

ENTRUSTABLE PROFESSIONAL ACTIVITIES (EPAS) - IMPLEMENTATION PROCESS AND LESSONS LEARNED

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DISCLOSURES

- Member of the Teachers' Academy, University of Helsinki, Finland
- Member of the International Collaboration of the Competency-based Medical Educators
 - member of the ICBME Executive Board
- Co-chair elect of the AMEE Postgraduate Committee
- Member of the ATAIC Committee, ESAIC

FACTS ABOUT FINLAND

- **Population 5.3 million people**
 - 22 000 physicians
- **Five autonomous medical schools**
- **50 autonomous medical and 10 dental specialities**
- **300 physicians having special competency in medical education**
- **Statute in 2020**
 - competency-based medical education





BACKGROUND: FINLAND BEFORE THE REFORM

- **Population 5.5 million people**
 - - 22 000 physicians
- **Five autonomous universities**
- **50 medical and 10 dental specialities**
- **Ministry of Health and Social Services:**
 - - statute in 2020
 - -> competency-based medical education
- **Time-bound education**
 - - residents and supervisors as workforce
- **Traditional master-apprentice model**

National examination		
Leadership education (10 credits)		
Regular evaluations		
Theoretical teaching at the workplace (2-5 hours/week)		
Primary health care 9 months	Basic education 2 years 3 months In secondary hospitals	Working at a tertiary hospital 3 years
Primary health care 9 months	Education defined by the specialty 4 years 3 months	

Collaboration:

Ministry of Health and Social Services & the five Universities
- each University has its own Postgraduate Education Committee

