

Workplace Based Assessment (WBA)

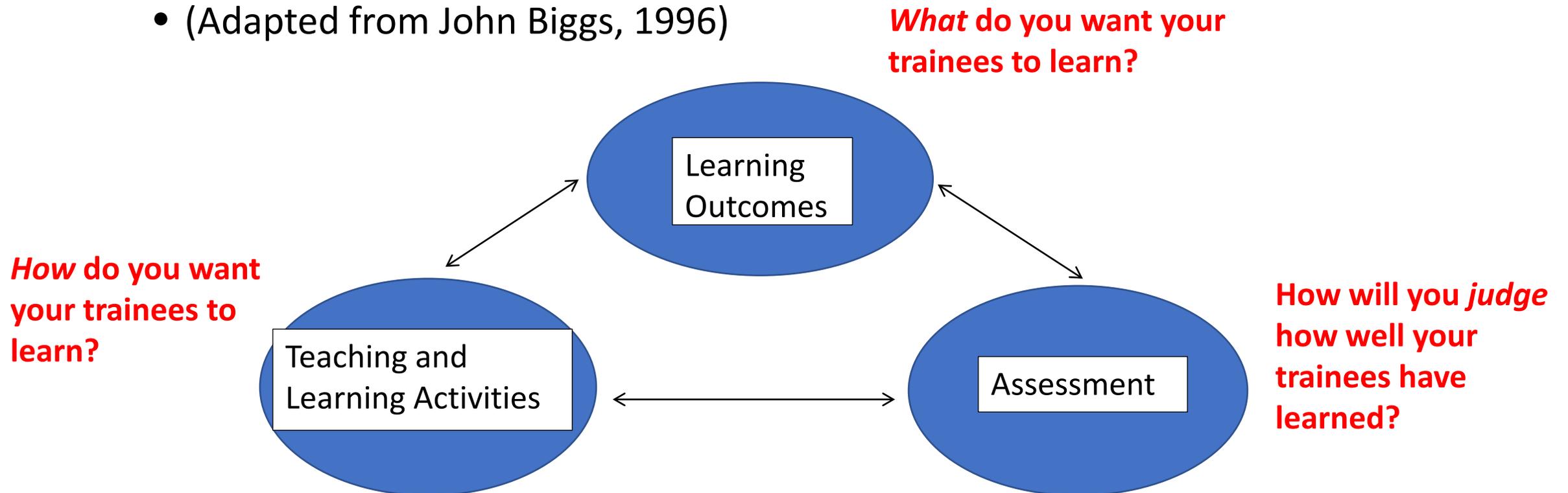
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Assessment Subgroup Chair

Curriculum

- **What** do we want our trainees to learn?
 - **Aims and Learning Outcomes**
- **How** do we want our trainees to learn?
 - **Teaching and learning activities** aligned with Learning Outcomes
 - Informative courses, rotation, EASE, EMAC, regional block, echo, etc
- **How will we judge** how well our trainees have learned?
 - **Assessment**
 - Methods and standards aligned with Learning outcomes

- **Assessment must match learning**
- **Constructive Alignment**
 - (Adapted from John Biggs, 1996)



Why do we want to assess doctors?

- To drive their learning
- To demonstrate competence
- To improve trainee confidence
- To provide feedback about their progress
- To inform decisions about progression to the next stage
- To demonstrate that our training is working
- To provide public confidence

