

Assessment Methods in the New Curriculum

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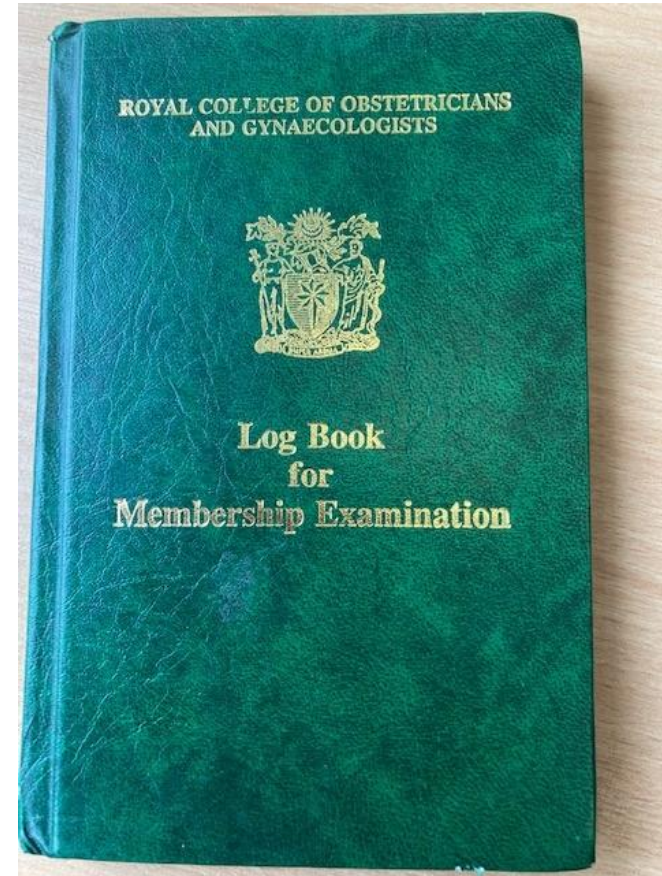
Associate Dean HEE NW

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My Reflection Pre Calman

See one, do one, teach one



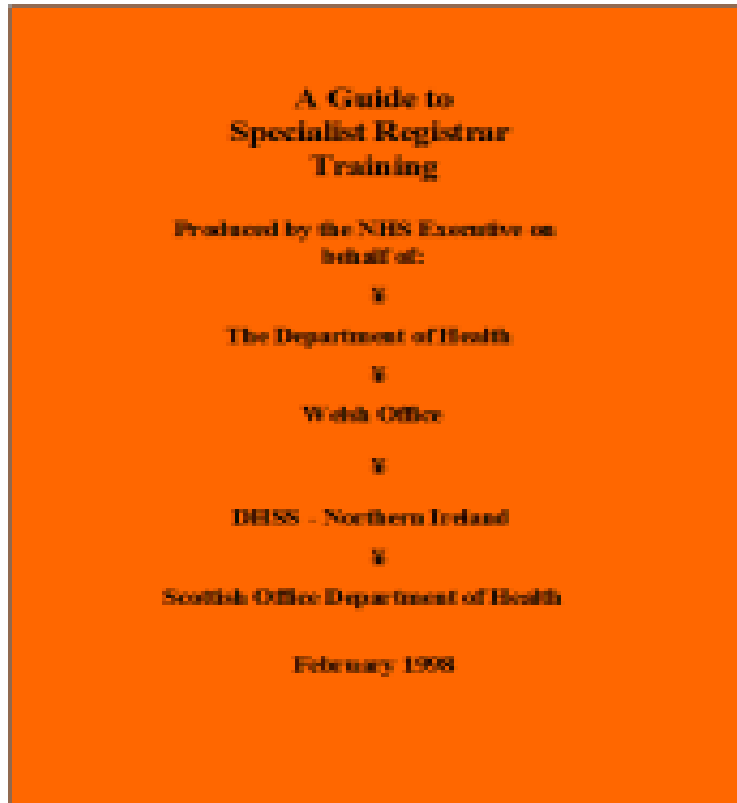
Calman Report 1993

“produce a shorter, more structured and organised training pathway so that independent clinical competence as a consultant can be achieved much earlier than in the past in many disciplines”.

The key features of the new grade may be summarised as:

- Explicit educational and service entry requirements for admission to training programmes.
- Competitive entry.
- A shorter duration of training for most specialties.
- More intensive, managed training.
- **Progress dependent on educational attainment.**
- Graded service responsibility as the trainee progresses.

