

*Implementing Entrustable
Professional Activities
for UME*

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Who Are We?

- How familiar are you with EPAs?
 - Have heard of EPAs
 - Have a basic understanding of EPAs
 - Have done some work with EPAs
 - Can run a workshop on EPAs
- How many of your institutions are
 - Interested in implementing EPAs
 - Have already started implementing EPAs
- How many of you primarily work in UME?

Objectives

- Define an entrustable professional activity (EPA)
- Review examples of EPAs
- Map selected EPAs to your local curriculum
- Identify information sources for assessment
- Determine benchmarks for levels of supervision/entrustment

Agenda

Time	Activity
8:45 - 8:55	Welcome and introductions
8:55 - 9:10	Brief EPA overview
9:10 - 9:45	Review of available EPAs (SG) Adjustment of EPAs for local context (SG) EPA mapping to curriculum (SG)
9:45 - 10:00	Assessment
10:00 - 10:25	Identification of assessment information sources (SG) Benchmarking levels supervision/ entrustment to stages of training (SG)
10:25 - 11:00	SG presentation of EPA and discussion
11:00 - 11:15	Next steps, questions and wrap-up

In Competency-Based Medical Education

- Want to know that student
 - Demonstrated competence
 - Ready to advance to GME training
- Requires
 - Clear definition of expected competencies
 - Assessments to determine whether performance is consistent and within contextual needs of clinical environment

Entrustable Professional Activity

*Is a core unit of work, reflecting a **responsibility** that should only be entrusted upon someone with adequate competencies*

- Provides framework to work with competencies
- Translates competencies into clinical practice
- Integrates multiple competencies in holistic way

What is an EPA?

- Part of essential professional work in a given context
- Leads to recognized output
- Observable and measurable
- Requires specific knowledge, skills, and attitudes acquired through training
- Reflects important competencies
- Usually confined to qualified personnel only

Collection of EPAs = core of profession

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Defining EPAs

- Identify important professional/clinical activities
 - Concrete activities
 - Allows deliberate “decisions of entrustment”
 - Results in responsibility change
 - Portfolio of mastered EPAs document full competence
- Work backwards to link to competencies & required knowledge, skills, attitudes

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Recommended EPA Description

1. EPA title
2. Specifications and limitations
3. Most relevant competency domains
4. Required knowledge, skills, attitudes
5. Sources of information to assess progress (basis of formal entrustment)
6. Levels of entrustment/supervision at which level of training (implications of entrustment)
7. Expiration date (optional)

ten Cate et al., Medical Teacher 2015



Example: Routine check-up of the stable adult patient

2 Specification and limitations	<ol style="list-style-type: none"> 1. Measuring vital functions: pulse, breathing, temperature, blood pressure, saturation: by hand and with devices 2. Explaining all actions to the patient 3. Reporting results to care givers (orally and/or written) Limitations: only with circularory stable patients \geq 18 year old	
3 Relevant competency domains	<input checked="" type="checkbox"/> Medical expert <input checked="" type="checkbox"/> Communicator <input checked="" type="checkbox"/> Collaborator <input type="checkbox"/> Manager	<input type="checkbox"/> Health advocate <input type="checkbox"/> Scholar <input type="checkbox"/> Professional
4 Required experience knowledge, skills, attitude, behavior before entrustment	<u>Knowledge:</u> <u>Skills:</u> <u>Attitude:</u>	Basic anatomy; normal and abnormal values, interpretation; estimation of consequences 2nd year med school skills test passed Aware of critical nature of adequate report
5 Sources of information for assessment	Short practice observations of all acts, 3 case-based discussions	
6 Level & expected moment of entrustment	Level 3a (indirect supervision, all findings checked) after 2 weeks of first clerkship	
7 Expiration	One year after non-practice	



Example: Resuscitation of the multiple trauma patient in the Emergency Room

2	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		
3	<input checked="" type="checkbox"/> Medical expert <input checked="" type="checkbox"/> Communicator <input checked="" type="checkbox"/> Collaborator	<input checked="" type="checkbox"/> Manager <input type="checkbox"/> Health advocate	<input type="checkbox"/> Scholar <input type="checkbox"/> 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		

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AAMC Core EPAs (US)