Helsinki

Competency-based
medical education

Turku

Train-the trainers
CBME

Tampere

Application process

National
collaboration
of
Postgraduate
Education
Committees

Kuopio

Quality of education

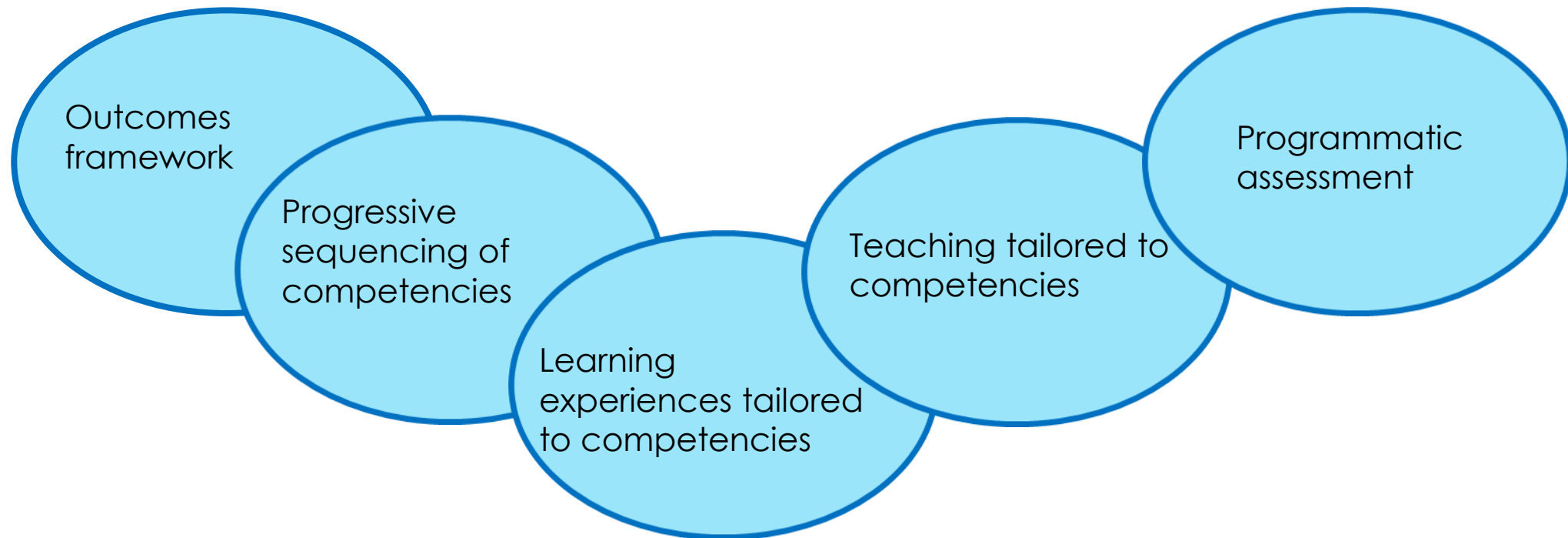
Oulu

Electronic assessment
system

Family Medicine

Dental specialities
Johanna Uittamo

THE FIVE CORE COMPONENTS



OUTCOMES FRAMEWORK

An excerpt from *Alice's Adventures in Wonderland* (Carroll 1865) illustrates the importance of having a clear target (learning outcome) to determine the best path to take (intervention):

“Would you tell me, please, which way I ought to go from here?” said Alice.

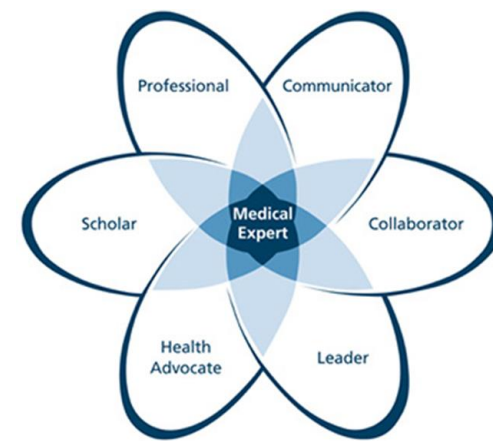
“That depends a good deal on where you want to get to,” said the Cat.

“I don't much care where,” said Alice.

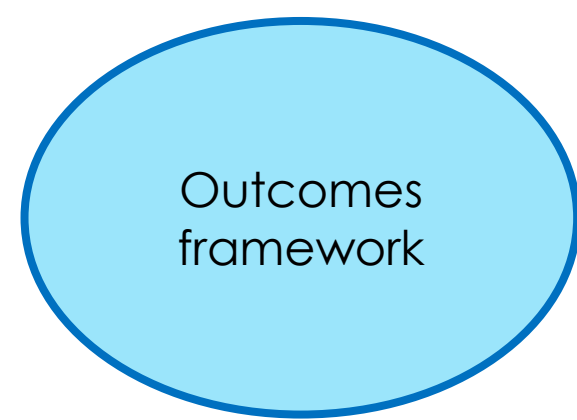
“Then it doesn't matter which way you go,” said the Cat.



NATIONAL STUDY GUIDE



CANMEDS



- **Five medical schools**
 - five professors = five program directors
- **National postgraduate education study guide published in August 2020**
 - based on the UEMS and other international guidelines
- **Healthcare reform and the societal needs?**

ANAESTHESIOLOGY, PAIN AND INTENSIVE CARE MEDICINE

UEMS/EBA GUIDELINES

EPA – ENTRUSTABLE PROFESSIONAL ACTIVITY

Progressive
sequencing of
competencies

- **EPA is a unit of work**
 - Competencies are descriptors of physicians, EPAs are descriptors of work
- **EPA is a key activity of our specialty**
- **EPA defines degree of supervision needed**

Level 1 - Be present and observe

Level 2 - Act with direct, pro-active supervision, i.e. with a supervisor physically present in the room

Level 3 - Act with indirect, re-active supervision, i.e. readily available on request

Level 4 - Act with supervision not readily available, but with distant supervision and oversight

Level 5 - Provide supervision to junior trainees

SUPERVISION SCORES (THE O-SCORE)

1. I had to do (learner watched)
2. I walked them through (hands on supervision + learner assists)
3. I prompted (learner performed but guided)
4. I had to be there just in case
5. I did not need to be there (entrusted)

-Gofton & Dudek

GOOD QUALITY EPA

Progressive sequencing of competencies

- **Focused**

 - addresses a single activity, not too broad in scope

<ul style="list-style-type: none">• Low risk, great need (e.g. sedation outside the OR)	<ul style="list-style-type: none">• Great risk, great need (e.g. thoracic anaesthesia)
<ul style="list-style-type: none">• Low risk, low need (e.g. challenging venous cannulation)	<ul style="list-style-type: none">• Great risk, low need (e.g. HIPEC)

medicine

- **Multiple Competencies**

 - reflects multiple competencies
 - requires integration of knowledge, skills, and attitudes



