



UMC Utrecht

# Introducing EPAs for undergraduate medical education: critical issues to consider

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Short communication AMEE conference Glasgow - 8/9/2015



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# Content

Critical issues to consider when developing EPAs for UME:

1. Supervision levels
2. Ad-hoc entrustment vs. summative entrustment
3. Discipline-specific contributions to general EPAs
4. Nesting EPAs

Framework of EPAs for UME at UMC Utrecht



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# 1. Stepwise decrease of supervision

## Issue

Common entrustment and supervision scale not sufficient:

- Too little gradation in first levels of supervision
- Levels 4-5 will not be reached during UME

Common PGME entrustment and supervision scale	
1	Not allowed to practice EPA
2	Allowed to practice EPA only under proactive, full supervision
3	Allowed to practice EPA only under reactive/on-demand supervision
4	<i>Allowed to practice EPA unsupervised</i>
5	<i>Allowed to supervise others in practice of EPA</i>

# 1. Stepwise decrease of supervision

PGME entrustment and supervision scale	UME entrustment and supervision scale
1. Not allowed to practice EPA	1a: Not allowed to observe EPA <b>1a: Allowed to observe EPA</b>
2. Allowed to practice EPA only under proactive, full supervision (direct)	<b>2a: As coactivity with supervisor</b> <b>2b: With supervisor in room ready to step in as needed</b>
3. Allowed to practice EPA only under reactive/on demand supervision (indirect)	<b>3a: With supervisor immediately available, all findings double checked</b> <b>3b: With supervisor immediately available, key findings double checked</b> 3c: With supervisor distantly available (e.g. by phone), findings reviewed
4. Allowed to practice EPA unsupervised	4. Allowed to practice EPA unsupervised
5. Allowed to supervise others in practice of EPA	5. Allowed to supervise others in practice of EPA



## 2. Ad-hoc versus summative entrustment

### Issue

No early full ('summative') entrustment possible yet, *but*

1. Students need to practice with limited supervision
2. Student cannot always be directly supervised

*How to justify that students already perform tasks with limited supervision without formal entrustment?*



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## 2. Ad-hoc versus summative entrustment

### Solution

#### Ad hoc entrustment:

occasional permission to practice with limited supervision for educational purposes (to be confirmed every time)

#### Summative entrustment:

formalised, default permission to act with limited supervision



# 3. Discipline-specific contributions to general EPAs

## Issue

- 'Perform a physical examination'
- 'Prioritize a differential diagnosis'
- 'Recommend common diagnostic tests'

→ General skills of a physician, but these skills also require discipline-specific skills and knowledge!



# 3. Discipline-specific contributions to general EPAs

## EG: EPA1: 'The clinical encounter'

Specifications

1. Taking a medical history
2. Performing physical examination
3. Prioritize a differential diagnosis
4. Requesting common diagnostic tests
5. Interpret diagnostic tests
6. Designing a treatment plan

Skills and knowledge

- General / internistic
- Children
- Gynaecological
- Neurological
- Psychiatric
- Dermatological
- Etcetera...!



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# 4. Nesting EPAs

## Issue

- When parts of an EPA can be practiced early, but not the full EPA
  - Some parts are too specialized for early learners
  - Too many observations needed within one clerkship to make a grounded entrustment decision

## Solution

Nesting simple EPAs within complex EPAs



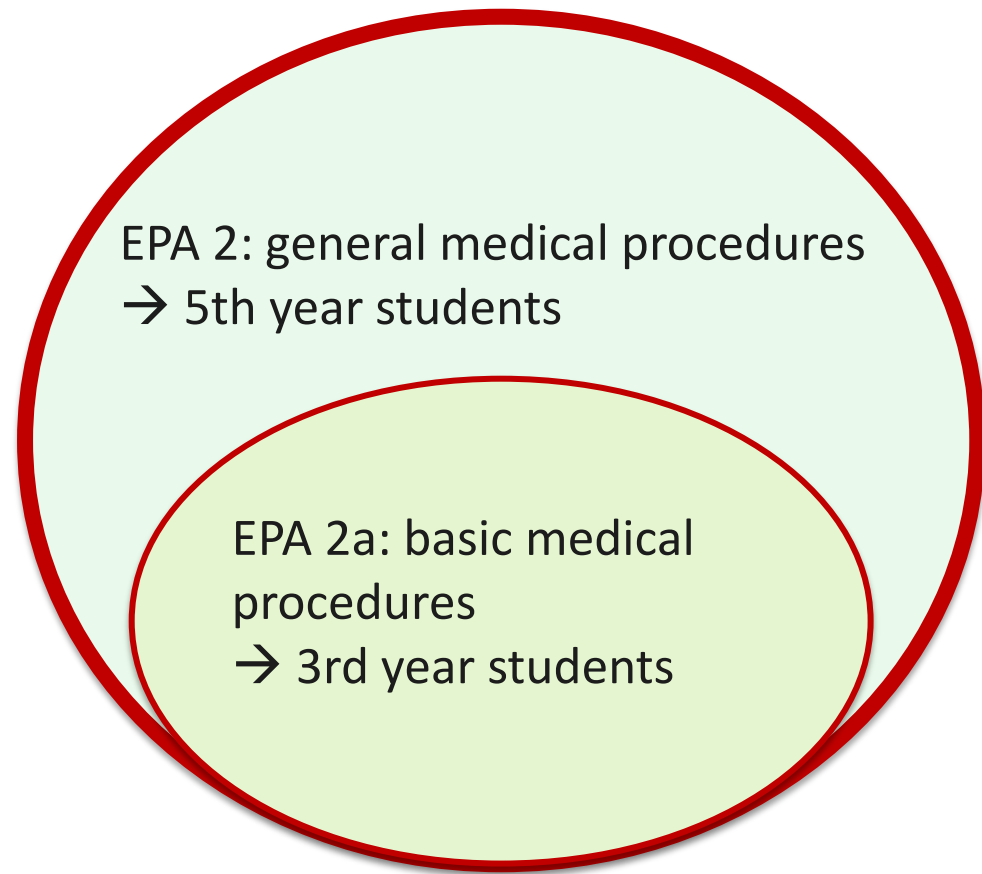
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## 4. Nesting EPAs