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

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Swiss PROFILES

1. Gather patient's history
2. Assess physical and mental status
3. Prioritize differential diagnosis
4. Order and interpret tests
5. Perform general procedures
6. Recognize and treat an emergency
7. Prescribe and develop management plan
8. Document and present a clinical encounter
9. Identify system failure/ professionalism

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1. **The clinical consultation**
(History, physical examination, measuring vital signs, creating differential diagnosis, ordering and interpreting tests, designing management plan, documentation)
2. **General medical procedures**
(preparing + executing procedures including communication with patient)
3. **Informing, advising & guiding patients and families**
(discussing diagnostic options, test results, or management plan and documentation)
4. **Communicating and collaborating with colleagues**
(Writing discharge summary, oral patient hand-over, patient & research presentations, collaborating with health care workers and contributing to interprofessional teams)
5. **Extraordinary patient care**
(basic life support, establishing death)

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Small Group Activity 1

Each group to

- Review list of available EPAs
- Consider which EPAs you would want to see implemented at your institution
- Pick one for your group to work on today

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Ten Cate et al., Medical Teacher 2015

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Small Group Activity 2

For your chosen EPA

- Review the EPA description provided in handouts
- Adjust specifications/ limitations as needed
- Map to your institutions competencies

(worksheet page 1)

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ten Cate et al., Medical Teacher 2015

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Small Group Activity 3

For your chosen EPA

- List the knowledge, skills, attitudes required to complete EPA



Any gaps?

- Note where in curriculum students learn them

(worksheet page 2)

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Supervision/Entrustment as Assessment



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Levels of Supervision

GME Entrustment Scale	
1	Not allowed to practice EPA
2	Allowed to practice under proactive full supervision
3	Allowed to practice under reactive supervision
4	Allowed to practice EPA unsupervised
5	Allowed to supervise others in practice of EPA

ten Cate et al., Medical Teacher 2010

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With Additional Gradations

	GME Scale	UME Scale
1	Not allowed to practice EPA	1a. Not allowed to observe 1b. Allowed to observe
2	Allowed to practice under proactive full supervision	2a. As coactivity with supervisor 2b. With supervisor in room ready to step in as needed
3	Allowed to practice under reactive supervision	3a. With supervisor immediately available, all findings double checked 3b. With supervisor immediately available, key findings double checked 3c. With supervisor distantly available, findings reviewed

Chen et al., Academic Medicine 2015

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Entrustment



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Ad Hoc Entrustment

- Momentary decisions in field
 - Applies to specific circumstance
 - Confirmed each time
- Post hoc field notes
 - Adjustments required
 - **Context**
 - Recommendation for future entrustment



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Summative Entrustment

- Formalized decision
 - Permission for less supervision
 - Applies to future cases
- Informed by
 - Numerous ad hoc decisions
 - Multiple supervisors
 - Variety of **contexts**
 - Additional sources of information



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Determining Student Entrustability

- Who will make formal entrustment decision
 - Individuals
 - Competency committee
- On what basis
 - What assessments
 - How many observations
 - In what contexts

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Sources of Information

1. Prior credentials/ performance
2. Knowledge & skills tests
3. Short practice observations (mini-CEX, DOPS)
4. Longitudinal practice observations (MSF)
5. Entrustment-based case discussions
6. Work product evaluation (notes)
7. Self-reports (activity logs, reflections)
8. Post-hoc results (pt satisfaction, event analysis)

ten Cate et al., *Medical Teacher* 2015; ten Cate & Hoff, *Clinical Teacher* 2017

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Trustworthiness

- Based on
 - Ability or level of KSA
 - Conscientious, stable behavior
 - Truthfulness, benevolence
 - Knowing one's limits and willing to ask for help
 - Ability
 - Reliability
 - Integrity
 - Humility

Kennedy et al., *Academic Medicine* 2008; ten Cate et al., *Academic Medicine* 2016

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ten Cate et al., Medical Teacher 2015

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Small Group Activity 4

For your chosen EPA

- Note where students currently assessed on EPA or related KSA
(include type of assessment)
- Any noticeable gaps?