EPAS IN THE NATIONAL ASSESSMENT GUIDE

2020: Five medical specialties (10%) had at least one EPA

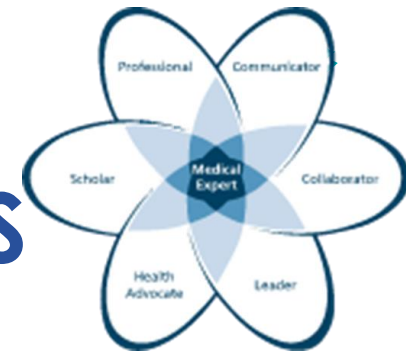
2021

- one EPA was requested
- 5 specialties did not have an EPA
- 12 had one EPA
- 15 had 2-5 EPAs
- 5 had 11-15 EPAs
- 4 had more than 20

2022

- five EPAs were requested
- 5 specialties had 1-4 EPAs
- 18 had 5 EPAs
- 14 had 6-10 EPAs
- 6 had 11-15 EPAs
- 4 had more than 20

NATIONAL EPAS AND CANMEDS COMPETENCIES



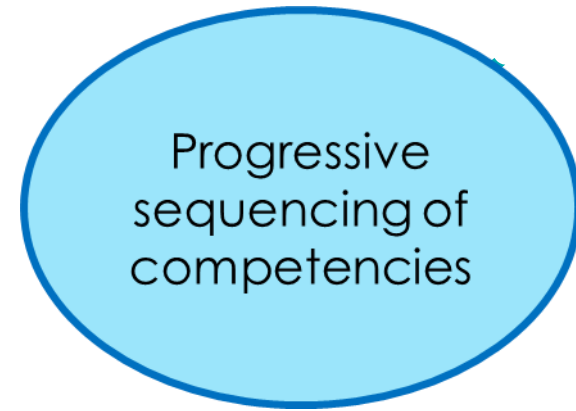
CanMEDS	2021 N=118	2022 N=284
Medical expertise	93 (78,80 %)	<u>269 (94,60 %)</u>
Communication	<u>100 (84,74 %)</u>	257 (90,28 %)
Collaboration	84 (71,18 %)	233 (80,57 %)
Leader	61 (51,69 %)	160 (56,47 %)
Health advocacy	31 (26,27 %)	98 (35,25 %)
Scholar	68 (57,62 %)	154 (54,22 %)
Professional	70 (59,32 %)	222 (78,16 %)

CANMEDS COMPETENCIES: SURPRISES

- **Misunderstandings**
 - one specialty had included Scholar but not Medical Expertise in their EPAs
 - Medical Expertise was missing from some very clinical EPAs
- **CanMEDs vs. other competencies**
 - nine specialties had included their own competencies
 - decision making, writing clinical guidelines, holistic viewpoint
 - Other individual structures and definitions
- **Incentives?**
 - specialties are autonomous
 - compatibility with the technical requirements of the Electronic Assessment System

ANAESTHESIOLOGY AND INTENSIVE CARE MEDICINE EPA:S

OUR SPECIALTY HAS TWELVE EPAS



- **Anaesthesia has ten EPAs**
 - trial period after probational study right
 - perioperative care of a patient undergoing casearean section
 - perioperative anaesthetic care of a geriatric patient
 - perioperative care of an adult undergoind ambulatory (day-case) surgery
 - perioperative care of a adult child undergoind ambulatory (day-case) surgery
 - perioperative care of a patient undergoing thoracic surgery
 - perioperative care of a petient undergoing craniotomy
 - anaesthetic care of a child younger of 8 years
 - perioperative care of vascular anaesthesia
 - pre- and perioperative care of a trauma patient
- **Intensive Care Medicine has two EPAs**
 - assessment of the need of intensive care
 - ward round in the ICU

