EPAS—A BRIGHT NEW IDEA THAT IS CURRENTLY AS CLEAR AS MUD

UNDERSTANDING, CREATING, UTILIZING, AND EMBRACING ENTRUSTABLE PROFESSIONAL ACTIVITIES IN LEARNER ASSESSMENT

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Financial Disclosures

• None of the authors have anything to disclose
Objectives

• Discuss the challenges surrounding the assessment of ACGME Core Competencies

• Articulate the educational theory behind Entrustable Professional Activities (EPAs)

• Explore how Milestones and EPAs can co-exist in competency assessment at the trainee level

• Discuss an assessment framework for learners in the era of EPAs, STARs, and Competencies
By the end of this workshop

• You will:
  – Identify EPAs within the scope of your practice
  – Create in-depth EPA descriptions and justify what makes an activity a true EPA
  – Link EPAs with Milestones and Competencies
  – Define entrustment thresholds for unsupervised practice
  – Propose a practical framework for the assessment of EPAs
How comfortable are you in defining and identifying Entrustable Professional Activities (EPAs)?

- Very comfortable: 1
- Somewhat comfortable: 8
- Neither comfortable nor uncomfortable: 5
- Somewhat uncomfortable: 5
- Very uncomfortable: 7

2012
How comfortable are you with defining and identifying Entrustable Professional Activities (EPAs)?

- Somewhat comfortable: 38.9% (14)
- Somewhat uncomfortable: 16.7% (6)
- Very uncomfortable: 19.4% (7)
- Unfamiliar with EPAs: 2.8% (1)
- Very comfortable: 8.3% (3)
How comfortable are you in using Entrustable Professional Activities (EPAs) for learner assessment?

- Somewhat comfortable: 33.3% (12)
- Somewhat uncomfortable: 30.6% (11)
- Very uncomfortable: 16.7% (6)
- Unfamiliar with EPAs: 13.9% (5)
- Very comfortable: 5.6% (2)
Are you currently using EPAs as a mode of learner assessment?

- Yes: 8.3% (3)
- No: 58.3% (21)
- Not yet, but plan to in next 12 months: 33.3% (12)
Part I: Recognizing and Defining EPAs

Jake Robson, MD
Entrustable Professional Activities

• First introduced as a concept in medical education in 2005

• Further clarified as part of a two dimensional matrix with competencies in 2007
  – By accomplishing EPAs, residents accomplish competencies that lie therein

ten Cate, 2005, 2007
Resident Focus Group Themes

• “Discuss the current evaluation format as an assessment tool”
  – Confusion/questions about their utility for assessment of core competencies
    • “What does a 4 on IPC really mean for me?”
  – Desire for real time feedback on clinical performance
    • Including clinical context
      – Often relating to rotation specific knowledge/skills/attitudes
  – Need for long term tracking scheme to answer key questions:
    • Am I where I should be in key areas?
    • Where do I need to get better?
    • Am I safe to take care of children? Can I be trusted?
What is an EPA?

• Generally
  – “Critical activities in a medical discipline that must be assessed and approved of at some point during training”
  – “A key part of professional work that can be identified as a unit to be entrusted to a trainee once sufficient competence has been reached”
  – “Professional activities that together constitute the mass of critical elements that operationally define a profession”

Mulder, 2010; ten Cate, 2005, 2007
What is an EPA?

