Assessment of Resident Performance

Fall, 2012
Objectives

- Identify how residents are assessed
- Discuss upcoming changes in ACGME resident evaluation methods including sub-competencies and milestones
- Discuss the COM PHX Education Program Objectives and Clerkship Objectives correlate to residency teaching, learning, and assessment
- Discuss the ACGME Next Accreditation System (NAS), milestone movement in 2013-14
  - Review example of educational milestone criterion
- Recognize expectation and developmental level differences with benchmark guidelines
- Discuss the differences between the expectation levels
- Explain the significance of narrative comments
- Recognize the timeliness of formative and summative feedback
Disclosures

• None
Resident Assessment

- Direct and indirect observations
- 360 or multisource feedback systems
- Patient, faculty, self, peer assessments
- Review of documentation
Evaluation Areas: The Present

• The current method for educating and evaluating residents includes the 6 competencies:
  
  • Interpersonal and Communication Skills
  • Medical Knowledge
  • Patient Care
  • Practice-based Learning
  • Professionalism
  • Systems-based Practice
Education Program Objectives

- Based on the 6 ACGME Competency areas:
  - Current: [http://epc.medicine.arizona.edu/ProgObjectives](http://epc.medicine.arizona.edu/ProgObjectives)
  - Starting 2013-2014: [http://phoenixmed.arizona.edu/students/curriculum/educational-program-objectives](http://phoenixmed.arizona.edu/students/curriculum/educational-program-objectives)

- Clerkship Objectives also tied to the 6 competency areas:
Evaluation Tools: The Present

• Using current methods, evaluate the following learner using the scale below:

<table>
<thead>
<tr>
<th>Needs Improvement</th>
<th>Meets Expectations</th>
<th>Exceeds Expectations</th>
<th>Unable to Evaluate</th>
</tr>
</thead>
</table>

Enter comments regarding strengths or areas for improvement:

Comment

Remaining Characters: 5,000

• https://www.youtube.com/watch?v=2H2_bSHPs54
Difficulties?
Evaluation Tools: The Present

**Patient Care**

**Characteristics for evaluation:**
- Elicits essential and accurate history from patient/family in a timely manner
- Performs a complete, age-appropriate physical exam in a timely manner
- Prioritizes patient's problems and/or purpose of visit
- Considers patient's preferences and social issues/concerns
- Orders appropriate diagnostic tests
- Performs procedures well (LP, IV)
- Incorporates prevention into care plan

Needs Improvement ☐  |  Meets Expectations ☐  |  Exceeds Expectations ☐  |  Unable to Evaluate ☐

Enter comments regarding strengths or areas for improvement:

Comment

Remaining Characters: 5,000
Evaluation Tools: The Present – Problems

• The existing competencies:
  o are broad and not distinct by specialty
  o are often viewed in isolation, not as part of a continuum
  o focus is mainly on how well the resident gets along, not on what competence the resident can demonstrate
  o do not differentiate which skills, or outcomes, are expected to be attained at each specific level of training
  o have evaluation methods with abstract anchors leading to wide disparity between educators
Milestone Project

• The Milestones were created in response to:
  
  o Transparency in physician education; growing scrutiny of the adequacy of physician training by the public

  o A desire by leaders in medical education to structure training based on outcomes

• GME responded by redesigning residency requirements to ensure that all graduated residents have been adequately educated to provide safe and effective medical care to future patients
Milestone Project

• For each specialty, a joint initiative of ACGME and the specialty accreditation boards

• Based on evidence-based decision making in literature
What are the Milestones?

• The milestones are benchmarks of skills and knowledge that residents must achieve at certain stages in their residencies and document increasing mastery of the six competencies

• Evaluation of the milestones is through narrative descriptions of behaviors at successive levels of development for all sub-competencies
How Do The Milestones Work?