Assessment must be multi-purpose

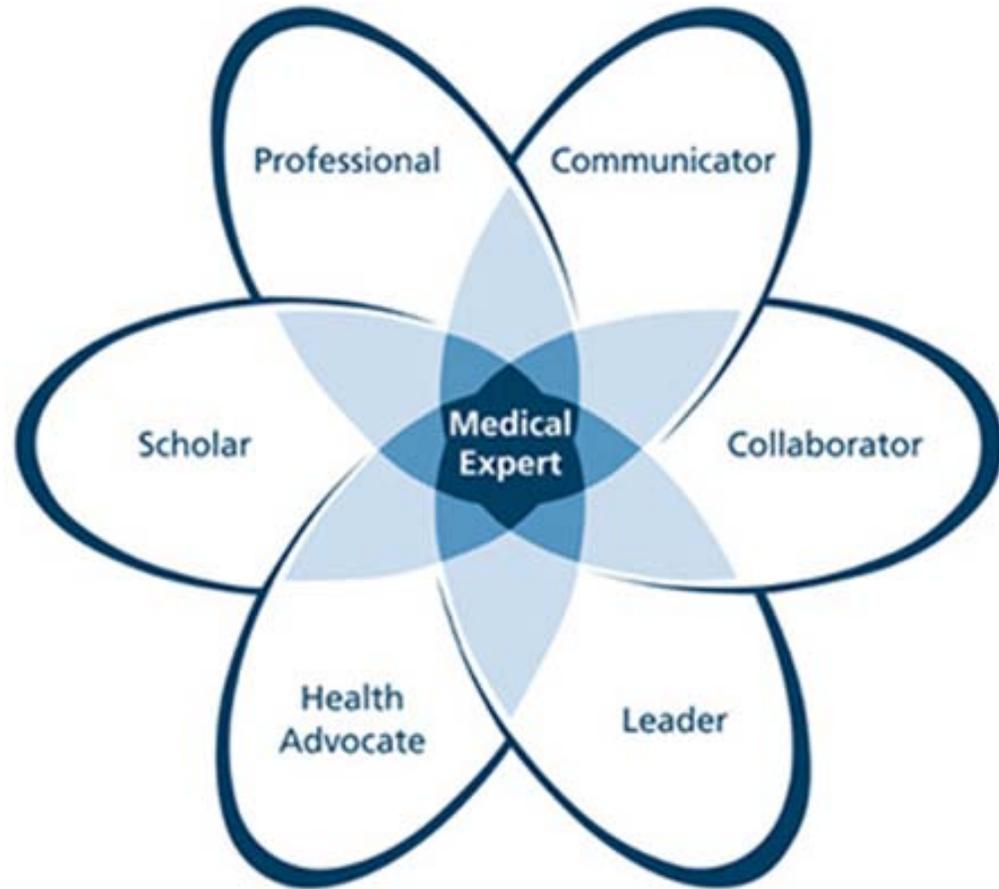
- To drive their learning
- To demonstrate competence
- To improve trainee confidence
- To provide feedback about their progress
- To inform decisions about progression to the next stage
- To demonstrate that our training is working
- To provide public confidence

No single assessment can meet all these requirements.

Different types of assessments have different characteristics that support each of these requirements to different extents