• Specifically
  – Part of essential work to that profession
    • Can be a huge theme or a concrete activity
  – Require adequate knowledge, skill, and attitude
    • Generally acquired through training
  – Must lead to recognized output:
    • Which should be independently executable
    • Which should be confined to qualified personnel
    • Which should be executable within a specified time frame
    • Which should be observable and measurable and should lead to a conclusion (e.g. well done, not well done)
  – Reflect one or more of the competencies to be acquired

Mulder, 2010; ten Cate, 2005, 2007
The Golden Rules

• Rule #1:
  – An EPA should be an authentic professional activity that can be entrusted to someone
    • Eg: “Recognize, provide initial management and refer patients presenting with surgical problems”
    • Not Eg: “Discuss the utility of labs and/or imaging studies (specifically CT vs. US) in diagnosis of acute appendicitis”

• Rule #2:
  – EPAs require competence, that is the integration of the knowledge, skills and attitude to perform a task successfully
    • Eg: “Provide consultation to other health care providers caring for children”
    • Not Eg: “Make a differential diagnosis for new onset upper GI bleeding”

Mulder, 2010; ten Cate, 2007
The EPA Sniff Test

• Complete the sentence:
  – “Tomorrow, you will be able to...”

• Avoids:
  – Overly general statements without clear assessment points
    • E.g.: Communicate properly, care for patients
  – Overly specific portions of larger activities
    • E.g.: Follow sterile procedure precautions in preparing for a lumbar puncture

Mulder, 2010; ten Cate, 2007
A Point About Scope

• In its first definition:
  – “EPA Examples: performing a vena puncture, performing an appendectomy, chairing a multidisciplinary meeting, requesting an organ donation”

• Refining over time:
  – Many activities in Pediatrics meet the technical criteria, but aren’t one of the 10-20 KEY, overarching activities that truly define a profession
  – Many of these EPAs will break down into ‘small’ EPAs
    • EPA: Care for the well newborn
    • ‘Small’ EPAs: Understand and carry out newborn screening tests, provide lactation counseling, transition to outpatient medical home
  – Smaller EPAs can still be learned, assessed and entrusted; avoids need to spell out every single activity in pediatrics

ten Cate, 2005, Mulder, 2010
Why EPAs?

• EPAs translate the qualities of learners to actual descriptors of work
  – Meets clinician educators and learners where they are living--the real world of medical practice

• EPAs embrace supervisor/trainee relationship
  – Emphasizes conference of trust as a personal involvement in the outcomes of the trainee’s work

• Recognizes that learning is a lifelong endeavor, but training is structured towards competence for unsupervised practice
Applying the Test

• Emergency Department Junior Resident:
  - “Provide patient resuscitation, stabilization and triage that aligns care with severity of illness”
ED Junior Resident

“Provide patient resuscitation, stabilization and triage that aligns care with severity of illness”

• Rule #1:
  – An EPA should be an authentic professional activity that can be entrusted to someone
    • Busy attending in ED, can entrust Junior resident to see the patient, order labs, fluids, imaging, and participate in a code situation

• Rule #2:
  – EPAs require competence, that is the integration of the knowledge, skills and attitude to perform a task successfully
    • Knowledge of PALS algorithms (MK, PC)
    • Communication/Leadership skills (IPC, P, PBL, SBP)
    • Confidence and comfort in high stress situation (PC, P, IPC)
ED Junior Resident
“Provide patient resuscitation, stabilization and triage that aligns care with severity of illness”

• Complete the sentence:
  – “Tomorrow, you will be able to:
    • provide patient resuscitation, stabilization and triage that aligns care with severity of illness”

• Consider the ‘small’ EPAs which may fall under this larger statement:
  – “Tomorrow, you will be able to:
    • serve as team leader in directing an emergency resuscitation”
    • coordinate with the ED charge nurse regarding patients that need to be seen urgently, ahead of low acuity patients”
    • participate in a mock code curriculum, assuming different roles on the code team”
ED Junior Resident

“Provide patient resuscitation, stabilization and triage that aligns care with severity of illness”

- Part of essential work to that profession
- Require adequate knowledge, skill, and attitude, generally acquired through training
- Must lead to recognized output:
  - Which should be independently executable
  - Which should be confined to qualified personnel
  - Which should be executable within a specified time frame
  - Which should be observable and measurable and should lead to a conclusion (well done, not well done)
- Reflect one or more of the competencies to be acquired
An Attending Night on Call...

