tr>
</tbody>
</table>
## Evaluation

Examples of questions for KNOWLEDGE

<table>
<thead>
<tr>
<th>LEVELS</th>
<th>recall</th>
<th>Analysis/Synthesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPES</td>
<td>Fundamental</td>
<td>Applied</td>
</tr>
</tbody>
</table>

|  | "What are the major causes of renal failure?" | "What is this patient’s Hgb?"
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&quot;How would you contrast the etiologies of renal failure?&quot;</td>
<td>&quot;What is your diagnostic plan for this patient?&quot;</td>
</tr>
</tbody>
</table>
Evaluation

2. Questioning
Teaching behavior:
• Ask questions to assess skills

<table>
<thead>
<tr>
<th>Levels of complexity</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple</td>
<td>“Can you show me how to percuss the abdomen?”</td>
</tr>
<tr>
<td>Complex</td>
<td>“Can you demonstrate placing a central line?”</td>
</tr>
</tbody>
</table>
2. Questioning
Teaching behavior:
• Ask questions to assess attitudes

Examples

“What behaviors do you feel are important for showing collegial respect?”
“What factors are influencing your choice of medical specialty?”
“How are your feelings about patients with prescription opioid dependency affecting your care for this patient?”
3. **Assessing self-assessment**

Teaching behavior:
- Ask learner to self-assess and evaluate their S-A skills

Teacher asks "How well do you think you did?"…
…and watches Learner look in mirror.
3. Assessing self-assessment

Teaching behavior:
- Ask learner to self-assess

**Examples**

- **Fundamental Recall K:** “How would you assess your knowledge of the major precipitating causes of hepatic encephalopathy?”
- **Applied Analysis/Synth K:** “Do you think your knowledge base is adequate to take care of this patient?”
- **Skill:** “Are you comfortable with your skill in placing an arterial line?”
- **Attitude:** “How would you assess the level of respect you showed to the patient we just saw?”
Recap: Evaluation opportunities

- Observes/listens/reads
- Questions

• Knowledge
• Skills
• Attitudes
• Competencies/milestones
• Self-assessment
From nuts & bolts to putting it all together (literally)...

... the dreaded (or #$@$&!) evaluation form and narrative comments!!!
Evaluation of Clinical Trainees

• Analytic vs. Synthetic approaches
  – **Analytic**: traditional method; “analyzes”, or “breaks up” learner’s performance into several components (knowledge, skills, & attitudes).
  – **Synthetic**: “puts things together” → asks how the learner’s abilities in several domains come together to achieve a level of proficiency. Developmental in nature.

• Medical students are transitioning from pre-clinical status to internship → a developmental aspect is more useful in framing an evaluation system.
Advantage of a synthetic approach
RIME framework

- Vocabulary for synthetic evaluation of students’ knowledge, clinical skills, & professionalism
- Describes development in clinical skills from “Reporter” to “Interpreter” to “Manager/Educator” (RIME)
  - Each level requires all three facets of the analytic model (knowledge, skills, and attitude)
    - Definition by Dr. Edmund Pellegrino: professionalism is a promise of duty and a promise of expertise.
  - Developmental approach
  - Descriptive evaluation (NOT “subjective”): criterion-based for each level
  - Aligns well with the SOAP sequence (and USMLE step 2 & 3 examinations)

Pangaro LN. A new vocabulary and other innovations for improving descriptive in-training evaluations. Acad Med 1999
RIME framework – in stages

What?
S + O data + problem list,
i.e., “Reporter”

So what?
Assessment,
i.e., “Interpreter”
(USMLE Step II)

S + O = A + P

What?

Now what?
Plan, i.e., “Manager”
(USMLE Step III)

How & why?

So what? How & why?

Assessment, i.e.,
“Interpreter”
(USMLE Step II)
Developmental nature of RIME

Chart 1
Progression of Educational and EMR-specific Skills Through Undergraduate and Graduate Medical Education and Into Clinical Practice*

<table>
<thead>
<tr>
<th>RIME</th>
<th>MS-1</th>
<th>MS-2</th>
<th>MS-3</th>
<th>MS-4</th>
<th>PGY-1</th>
<th>PGY-2+</th>
<th>Practice</th>
<th>EMR</th>
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<tbody>
<tr>
<td>Educator</td>
<td>I</td>
<td></td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>P</td>
<td>M</td>
<td>Clinical Decision Support</td>
</tr>
<tr>
<td>Manager</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>R</td>
<td>R+</td>
<td>P+</td>
<td>M</td>
<td>Data Assimilation</td>
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<td>Interpreter</td>
<td>I</td>
<td>I</td>
<td>R</td>
<td>P</td>
<td>P</td>
<td>P+</td>
<td>M</td>
<td>Data Assessment</td>
</tr>
<tr>
<td>Reporter</td>
<td>I</td>
<td>R</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P+</td>
<td>M</td>
<td>Data Entry</td>
</tr>
</tbody>
</table>

*I = Introduced; R = Repetition; P = Proficiency; M = Mastery. Modified from Pangaro and Stritter.\(^2\)

Questions?

• Barriers to evaluation?