Roles of a doctor

UK GMC Generic Professional Capabilities

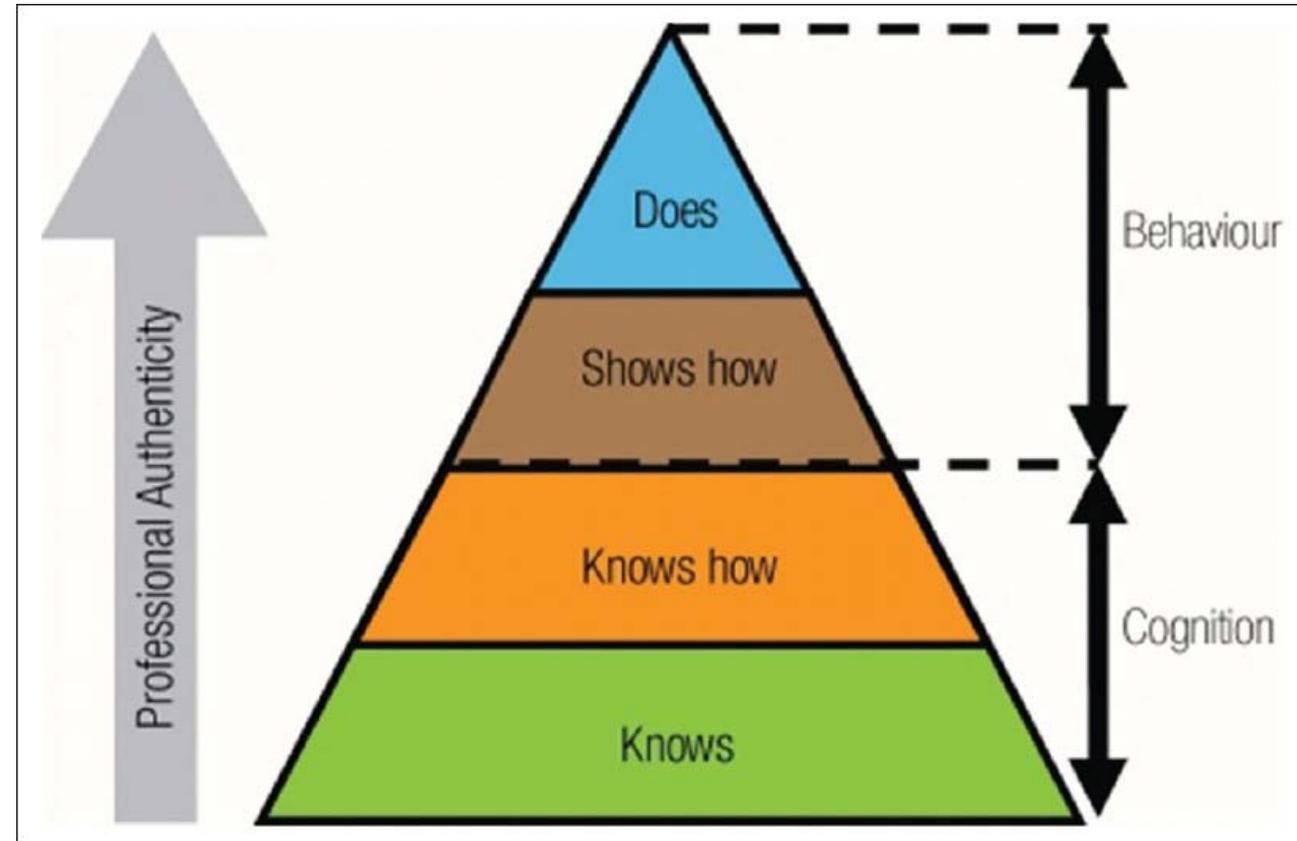


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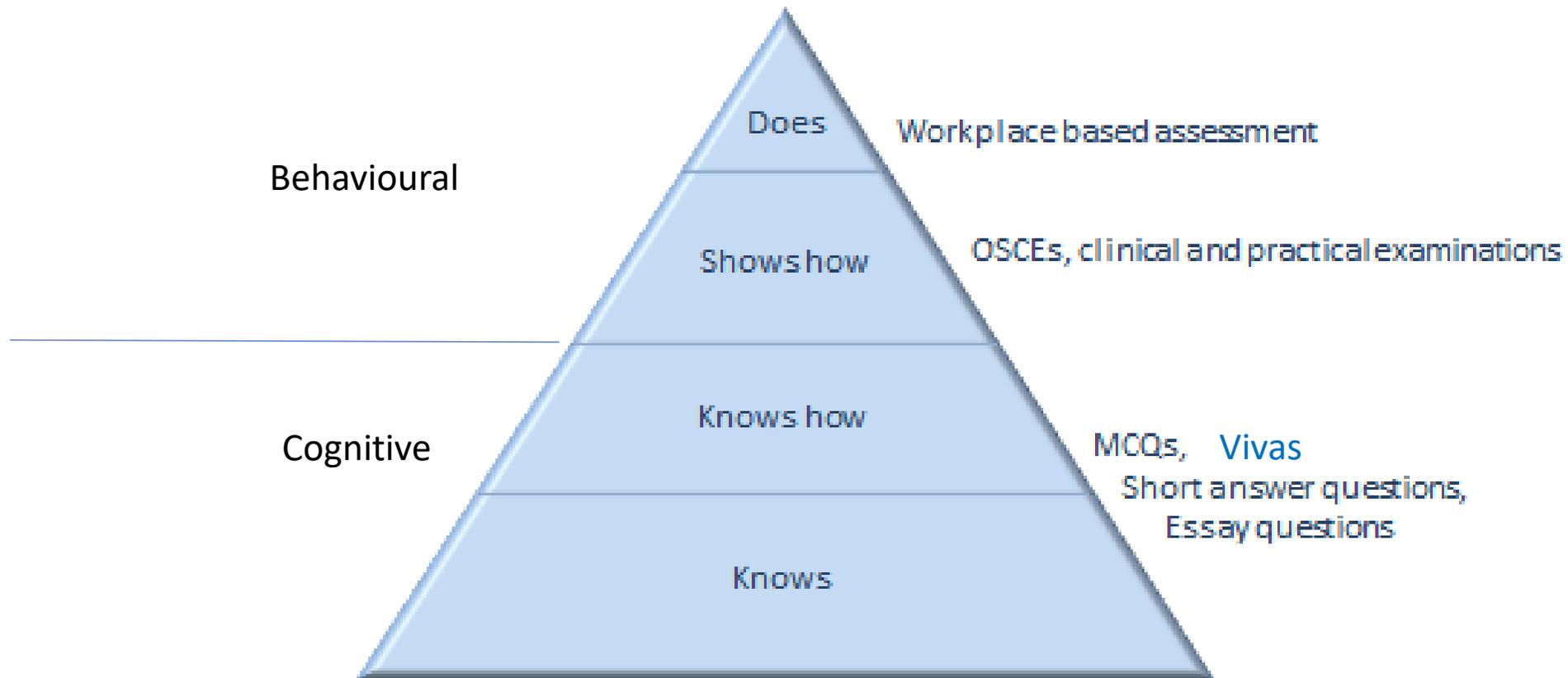