OUR SPECIALTY: PROGRESSIVE SEQUENCING OF COMPETENCIES

Progressive sequencing of competencies

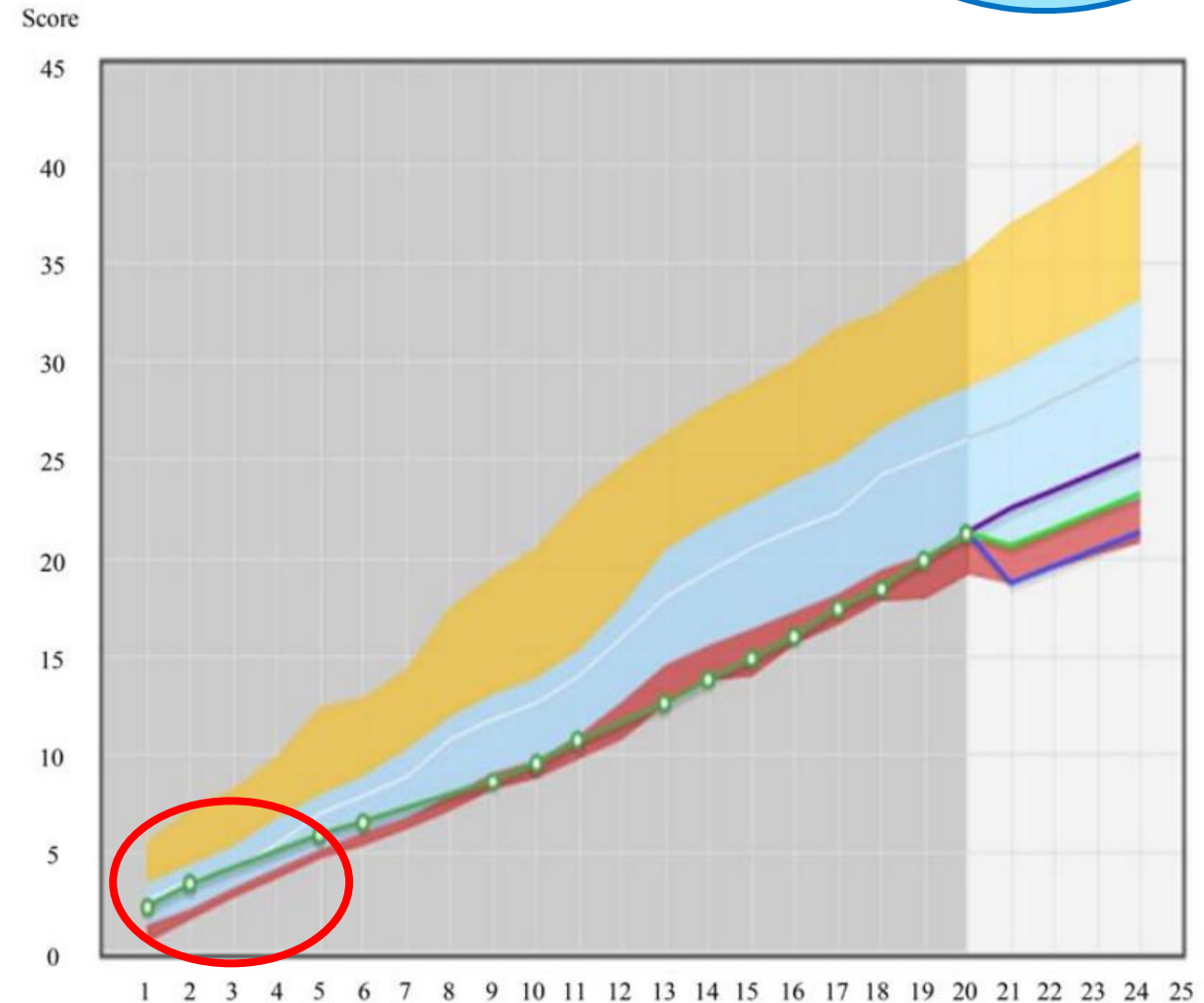
EPA	Timing	Secondary hospital	University hospital
Trial period	Trial period	+	+
Caesarean section	Early	+	+
Ambulatory surgery, adult patient	Early	+ (s)	+ (f)
Assessment of the need of intensive care	Early	+	+
Geriatric patient	Not specified	+	+
Ambulatory surgery, child	Not specified	+ (s)	+ (f)
Thoracic surgery	Not specified	+	+
Neurosurgery	Not specified	-	+
Child younger of 5 years	Late	-	+
Ward round in the ICU	Late (?)	+	+
Trauma patient	Late	+	+
Vascular surgery	Late	?	+

STRUGGLING TRAINEES?

