workshop
Applying EPAs in workplace assessment across the continuum

Olle ten Cate, PhD
Center for Research and Development of Education
University Medical Center Utrecht
The Netherlands

Disclosure statement
No conflict of interest reported

Creative Commons License. This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. http://creativecommons.org/licenses/by/4.0/
Agenda

1. What are EPAs?
2. How can GME know that UME graduates meet entry requirements?
3. Recommended tools for assessment
4. Workshop assignment: discuss what is needed to convince GME programs that graduates meet entrance criteria

What are EPAs?
**Entrustable Professional Activities**

Units of professional practice (tasks) that may be entrusted to a learner to execute unsupervised, once (and as long as) s/he demonstrates the required competence

Enables a shift of focus from individual competencies to the work that must be done

**Features of EPAs**

- Part of essential professional work in a given context
- Must require adequate knowledge, skill and attitude, competencies, generally acquired through training
- Must lead to recognized output of professional labour
- Usually be confined to qualified personnel
- Executable independently of other EPAs
- Executable within a time frame
- Observable / measurable in process and outcome, leading to a conclusion (‘well done’ or ‘not well done’)
- Should allow for decision to decrease supervision
What EPAs are and what not

An EPA is: an activity; a task; an assignment; a responsibility. EPAs together may constitute a job description; the things that fill your agenda for the day.

An EPA is, strictly, not:

• A competency, an attitude, a behavior
• A learning objective (mastery of an EPA is an objective)
• An assessment tool (EPA can be focus of assessment)

Entrustment EPAs as assessment

• Assessment with the purpose to decide upon required supervision (5 main levels)
• Clinical education involve continuous try-outs: ad-hoc entrustment decisions that need to be evaluated
• Summative entrustment decision serve as certification to act at a designated supervision level
### Recommended 7-item EPA description

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Title of the EPA</strong></td>
</tr>
<tr>
<td>2</td>
<td><strong>Specification and limitations</strong></td>
</tr>
<tr>
<td>3</td>
<td><strong>Most relevant competencies</strong></td>
</tr>
<tr>
<td>4</td>
<td><strong>Required experience, knowledge, skills, attitude and behavior for entrustment</strong></td>
</tr>
<tr>
<td>5</td>
<td><strong>Information sources to assess progress and ground a summative entrustment decision</strong></td>
</tr>
<tr>
<td>6</td>
<td><strong>Entrustment for which level of supervision is to be reached at which stage of training?</strong></td>
</tr>
<tr>
<td>7</td>
<td><strong>Expiration date</strong></td>
</tr>
</tbody>
</table>

### Resuscitation of the multiple trauma patient in the Emergency Room

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Resuscitation of trauma patients of all age groups, in the Emergency Room. Active participation in the trauma team. Assessment and control of vital functions. Pain management in trauma patients. No limitations</td>
</tr>
</tbody>
</table>
| 3 | ✓ Medical expert  
✓ Communicator  
✓ Collaborator  
✓ Manager  
☐ Health advocate  
☐ Scholar  
☐ Professional |
| 4 | Trauma mechanisms & pathophysiology; Organization of trauma care; Collaboration in the trauma team; Trauma diagnoses & treatment; Primary & secondary survey; Trauma airway management; Emergency IV\(^1\) & IO\(^2\) access; Emergency thoracostomy; Hemorrhage / massive transfusion; Emergency Room registration procedures |
| 5 | 5 SPOs and 5 trauma CBDs (different days and assessors), incl. trauma airway management, emergency IV & IO access and emergency thoracostomy; LPO over >3 weeks (MSF); 2 trauma simulator achievement tests passed |
| 6 | Level 4 (unsupervised practice) in PGY 4 of anesthesiology training |
| 7 | Six months after non-practice |
Individualized workplace curriculum

Graded supervision allows for...

1. Observing the activity
2. Acting with direct supervision present in the room
3. Acting with supervision available within minutes
4. Acting unsupervised (i.e., under clinical oversight)
5. Providing supervision to juniors

<table>
<thead>
<tr>
<th>Portfolio of: trainee Jones</th>
<th>PGY1</th>
<th>PGY2</th>
<th>PGY3</th>
<th>PGY4</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA a</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>EPA b</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>EPA c</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>EPA d</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>..EPA x</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Purpose of using EPAs

- Gradual increase of responsibility of trainees
- Deliberate decisions of decreased supervision
- Balancing autonomy and patient safety
- Providing a clear roadmap for learners
How can GME know that UME graduates meet entry requirements?