RITA, Orange Guide 1998



The Orange Guide

Record of In-training Assessment (RITA): Specialist Registrar Grade

Form C: Record of satisfactory progress

Region: _____ Deanery: _____
Name: _____ NTN/VTN/FTN: _____
Specialty: _____ Training programme reference: _____
Royal College/Faculty recommending award of CCST: _____

Date of review: _____

Period covered: from _____ to _____

Year/phase of training programme reviewed (*circle*): 1, 2, 3, 4, 5, 6, or other (*state*) _____

Circle if assessing the result of Stage 1 or Stage 2 of Required Additional Training: Stage 1 Stage 2

Experience gained during period of review (*full details of programme should be attached*):

| Placement/ Post/Experience | Dates: from to | In/out of Programme | PI/FT PI Tm as % FT |
|-------------------------------|-------------------|------------------------|------------------------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |

Documentation taken into account during the review and known by trainee:

1

2

3

4

5

(Name) _____

has successfully completed the assessment requirements for progress to the next/final year/phase of his/her training programme (*delete as required*)

Chairman of Specialty Training Committee (signature) _____ Date _____

I confirm that:

a) I intend to continue with my training programme and wish to retain my NTN/VTN/FTN *(circle)* Y N

b) the core information *Form A* and amendments to it *Form B* are correct.

Specialist Registrar (signature) _____ Date of next review (*unless not relevant*) _____

Workplace Based Assessments

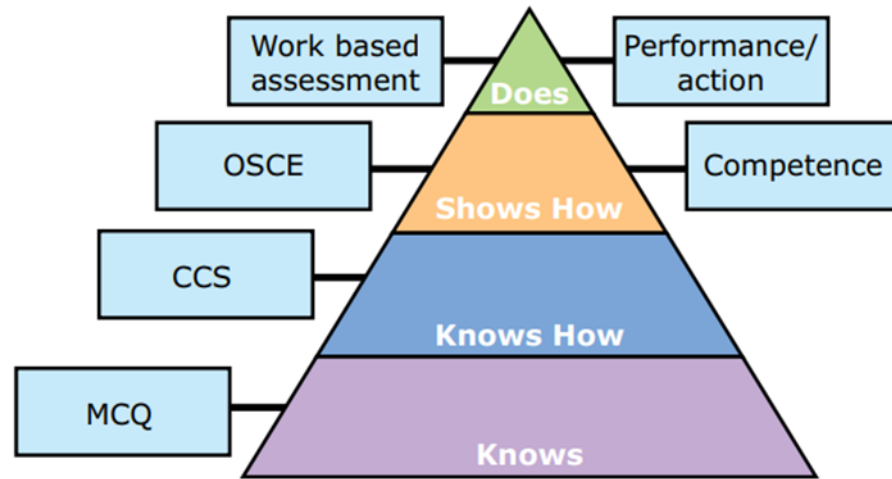


Figure 3: Miller's Pyramid

- Introduced 2005

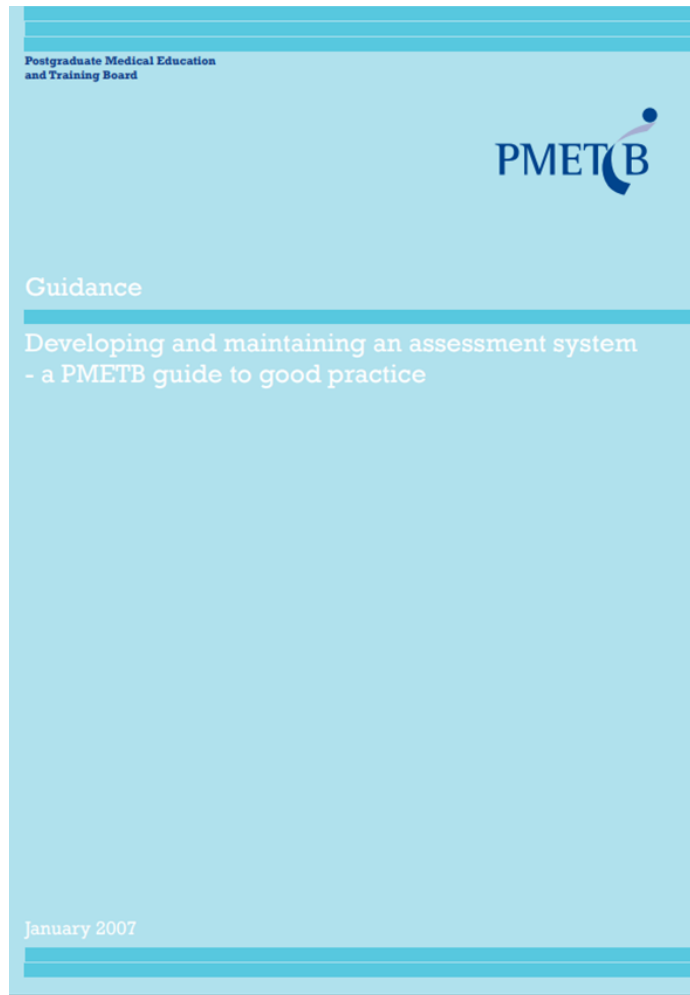
Work based assessment encompasses the true “does” (using judgments about day to day practice, such as multisource feedback) as well as the “shows how” (competence), when an individual knows he or she is being assessed, although it is a routine clinical encounter.

Competence is necessary but not always sufficient for adequate day to day performance.

Norcini JJ, Blank LL, Duffy FD, Fortna GS. The mini-CEX: a method for assessing clinical skills. *Ann Intern Med* 2003;138: 476-81.