Miller's Pyramid of Clinical Competence (1990)

- Psychologist George Miller proposed a framework for assessing levels of clinical competence back in 1990
- Knows
 - Knows some knowledge
- Knows How
 - Knows how to apply that knowledge
- Shows
 - Shows how to apply that knowledge
- Does
 - Actually applies that knowledge in practice



Miller's Pyramid - Where our assessment fits in



Assessment Programs

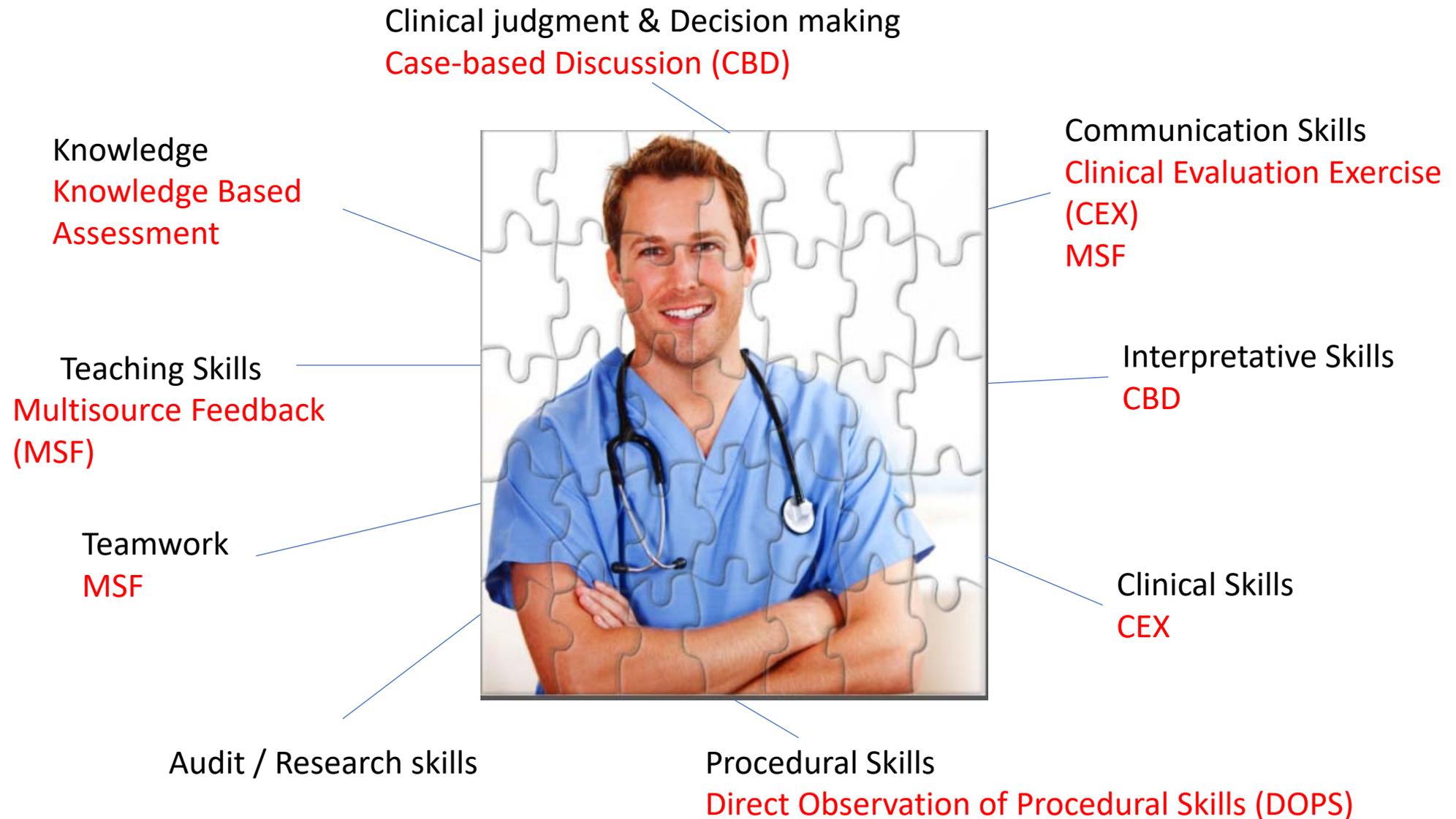
Summative Assessment

- Examinations, (ITA)
- Assessment **of** Learning
- Assessment **of Knows, Knows how and Shows how**
- Mainly knowledge-based
- Can be standardized
- Make progression decision
 - (High-stake, Pass/Fail)
- *Do not measure everything that is required to be a good doctor.....*