- A 1 month old infant is being assessed in the ED for fever to 102.4. The PGY-2 has a plan to initiate a workup for likely sepsis.
- A 6 year old is being admitted with bruising, pancytopenia and peripheral blasts. The PGY-3 has a plan to disclose the diagnosis of likely leukemia in a family meeting.
- A 4 day old is being discharged from the nursery. The PGY-1 has a plan to do lactation counseling, newborn screening tests and speak with the accepting outpatient pediatrician.
Do It Yourself!

• Use the rules and checkpoints to create one EPA for Pediatrics

• Based on EPA theory, provide justification for why this EPA is a critical activity in Pediatrics

• Start to think about some of the ‘small’ EPAs which fall under this larger activity

  – Time Limit: 15 Minutes
Part II: EPA Description and Linking to CBAs

Dan Schumacher, MD, MEd
The Good Doctor: Putting It All Together

EPAs

DOMAINS OF COMPETENCE

COMPETENCIES

MILESTONES

The Good Doctor: PUTTING IT ALL TOGETHER

Credit: Carraccio
Newborn EPA Example
### TABLE 2  GUIDELINES FOR FULL ENTRUSTABLE PROFESSIONAL ACTIVITIES DESCRIPTIONS

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Title</td>
<td>Make it short; avoid words related to proficiency or skill. Ask yourself: Can a trainee be scheduled to do this? Can an entrustment decision for unsupervised practice for this EPA be made and documented?</td>
</tr>
<tr>
<td>2. Description</td>
<td>To enhance universal clarity, include everything necessary to specify the following: What is included? What limitations apply? Limit the description to the actual activity. Avoid justifications of why the EPA is important, or references to knowledge and skills.</td>
</tr>
<tr>
<td>3. Competency domain</td>
<td>Which competency domains apply? Which subcompetencies apply? Include only the most relevant ones. These links may serve to build observation and assessment methods.</td>
</tr>
<tr>
<td>4. Required KSAs</td>
<td>Which KSAs are necessary to execute the EPA? Formulate this in a way to set expectations. Refer to resources that reflect necessary or helpful standards (books, a skills course, etc.).</td>
</tr>
<tr>
<td>5. Information to assess progress</td>
<td>Consider observations, products, monitoring of knowledge and skill, multisource feedback.</td>
</tr>
<tr>
<td>6. When is unsupervised practice expected?</td>
<td>Estimate when full entrustment for unsupervised practice is expected, acknowledging the flexible nature of this. Expectations of entrustment moments can shape an individual workplace curriculum.</td>
</tr>
<tr>
<td>7. Basis for formal entrustment decisions</td>
<td>How many times must the EPA be executed proficiently for unsupervised practice? Who will judge this? What does formal entrustment look like (documented, publicly announced)?</td>
</tr>
</tbody>
</table>

Adapted from: ten Cate, JGME 2013

1. You just did step 1.
2. We will now do steps 2-4
3. Duncan will take us through steps 5-7 next
Part III: EPA Assessment

Duncan Henry, MD
A (Very) Brief (Incomplete) History of Competency Assessment

- ACGME defines core competencies.
- Undertakes the Outcomes Project.

1999
- ACGME Global Competency Evaluation
  - Likert scale based on 6 core competencies.
  - Most commonly used evaluation for faculty.

2003
- BCRP Global Competency Evaluation
- Ten Cate. Medical Education 2005
  - Introduces the concept of EPA’s as a bridge between competencies and practice.

2006
- BCRP Goals and Objectives Project.
- Pediatric Milestones published.
  - Simultaneously EPA’s are highlighted as a way to integrate competencies and milestones.

2009
- Systematic review of assessment practices for core competencies
- Pediatric EPA’s... Near complete draft of Pediatric EPA’s being produced.

2012
- Pediatric EPA’s... Near complete draft of Pediatric EPA’s being produced.

2013
- BCRP Experiment with EPAs
  - Creates rotation-specific EPA’s and incorporates them into redesigned global evaluations.
If We Aren’t Assessing the Competencies Directly . . .