(worksheet page 3)

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Small Group Activity 5

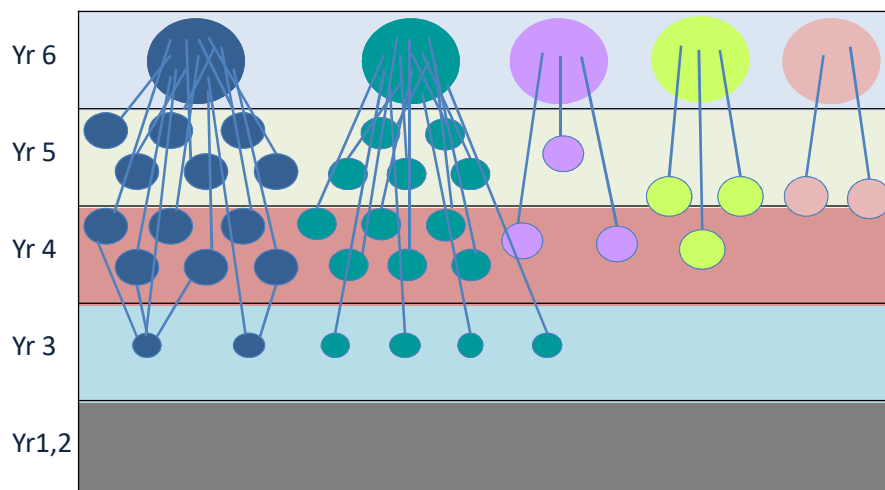
For your chosen EPA

- Determine level of entrustment/ supervision at graduation
(adjust descriptions of the entrustable student as needed)
- Provide benchmarks for levels of training prior to graduation
(using entrustment scale or nesting EPAs)

(worksheet page 5)

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Nesting Principle



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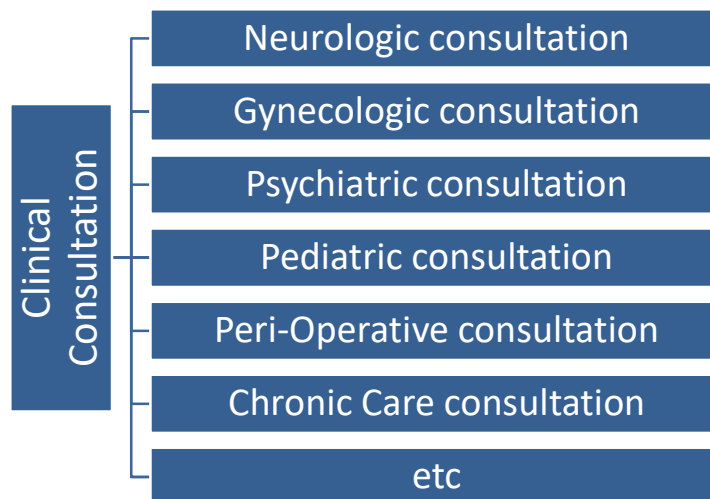
EPAs for Clerkship Entry

1	Gather information from a medically stable patient with a common chief complaint
2	Integrate information gathered about a patient to construct a reasoned and prioritized differential diagnosis as well as a preliminary plan for common chief complaints
3	Communicate information relevant to a patient's care with other members of the health care team
4	Share information about the patient's care, including diagnosis and management plan, with a patient in no significant physical or emotional distress
5	Provide the health care team with resources to improve an individual patient's care or collective patient care

Chen et al., Academic Medicine 2016

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Utrecht EPA: The Clinical Consultation



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Small Group Activity 5

For your chosen EPA

- Determine level of entrustment/ supervision at graduation
(adjust descriptions of the entrustable student as needed)
- Provide benchmarks for levels of training prior to graduation
(using entrustment scale or nesting EPAs)

(worksheet page 5)

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ten Cate et al., Medical Teacher 2015

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Group Share

Each small group to share in 2 minutes:

- Which EPA your group picked
- One issue you discovered working on the EPA
- One ah-ha moment

Key Questions for Groups

- Are current tools adequate for EPA assessment?
- Do assessments address trustworthiness?
- Is there a program of assessment?
 - Data collection
 - Tracking of progress
 - Competency committees
 - Competency-based advancement

Wrap-Up

- Remaining thoughts or questions?
- For consideration:
 - What are your next steps?
 - How might today's work help?

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THANK YOU

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