Formative Assessment

- Workplace-Based Assessment
- Assessment **for** Learning
- Facilitates learning, *Feedback*
- Assessment of **Does**
- Competence/Teamwork/Professionalism
- Cannot be standardized, but has validity
- Low stake, no pass or fail
- Focus on practice improvement
- Multiple assessment tools, multiple assessors, multiple data points

Assessing the Skills/Competencies of a Doctor – assessing the pieces



Workplace Based Assessments (WBA) in the New HKCA Curriculum

- WBA is one of the assessment strategies in the new curriculum to assess competency.
- Done in the workplace
- An assessor directly observing a trainee as s/he performs procedural skills and provides care to patients.
- A formative assessment (assessment for learning)
- Intention – to stimulate learning and improve performance
- No grade or mark, no pass or fail
- **Feedback** is the most important element in WBA.

Feedback

- High quality
- Constructive
- Time and timely
- Provision of specific information
- Based on objective observation that is relevant to the trainee
- Provided by a source perceived by the trainee to be credible
- Occurs in the presence of psychological safety
- May include an action plan for improvement

Goals of WBAs

- To assess competencies, corresponding to the learning outcomes
- To offer ongoing constructive feedback, aim – to improve performance
- To provide a framework to support teaching and learning in the clinical environment
- To engage the trainer and trainee in professional educational conversations
- To enable trainees to reflect on their own practice
- To **record and document** holistically a trainee's clinical performance
- ***Assessment for learning***

The WBA Tools

- Direct Observation of Procedural Skills (DOPS)
- Clinical Evaluation Exercise (CEX)
- Case-Based Discussion (CBD)
- Anaesthesia List Management Tool (ALMAT)
 - During Provisional Fellowship Year
- Multisource Feedback (MSF)
 - One during Basic Training, One during Higher Training, One during PF Year

Direct Observation of Procedural Skills (DOPS)

- For assessing technical skills e.g. arterial cannulation
- For assessing trainees who have learned a new skill.
- Can be assessed in real patients, or in simulated environment e.g. the use of a defibrillator.
- Feedback should focus on the whole event, not just the success or failure of the procedure.
 - E.g. understanding of the clinical procedures and alternatives, risks and benefits, anatomy, etc.
 - Safety concerns
 - Documentation, interaction with patients, etc

Clinical Evaluation Exercise (CEX)

- The CEX tool looks at the trainee's performance in **a case** rather than focusing on a specific procedure, for example the anaesthetic management of a patient with renal failure.
- The trainer will act primarily as an observer
- Trainee manages the major part of the clinical work.
- The trainer will discuss the case management with the trainee to assess the understanding of the topic and stimulate self reflection.
- Possible areas of feedback
 - Anaesthetic plan, techniques and procedures, management of the problems arose, safety concerns, teamwork, etc

Case-Based Discussion (CBD)

- CBDs offer an opportunity to discuss a case in depth and to explore thinking, judgement and knowledge.
- They provide a useful forum for reflection on practice, especially in cases of critical incidents or complications.
- When undertaking a CBD, **the trainee should bring the case notes and/or anaesthetic chart of a case that they wish to discuss *in retrospect*.**
- A 'virtual' CBD can also be undertaken, e.g. management of a patient with ruptured AAA.
- The conduct and management of the case as well as the standards of documentation and follow up should be discussed.