- Competencies are abstract concepts that can help guide curriculum development
  - But most assessments end up evaluating overall competency (Lurie et al, 2009)
- EPAs may be a way to make the abstract, concrete
  - Specific, observable activities (work-based)
  - Asks question of entrustment instead of competency (makes the implicit, explicit)
  - Entrustment based on supervision needs
Adapted Levels of Supervision

- Level 1: not allowed to practice the EPA
- Level 2: practice with full supervision
- Level 3: practice with supervision on demand
- Level 4: “unsupervised” practice allowed
- Level 5: supervision task may be given

Competence threshold reached; formal entrustment decision, “STAR” (Statement of Awarded Responsibility) is conferred
Sample Resident Competency Curve

Justified entrustment decisions

With permission from H.C. Chen
UCSF Pediatric Grand Rounds, 1/31/13

ten Cate, Snell & Carraccio, Med Teach, 2010
EPA Assessment Building Blocks

- **Who**
  - Is best positioned to provide assessment data?
  - And how should it be obtained?

<table>
<thead>
<tr>
<th>EPA Title</th>
<th>Source</th>
<th>Format</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>Direct observation of discharge counseling to families</td>
<td>Multiple opportunities for in vivo assessment</td>
<td></td>
</tr>
<tr>
<td>Rotation Director</td>
<td>Chart audit – analysis of discharge summaries sent to primary care provider</td>
<td>Time intensive</td>
<td></td>
</tr>
</tbody>
</table>
EPA Assessment Building Blocks

• When

– Within your curriculum, do we expect the learner to achieve a level of performance allowing unsupervised practice?

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>May not practice (observation, no execution)</td>
</tr>
<tr>
<td>II</td>
<td>May practice with full supervision (direct, proactive supervision)</td>
</tr>
<tr>
<td>III</td>
<td>May practice with moderate supervision (reactive supervision)</td>
</tr>
<tr>
<td>IV</td>
<td>May practice without supervision (ad hoc supervision)</td>
</tr>
<tr>
<td>V</td>
<td>May supervise others (supervision of junior colleagues)</td>
</tr>
</tbody>
</table>

Adapted from ten Cate, JGME, 2013
EPA Assessment Building Blocks

• What
  – Will be the content and process for formal entrustment?

<table>
<thead>
<tr>
<th>EPA</th>
<th>Care for the Well Newborn</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entrustment Criteria</strong></td>
<td>• At least two supervisors/attending physicians must have observed at least 10 discharge counseling sessions with families with the trainee in the provider role all conducted proficiently and without errors or omissions</td>
</tr>
<tr>
<td></td>
<td>• Review by rotation director of 5 discharge summaries for completeness in transitions of care, and concurrent reports from receiving attendings</td>
</tr>
<tr>
<td></td>
<td>• At least two supervisors/attending physicians must have observed at least 10 follow-up encounters with families with the trainee in the provider role all conducted proficiently without errors or admissions</td>
</tr>
<tr>
<td><strong>Entrustment Process</strong></td>
<td>• Formal review of above data by PD and two independent faculty (Mulder et al, 2010)</td>
</tr>
<tr>
<td></td>
<td>• Formal statement/announcement to residency/faculty</td>
</tr>
</tbody>
</table>

Adapted from ten Cate and Young, BMJ Qual Saf, 2012
With Your Group . . .

• Using your group’s EPA and the worksheet, build an assessment plan for your EPA
  – Identify sources of information and the desired evaluation strategies
  – Estimate a time point in training when entrustment for unsupervised practice is likely to be obtained by the majority of your learners
  – Try to build consensus on how much data you would need for formal entrustment criteria and how decisions are made regarding STARs

- Time Limit: 15 Minutes
References

- Carraccio, C and Burke, A. Beyond Competencies and Milestones: Adding Meaning Through Context. JGME 2010: 419-4122
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