Progressive sequencing of competencies

- Individual growth curve
- Slow progress may be detected in early stages

Fig. 1 The PROgress test Feedback system (PROF). Longitudinal results of an individual student. The scores of an individual student after 20 test moments are shown. The *green line* represents the results of the student on the previous tests. The *red, blue* and *yellow* shaded areas represent the areas for fail, pass, and good scores. The *blue line* indicates the upper and lower limits of the likely future development in this student.



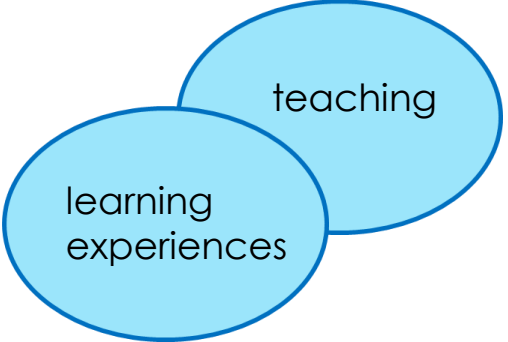
EPA BLUEPRINT

- Observation in many places
- Observation in one place
- Educational pathways

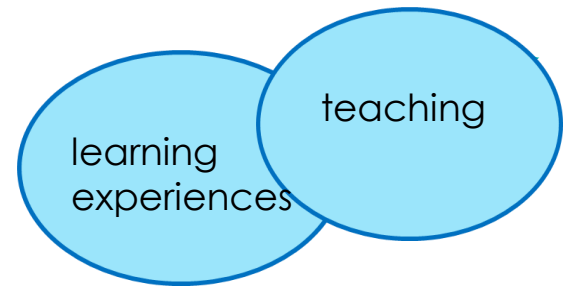
EPA	Peijas	Jorvi	Meilahti	Silta	NKL	ULS	Si-Ko	Puisto	ICU
Trial period	X	X		X					
Casearean section		X			X				
Geriatric patient	X	X	X	X			X	X	
Ambulatory adult	X	X			X		X	X	
Ambulatory child						X	X		
Thoracic surgery			X						
Craniotomy				X					
Child under 5 years						X			
Assessment ICU									X
Ward round in the ICU									X
Trauma patient				X					
Vascular surgery			X						