Anaesthesia List Management Tool (ALMAT)

- When undertaking an ALMAT, a trainee is given responsibility to run a list by himself / herself.
- The tool is assessed only during the Provisional Fellow Year.
- It allows assessment of both clinical and non-clinical skills.
- Trainee should ask for this assessment before the start of the list.
- Possible areas of feedback:
 - Case order on the list – considerations and rationales
 - Communication with surgeons: case complexities, positioning, etc
 - Preparation of equipment
 - People management (Teamwork)
 - Management of potential overrun

Documentation

- Electronically
- Use an app on a smart phone or computer
- Better to use supervisor's smart phone because the supervisor may take some time to write
- Select "Add new WBA" (vs "Review WBA")
 1. Enter trainee's username / password (by trainee) – should not "remember" on the smart phone
 2. Enter supervisor's username / password (by supervisor) – should not "remember"
 3. Enter the WBA form (by supervisor)
 4. Click "Save"
 5. Both Trainee and supervisor can see the WBA on his profile (under Review WBA): With "Pending review" button at end → trainee can click to see supervisor's comments (view only) and add comments into trainee's comments section. → click "Submit" (once submitted cannot amend. → the entry under trainee's WBA profile will be "Submitted"

WBA Form

Trainee's Name _____

Signature _____ (user name / password in electronic format)

Supervisor's Name _____

Signature _____ (user name / password in electronic format)

Date _____

Basic Trainee

Higher Trainee

Provisional Fellow

<input type="checkbox"/> DOPS	
General Anaesthesia and Sedation	Regional
<input type="checkbox"/> Arterial line insertion	<input type="checkbox"/> Spinal
<input type="checkbox"/> Central line insertion	<input type="checkbox"/> Epidural / CSE (Non-obstetrics)
<input type="checkbox"/> Transducer set up	<input type="checkbox"/> Peripheral plexus/nerve block (Adults)
Airway Management	Acute pain management
<input type="checkbox"/> Elective Mask Ventilation / LMA / DL/VL +ETT (Adult)	<input type="checkbox"/> Setting PCA machines / postop infusions
<input type="checkbox"/> Rapid Sequence Induction	Quality and Safety
<input type="checkbox"/> FOB intubation	<input type="checkbox"/> Checking of anaesthesia machine and circuit
<input type="checkbox"/> Anaesthesia for Tracheostomy	<input type="checkbox"/> Care of patient in the prone position
<input type="checkbox"/> Airway mnx in a patient with actual / suspected C spine injury	
Paediatrics	Obstetrics
<input type="checkbox"/> Mask Ventilation / LMA / DL/VL +ETT (Paeds)	<input type="checkbox"/> Lumbar Epidural / CSE (Obstetrics)
<input type="checkbox"/> Inhalational induction in paediatric patient	Thoracic
<input type="checkbox"/> Caudal / Penile / Ilioinguinal block (Paeds)	<input type="checkbox"/> Lung isolation and one-lung ventilation
Others, specify	

<input type="checkbox"/> CEX <input type="checkbox"/> CBD	
<u>Corresponding area in curriculum</u>	
Clinical Fundamentals	Specialty Modules
<input type="checkbox"/> GA / Sedation	<input type="checkbox"/> Gen surgery / Urology / Gynaecology / Endoscopy
<input type="checkbox"/> Regional	<input type="checkbox"/> Head and Neck and ENT
<input type="checkbox"/> Airway Management	<input type="checkbox"/> Orthopaedics
<input type="checkbox"/> Periop and Acute Pain Management	<input type="checkbox"/> Paediatrics
<input type="checkbox"/> Periop Medicine	<input type="checkbox"/> Obstetrics
<input type="checkbox"/> Trauma / Crisis / Resuscitation	<input type="checkbox"/> Neurosurgery
<input type="checkbox"/> Safety and Quality	<input type="checkbox"/> Ophthalmology
	<input type="checkbox"/> Remote areas
	<input type="checkbox"/> Cardiac
	<input type="checkbox"/> Thoracic
	<input type="checkbox"/> Vascular
	<input type="checkbox"/> Pain
	<input type="checkbox"/> ICU

Brief Case Description

Areas / Topics Discussed

	Supervisor's Comments (Mandatory, to be filled in by supervisor)	
Overall comment	<input type="checkbox"/> Case/procedure well-conducted. Ready to go on independent practice. <input type="checkbox"/> Case/procedure appropriately conducted. Individual areas for fine-tuning. <input type="checkbox"/> Case/procedure conducted with significant input from supervisor	
What went well?		<u>Suggested areas for comments</u> Planning Preparation Patient interaction Team communication Problem solving Decision making Infection control Self-reflection Documentation Post-procedural care Professionalism
What could have gone better?		
Improvement plan	<input type="checkbox"/> Nil specified <input type="checkbox"/> Targeted clinical experience <input type="checkbox"/> Self-study <input type="checkbox"/> Courses / Simulations <input type="checkbox"/> Others, Specify:	