Nesting EPA (yr3), within EPA (yr5):

- Capillary blood taking
- Venous blood withdrawal and taking a blood culture
- Swabs: oral, nasal, ears, skin, anal or wounds
- Giving infusions
- Ankle brachial index
- Administering a simple bandage and scarf bandage
- Urethral catheterization
- Suturing and injection of local anesthetic to skin
- Perform an ECG
- Give intracutaneous, subcutaneous and intramuscular injections
- Arterial blood gas



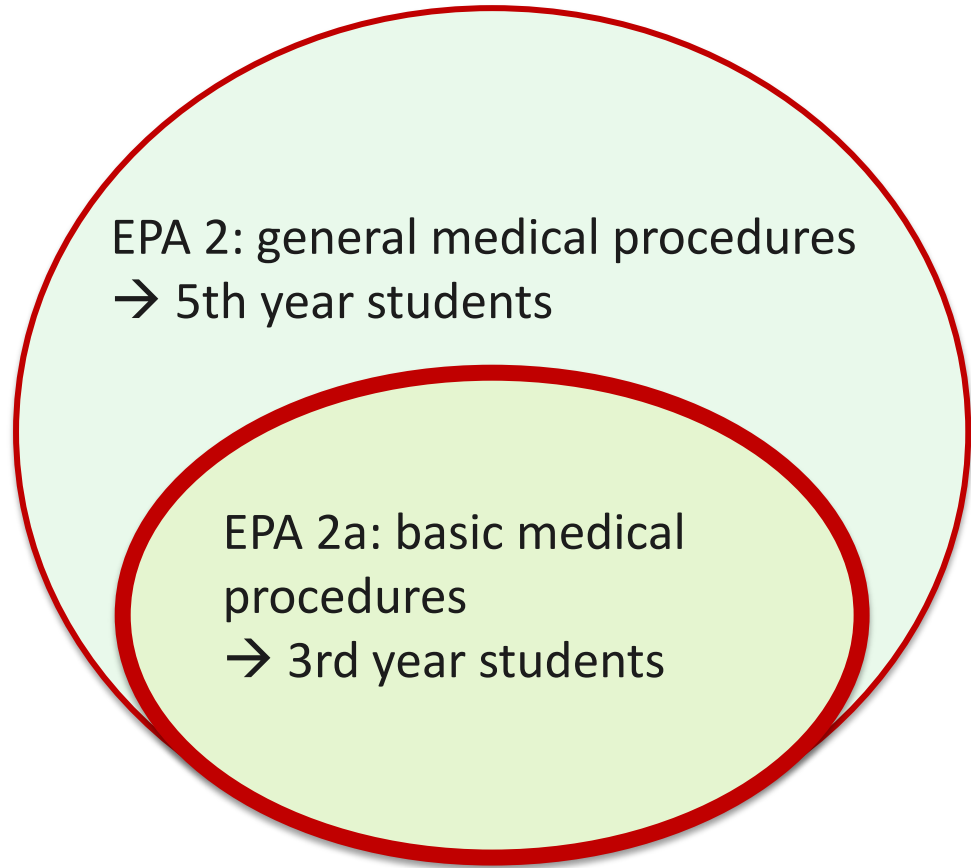
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# Final framework EPAs UME Utrecht

EPA 1 'The clinical encounter'	EPA 2 'General medical procedures'	EPA 3 'Inform and advise patients and their family'	EPA 4 'Collaboration and communication with colleagues'	EPA 5 'Patient care in special situations'
Specifications given before	Specifications given before	<ul style="list-style-type: none"> <li>• About diagnostic options (incl informed consent)</li> <li>• About prognosis (incl breaking bad news)</li> <li>• About therapeutic options (incl compliance and obtaining informed consent)</li> </ul>	<ul style="list-style-type: none"> <li>• Discharge letter</li> <li>• Oral handover</li> <li>• Consulting other care providers</li> <li>• Refer to other care providers</li> <li>• Perform oral presentation</li> <li>• Report on medical errors</li> </ul>	<ul style="list-style-type: none"> <li>• Establishing patient death</li> <li>• Basic and advanced life support</li> </ul>



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# Comparison with AAMC Core EPAs for Entering Residency (USA)

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

## Take-home message

Implementation of an EPA-based curriculum requires extensive discussion between curriculum designers and clinical teachers.



Thank you for your attention! Any questions?

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**References:**

H. Carrie Chen, MD, MEd, W.E. Sjoukje van den Broek, MD, and Olle ten Cate, PhD. The Case for Use of Entrustable Professional Activities in Undergraduate Medical Education. Acad Med. XXXX;XX:00–00. First published online *doi: 10.1097/ACM.0000000000000586*



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