AAMC Core EPAs for entering residency

1. Gather a history and perform a physical examination
2. Prioritize a differential diagnosis
3. Recommend and interpret common diagnostic and screening tests
4. Enter and discuss orders and prescriptions
5. Document a clinical encounter in the patient record
6. Give an oral presentation of a clinical encounter
7. Form clinical questions and retrieve evidence
8. Give or receive a patient handover
9. Collaborate as a member of an interprofessional team
10. Give urgent or emergent care
11. Obtain informed consent
12. Perform general procedures of a physician
13. Identify system failures and contribute to a culture of safety and improvement
Some general notes

- Residencies must trust schools to graduate doctors meeting standards
- Schools must trust clinicians and examination committees
- Clinicians/committees must take summative entrustment decisions
- Possibilities to observe and document are limited; sampling is critical; series of ad-hoc entrustment decisions must inform summative entrustment
- Eventually, trust implies taking a calculated risk that adverse events are manageable

Modes of trust

<table>
<thead>
<tr>
<th>Presumptive trust</th>
<th>Based on prior credentials without observation</th>
<th>Guides ad-hoc entrustment decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial trust</td>
<td>Based on first impressions – to confirm presumptions</td>
<td></td>
</tr>
<tr>
<td>Grounded trust</td>
<td>Based on data collection to inform new summative entrustment decision</td>
<td>Guides summative entrustment decisions</td>
</tr>
</tbody>
</table>

Cruess & Cruess 2014; ten Cate et al, 2016
Moving to new cycles in the continuum starts with presumptive trust based on prior education.
Assessment tools to support entrustment decisions

Four approaches of assessment to ground entrustment decisions

1. Watching to see trainees perform at their best
2. Hearing trainees explain their understanding
3. Observing trainee behavior over time
4. Looking at trainee products
Four approaches of assessment to ground entrustment decisions

1. Watching to see trainees perform at their best
   Short practice observations
2. Hearing trainees explain their understanding
   Case-based discussions
3. Observing trainee behavior over time
   Longitudinal practice observation
4. Looking at trainee products
   Product evaluations

Short practice observations
Short practice observations

- 15-20 mins observation
- Sampled occasions
- Pre-structured list of items for observation
- Judgment documented
- 5-10 mins feedback

Predominant consideration: how much supervision does this learner require?

Case-based discussion with a focus on entrustment

- 15-20 mins conversation
- Following an observed or unobserved EPA
- Suitable after ad-hoc entrustment decision to grant temporary autonomy
- Four key guiding questions
- Judgment documented
- 5-10 mins debrief

Predominant consideration: how much supervision does this learner require?
Case-based discussion with a focus on entrustment

<table>
<thead>
<tr>
<th>EBD questions</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 What you have done?</td>
<td>Let learner explain the case and relationship to the EPA</td>
</tr>
<tr>
<td>2 Exhibit understanding</td>
<td>Let learner explain rationale, indication, patho-physiology, clinical reasoning</td>
</tr>
<tr>
<td>3 Which risks and possible complications were involved?</td>
<td>How was the learner prepared to cope with these risks and complications?</td>
</tr>
<tr>
<td>4 What if the patient or situation would have been different?</td>
<td>Think of differences in culture, medical history, unexpected findings, mental or physical abnormality; same case in a night shift etc.</td>
</tr>
</tbody>
</table>

Longitudinal practice observation

- Observations over a weekend shift, a week or longer
- Focus on general features that enable trust:
  1. Integrity (truthfulness; benevolence)
  2. Reliability (consistent and predictable behavior; conscientiousness)
  3. Humility (observing limitations; knowing how to deal with the unexpected; asking for help when needed)
- Multi sources: faculty, nursing and others
Product evaluation

- Entries in health record / chart
- Presentations of patients or EBM
- Assignments systems-based practice

Workshop assignment

- GME faculty / program directors: what will convince you that entering residents are better equipped
- UME Faculty: how much observational and other data do you need to summative entrustment decision or EPAs
Video resources on EPAs

Animation explaining EPAs for postgraduate training:

Animation explaining EPAs from the College of Anaesthetists of Ireland EPA Team

Animation explaining EPAs from the University of Toronto

References


• ten Cate, O. (2014). AM Last Page: What Entrustable Professional Activities Add to a Competency-Based Curriculum. Academic Medicine, 89(4), 691.


• ten Cate, O., & Hoff, R. G. (n.d.). From Case-Based to Entrustment-Based Discussion, (submitted).