Trainee's comments

Multisource Feedback (MSF)

- The use of MSF broadens the source of feedback on everyday clinical care, from different disciplines of the team (e.g. seniors, peers, nurses, surgeons and anaesthetic assistants)
- Trainees are expected to complete a minimum of one MSF each during basic training, higher training, and provisional fellowship year.
- It gives an opportunity for members of the multidisciplinary team to provide feedback on a trainee.
- The MSF is a valuable tool for assessing a trainee's professional attitudes and behaviour

- The trainee invites at least 15 people (from a mixture of disciplines) who have worked with the trainee for the past year.
- There should be at least:
 - 6 Seniors (Supervisors from Anaesthesia or ICU),
 - 3 peers (Anaesthetic Trainees)
 - 2 Surgeons
 - 2 Nurses, and
 - 2 Anaesthetic Assistants.
- The trainee's SOT approves the list of assessors to ensure balance.
- Emails will be sent to the assessors through the e-portfolio system.
- A minimum of eight assessors is required to support validity. If the minimum number of assessors is not achieved then the process should be repeated.
- The SOT will receive the summary of the feedback and review the results before meeting the trainee for discussion.
- Further MSFs may need to be undertaken if concerns have been raised, either in the MSF or in the workplace.

Multi-source Feedback (MSF) Assessment Form

Trainee's Name _____

Date _____

Basic Trainee Higher Trainee

Provisional Fellow

- * Remarks
- There will be hyperlink for the explanation of the assessment items
- Chinese translation will be available

How do you rate this doctor in their:	Good	Satisfactory	Below average	Unacceptable	Unable to comment	Other feedback	
Clinical knowledge, Skills and Performance							
1. Ability to diagnose patient problems *							
1. Ability to formulate treatment plan							
1. Ability to update knowledge and skills							
1. Attends patient timely							
1. Technical skills							
1. Ability to multitask and handle stress							
1. Time management and Prioritization							
1. Willingness to teach colleagues							
1. Ability to take up leadership role							
1. Documentation							
1. Awareness of their own limitations							
Communication and Teamwork							
1. Communication with patients +/- relatives							
1. Verbal communication with colleagues							
1. Written communication with colleagues							
1. Being responsible and reliable							
1. integrity							
Interpersonal Relationship							
1. Respects patient's right							
1. Being polite to patient and colleagues							
1. Treats patients fairly and without discrimination							
1. Treats colleagues fairly and without discrimination							

Assessor Role				
Supervisor (Anaesthesia or ICU)	Peer (Anaesthetic Trainee)	Surgeon	Nurse	Anaesthetic Assistant

General comments about this doctor's overall performance
Are there any specific concerns?
How would you think the trainee could become a better doctor?

Required number of workplace-based assessments

- Trainees are required to complete a minimum number of workplace-based assessments according to their training status.
- These tools however are of most value when used as 'assessment for learning'.
- Trainees are encouraged to do more than the minimum to assist them to develop their skills wherever possible.
- Assessors will recommend whether the trainee should repeat an assessment for a particular case or procedure if necessary.

Summary of Minimum Workplace Based Assessments (WBAs) at different stages of training (Clinical Fundamentals)

	FOCUS	DURING BASIC TRAINING	DURING HIGHER TRAINING
GA + Sedation			
CEX/CBD	Themes focusing on learning outcomes listed above	1	1
DOPS	Ultrasound guided Central Venous Cannulation	1	---
	Arterial cannulation	1	---
	Transducer set up and problem solving	1	---
Regional Anaesthesia			
CEX/CBD	Themes focusing on learning outcomes listed above	1	1
DOPS	Spinal Anaesthesia	1	---
	Epidural or Combined Spinal Epidural Blocks (non-Obstetrics)	---	1
	Peripheral plexus / nerve block (sites and approaches not specified, with or without catheter)	1	1
Airway Management			
CEX/CBD	Themes focusing on learning outcomes listed above	1	1
DOPS	Elective airway management in an adult (BVM/LMA/ETT)	1	---
	Rapid sequence induction in an adult	1	---
	Fibreoptic intubation in an adult (including LA of the airway)	1 (CAN BE DONE IN BT OR HT YEARS)	
	Provision of airway management for patient with potential or actual cervical spine instability	1 (CAN BE DONE IN BT OR HT YEARS)	
	Provision of anaesthesia for tracheostomy in an adult	1 (CAN BE DONE IN BT OR HT YEARS)	