IMPLEMENTATION OF CBME IN FINLAND

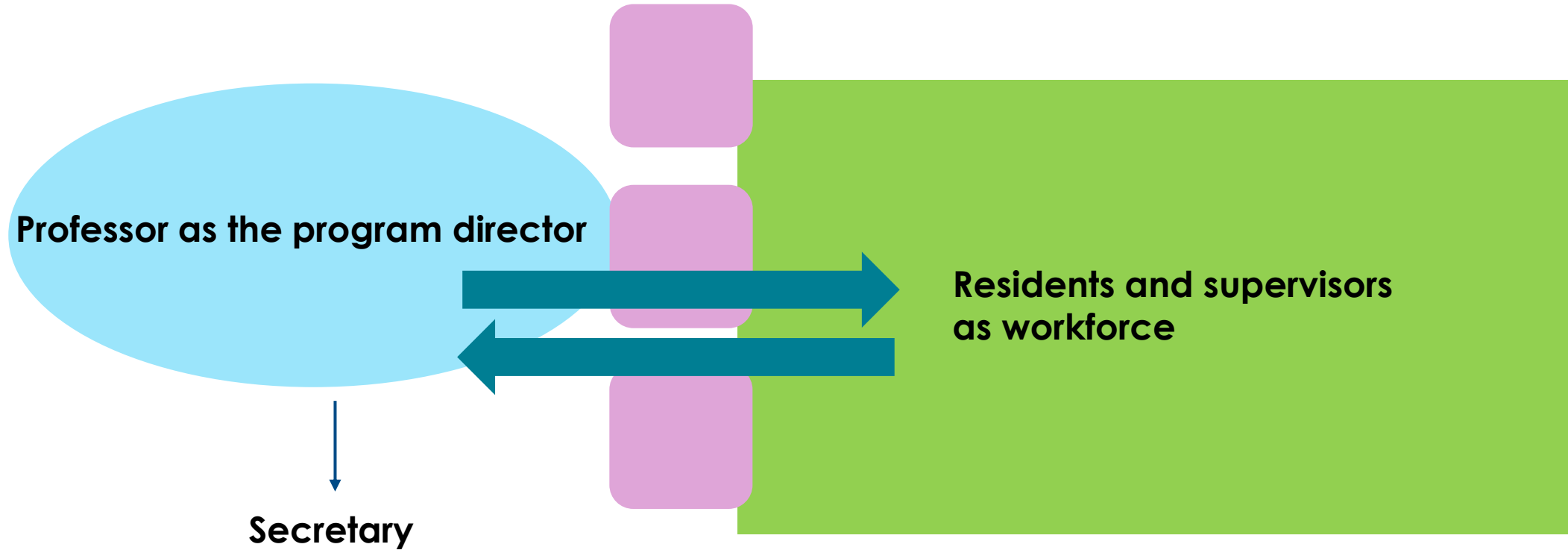
TRADITIONAL TIME-BASED EDUCATION



THE REFORM: ACADEMIC ADVISORS



1-8 Academic advisors



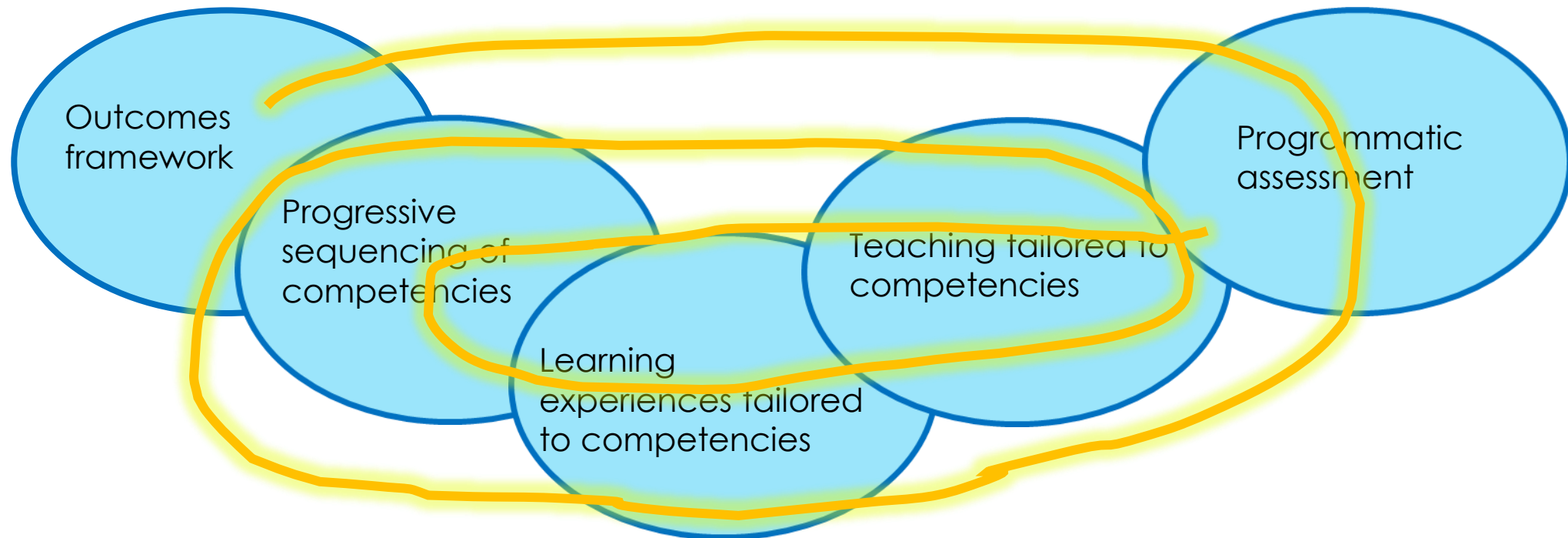
CHALLENGES FACED BY THE ACADEMIC ADVISORS

- **Lack of allocated working time (not sufficient)**
 - too much clinical work
- **Lack of support**
 - from the clinical administration
 - from the program director
- **Lack of instructions**
 - intended learning goals
 - observations and assessment
 - tools?