• Reframe and further define the competencies in the context of specific specialties

• For each sub-competency there are a set of developmental milestones

• Levels span the continuum of UME through GME to practice after formal training

• At completion of training, the achievement of the milestones demonstrates the learner is ready to enter unsupervised practice

• Identify/develop assessment tools that can be embraced by the specialty community as meaningful measures of performance
Milestone Process Flow

Competency

Sub-competency

Milestone 1
Milestone 2
Milestone 3
Milestone 4
Milestone 5
Next Accreditation System (NAS) Implementation Schedule – ACGME

• 2013
  o Emergency medicine
  o Internal medicine
  o Neurologic surgery
  o Orthopedic surgery
  o Pediatrics
  o Diagnostic radiology
  o Urology

• 2014
  o Remaining specialties
  o Transitional year
## Sample Education Competencies and Sub-competencies

### Pediatrics Milestones
To Be Reported on Semi-annually

<table>
<thead>
<tr>
<th>A. PATIENT CARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gather essential and accurate information about the patient</td>
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<tr>
<td>2. Organize and prioritize responsibilities to provide patient care that is</td>
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<tr>
<td>safe, effective and efficient</td>
</tr>
<tr>
<td>3. Provide transfer of care that insures seamless transitions</td>
</tr>
<tr>
<td>4. Make informed diagnostic and therapeutic decisions that result in optimal</td>
</tr>
<tr>
<td>clinical judgment</td>
</tr>
<tr>
<td>5. Develop and carry out management plans</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. MEDICAL KNOWLEDGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Locate, appraise, and assimilate evidence from scientific studies related</td>
</tr>
<tr>
<td>to their patients’ health problems</td>
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<tr>
<th>C. PRACTICE-BASED LEARNING AND IMPROVEMENT</th>
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<tbody>
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<td>1. Identify strengths, deficiencies, and limits in one’s knowledge and expertise</td>
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<tr>
<td>2. Identify and perform appropriate learning activities to guide personal and</td>
</tr>
<tr>
<td>professional development</td>
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<tr>
<td>3. Systematically analyze practice using quality improvement methods, and</td>
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<tr>
<td>implement changes with the goal of practice improvement</td>
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<tr>
<td>4. Incorporate formative evaluation feedback into daily practice</td>
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<tr>
<th>D. INTERPERSONAL AND COMMUNICATION SKILLS</th>
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<tbody>
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<td>1. Communicate effectively with patients, families, and the public, as</td>
</tr>
<tr>
<td>appropriate, across a broad range of socioeconomic and cultural backgrounds</td>
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<tr>
<td>2. Demonstrate the insight and understanding into emotion and human response</td>
</tr>
<tr>
<td>to emotion that allows one to appropriately develop and manage human</td>
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<td>interactions</td>
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<th>E. PROFESSIONALISM</th>
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<td>1. Humanism, compassion, integrity, and respect for others; based on the</td>
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<td>characteristics of an empathetic practitioner</td>
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<td>2. A sense of duty and accountability to patients, society, and the</td>
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<tr>
<td>profession</td>
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<tr>
<td>3. High standards of ethical behavior which includes maintaining appropriate</td>
</tr>
<tr>
<td>professional boundaries</td>
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<tr>
<td>4. Self-awareness of one’s own knowledge, skill, and emotional limitations</td>
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<tr>
<td>that leads to appropriate help-seeking behaviors</td>
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<tr>
<td>5. Trustworthiness that makes colleagues feel secure when one is responsible</td>
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<td>for the care of patients</td>
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# Sample Education Competencies and Sub-competencies

**Pediatrics Milestones**  
**To Be Reported on Semi-annually**

## A. Patient Care
1. Gather essential and accurate information about the patient
2. Organize and prioritize responsibilities to provide patient care that is safe, effective and efficient
3. Provide transfer of care that insures seamless transitions
4. Make informed diagnostic and therapeutic decisions that result in optimal clinical judgment
5. Develop and carry out management plans

## B. Medical Knowledge
1. Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems

## C. Practice-Based Learning and Improvement
1. Identify strengths, deficiencies, and limits in one’s knowledge and expertise
2. Identify and perform appropriate learning activities to guide personal and professional development
3. Systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement
4. Incorporate formative evaluation feedback into daily practice

## D. Interpersonal and Communication Skills
1. Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds
2. Demonstrate the insight and understanding into emotion and human response to emotion that allows one to appropriately develop and manage human interactions