Summary of Minimum Workplace Based Assessments (WBAs) at different stages of training (Clinical Fundamentals)

	FOCUS	DURING BASIC TRAINING	DURING HIGHER TRAINING
Acute Pain Management			
CEX/CBD	Themes focusing on learning outcomes listed above To be performed during Acute pain round	1	1
DOPS	Setting up PCA machines or postop analgesic infusions	1	---
Perioperative Medicine			
CEX/CBD	Themes focusing on learning outcomes listed above	1	1
Trauma, Crisis and Resuscitation			
CEX/CBD	Themes focusing on learning outcomes listed above	1	1
Safety and Quality in Anaesthesia			
CEX/CBD	Themes focusing on learning outcomes listed above	1	1
DOPS	Checking of anaesthesia machine and breathing system	1	---
	Care of patient requiring surgery done in the prone position	1 (CAN BE DONE IN BT OR HT YEARS)	

Summary of Minimum Workplace Based Assessments (WBAs) at different stages of training (Surgical Specialties)

	FOCUS	
Anaesthesia for General Surgery, Urology, Gynaecology and Endoscopic Surgery		
CEX/CBD	Themes focusing on learning outcomes listed above	2
Anaesthesia for Head and Neck and ENT Procedures		
CEX/CBD	Themes focusing on learning outcomes listed above	2
Anaesthesia for O&T Procedures		
CEX/CBD	Themes focusing on learning outcomes listed above	2
Paediatric Anaesthesia		
CEX/CBD	Themes focusing on learning outcomes listed above	2
DOPS	Elective airway management in paediatric patient (BVM/LMA/ETT)	1
	Inhalational induction in paediatric patient	1
	Caudal/Penile/Ilioinguinal block In paediatric patient	1

Summary of Minimum Workplace Based Assessments (WBAs) at different stages of training (Surgical Specialties)

	FOCUS	
Obstetric Anaesthesia and Analgesia		
CEX/CBD	Themes focusing on learning outcomes listed above	2
DOPS	Epidural insertion	1
Neuroanaesthesia		
CEX/CBD	Themes focusing on learning outcomes listed above	2
Ophthalmic Anaesthesia		
CEX/CBD	Themes focusing on learning outcomes listed above	2
Anaesthesia Outside Operating Theatre		
CEX/CBD	Themes focusing on learning outcomes listed above	2
Cardiac Anaesthesia and Interventional Cardiology		
CEX/CBD	Themes focusing on learning outcomes listed above	2

Summary of Minimum Workplace Based Assessments (WBAs) at different stages of training (Surgical Specialties)

	Focus	
Thoracic Anaesthesia		
CEX/CBD	Themes focusing on learning outcomes listed above	2
DOPS	Lung isolation and one-lung ventilation	1
Vascular Anaesthesia		
CEX/CBD	Themes focusing on learning outcomes listed above	2
Pain Medicine		
CEX/CBD	Themes focusing on learning outcomes listed above	2
Intensive Care Medicine		
CEX/CBD	Themes focusing on learning outcomes listed above	2

The Workplace-Based Assessment Process

- **Feedback** is the most important element of a WBA
- **Trainees should initiate** WBA relevant to their current unit of training
- Areas for assessment should be identified prior to starting a list, and the trainee should ask the trainer **in advance** to perform an assessment
- A trainer may also suggest conducting a WBA with the trainee. But this must be done with mutual agreement.
- The WBA should not delay, hinder, complicate, or add risk to the clinical work.

- Requesting assessments retrospectively is considered bad practice and is not acceptable, except in Case-Based Discussions
- Linking the assessment to more than one unit of training may be appropriate, if it demonstrates relevance.
- The trainer should **observe** the performance of the trainee, and give immediate verbal **feedback** as well as **suggestions** for future development, further reading etc.
- Trainers should comment on **clinical and non-clinical aspects** of performance, such as professionalism and teamwork
- The assessment should be **documented** on the **e-Portfolio** soon after the assessment.

THE END

THANK YOU

QUESTIONS



Training of Assessors

- 2 Train-the-trainer workshops for WBA
- 13-16 Oct, 2017
- Faculty from the Royal College of Anaesthetists of UK
- At least one representative from each training centre attended the workshop, except the HKEH
- Plan to organize at least 2 more TTT workshops next year
- The trained assessors can also teach the Fellows in their own hospitals about the principles of WBA
 - College will provide training materials
- Our plan – all HKCA Fellows in HA hospitals are capable to conduct WBA for their trainees.