ELECTRONIC ASSESSMENT SYSTEM

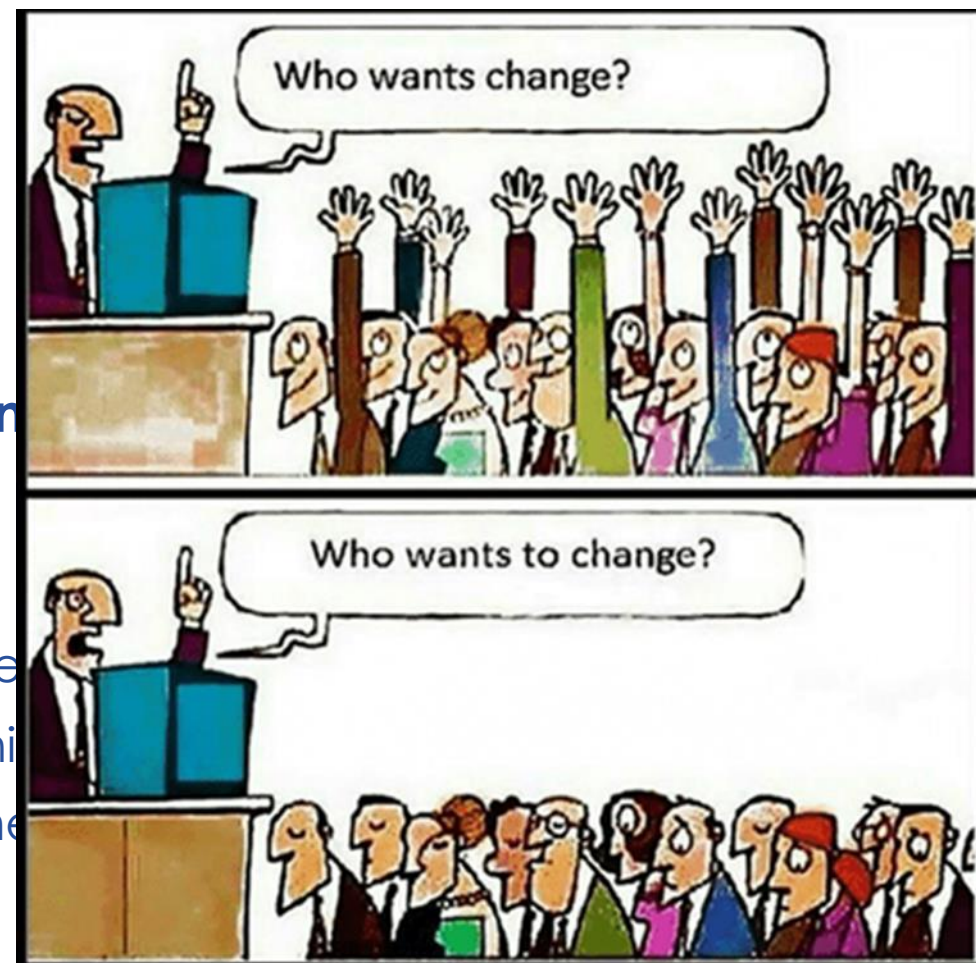
- **ELSA was launched in June 2022**
- **Residents will document their progress**
 - invitation will be sent to supervisors (clinicians)
 - observation and feedback discussion
- **Academic Advisors will encourage clinical supervisors**
 - introduction of formative assessments
- **-> Pushing and pulling**
- **Incentive: Residents are obliged by the statute to document their competency**

THE FIVE CORE COMPONENTS



CONCLUSIONS

- **Construction of the EPAs is just a start**
 - introduction of the principles
- **The importance of definitions: don't take anything for granted**
- **Implementation of CBME is a huge effort**
 - construction of a shared mental model
 - definition of learning outcomes at clinical level
 - construction of structured teaching and learning
 - construction of observation practice, assessment
- **"It is a marathon, not a sprint"**



**IN THEORY, PRACTICE WILL BE EASY.
IN PRACTICE IT IS NOT.**