## E. Professionalism
1. Humanism, compassion, integrity, and respect for others; based on the characteristics of an empathetic practitioner
2. A sense of duty and accountability to patients, society, and the profession
3. High standards of ethical behavior which includes maintaining appropriate professional boundaries
4. Self-awareness of one’s own knowledge, skill, and emotional limitations that leads to appropriate help-seeking behaviors
5. Trustworthiness that makes colleagues feel secure when one is responsible for the care of patients
**Example**

**Competency:** Patient Care  
**Sub-competency:** History Gathering - Gather essential and accurate information about the patient

### Developmental Milestone Levels

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Either gathers too little information or exhaustively gathers information</td>
<td>Clinical experience allows linkage of signs and symptoms of a current patient to those encountered in previous patients</td>
<td>Advanced development of pattern recognition leads to the creation of illness scripts</td>
<td>Well-developed illness scripts allow essential and accurate information to be gathered</td>
<td>Robust illness scripts and instance scripts lead to unconscious gathering of essential and accurate information</td>
</tr>
</tbody>
</table>

[https://www.abp.org/abpwebsite/publicat/milestones.pdf](https://www.abp.org/abpwebsite/publicat/milestones.pdf)
Entrustable Professional Activity (EPA)

- Define in which Entrustable Professional Activity (EPA), or the context the sub-competency can be observed
  - E.g. EPA = Consultations, patient history taking

- Entrustable
  - You can “entrust” someone, through direct observation, to do a focused activity with less and less supervision and eventually without any supervision

- Professional activities
  - The activities of a professional job that are central to the performance of that job
  - Examples for general Peds: caring for a well newborn, managing a child with asthma, caring for a sexually active teen
Milestone Process Flow

Entrustable Professional Activity (EPA)

Competency

Sub-competency

Milestone 1
Milestone 2
Milestone 3
Milestone 4
Milestone 5
Evaluation Tools: The Future with the Milestones

- Milestones will:
  - Ensure readiness for unsupervised practice and will benefit employers of new graduates
  - Ensure that graduates possess the attributes the public deems to be important
  - Reach into undergraduate medical education and foster a more seamless transition
  - Also extend into Maintenance of Certification (MOC)
Evaluation Tools: The Future

• Using the milestone approach, evaluate the learner using the developmental milestones below:

• **Basketball practice (EPA)**
  - Dribbling (Competency)
    - Control of the ball (Sub-competency)

<table>
<thead>
<tr>
<th>Developmental Milestones</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1</strong></td>
</tr>
<tr>
<td>Does not make repetitive or controlled contact with the ball while standing still.</td>
</tr>
</tbody>
</table>
Decision Making Process

• Separate observation from judgment
• Focus observation in behavioral aspects
• Compare performance observed not other observers
• Follow the milestone level criterion over your gut feeling
• Evaluate based on evidence
  o No evidence = no inference
• Review criterion and levels of development
  o What am I looking for?
Summative vs. Formative Feedback

• **Summative** = elicited from multiple observations of the resident

• **Formative** = observed from one instance, a single encounter with the resident
  - A single, brief encounter is not reflective of the overall experience unless it is a trend observed repeatedly by all

• Point of Clarification:
  - If the resident has made a mistake, corrects the problem and improves the behavior, target the improvement rather than the problem
Learner Advantage

• Useful information and relevant feedback in an authentic environment
  
  o Clear goals and objectives for the desired outcome
  
  o Opportunities to correct deficient behaviors
  
  o Reinforcement of positive behaviors
  
  o Creating of individualized action plans and goals for improvement within the educational setting
When is Feedback Essential?
Timeliness of Feedback

- Resident End of Rotation evaluations
  - Summative for rotation
  - Formative in overall review of observed behavior
  - Reviewed semi-annually first year (4 mos. notice)
    - Every 6 months, our evaluation (clinical competency) committee will submit milestone data on our residents, synchronized with their semiannual evaluations
    - Timely feedback
    - Developmental, progressive input
    - Discussion-based, two-way communication
References


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