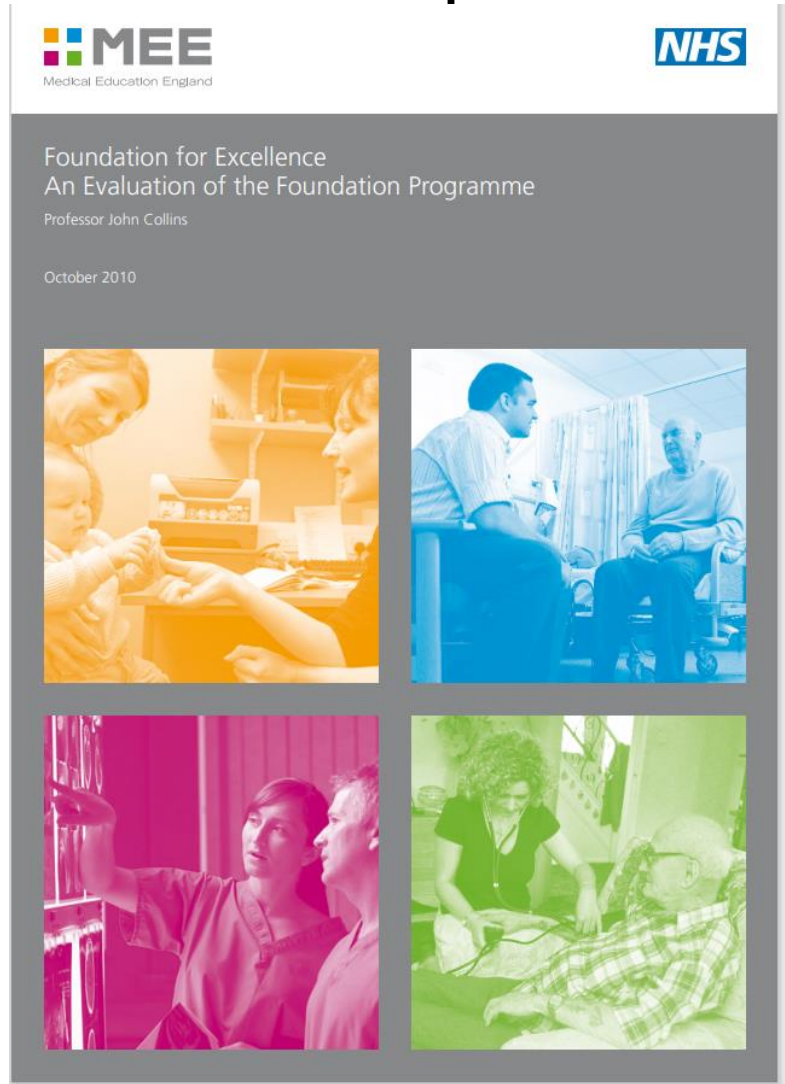
Rethans JJ, Sturmans F, Drop R, van der Vleuten C, Hobus P. Does competence of general practitioners predict their performance? Comparison between examination setting and actual practice. *BMJ* 1991;303: 1377-80

PMETB 2005 Types Of Assessment



- 1) **A real (medical) patient encounter** • an actual individual patient encounter - e.g. by mini-CEX, mini-ACE;
- 2) **Direct observation of a skill** • direct observation of a skill - The consistent feature is that one or more assessors, who are trained in the assessment of that skill, make a judgment about a real life performance.
- 3) **Behaviour over time** • MSF - e.g. TAB, mini-PAT.
- 4) **Behaviour in a real situation or environment** • observation of teamwork - e.g. in psychiatry; • (simultaneous) multiple actual patient encounter - e.g. in emergency room, labour ward.
- 5) **Discussion of clinical materials** • review of a documented incident or of medical records - e.g. case note review;
- 6) **Simulation** • consultation skills - e.g. with 'standard patient' or other role player;
- 7) **Cognitive assessments** • knowledge - e.g. by invigilated test such as MCQ, EMQ;
- 8) **Reflective practice** • review of outcomes of care, or of processes undertaken; • review of trainee-held materials - e.g. file ('portfolio') of achievements; • reflective practice - e.g. reflective diary, written up case, topic or event.

Collins Report Foundation 2010



- Assessment burden too high
- Demand on trainer time, need appropriate training
- Not sure of their validity
- Not discriminating, especially for excellence
- No patient involvement

AoMRC 2009 & 2016

ACADEMY OF
MEDICAL ROYAL
COLLEGES

Improving Assessment: Further Guidance and Recommendations

June 2016

2009

- Role of assessments is to help identify areas for improvement so are formative not summative
- Move from numerical values to standard expected at end of training
- Assessors should be trained

2016

Aim of Assessment

- Enhance and facilitate learning
- Demonstrate regulation and maintenance of standard of practice to the public

AoMRC 2016 Recommendations

Difficulties with use of WPBAs

- Assessor behaviour- tend to positive
- Poor understanding or purpose and methods of WPBAs
- Engagement of trainers
- Summative Assessments- trainees prefer WPBAs as formative

Recommendations

- Feedback and Learning Development
- Training of Assessors
- Stating a **minimum number tends to encourage targeting** that number rather than concentrating on development and feedback
- Use of multiple assessors

Assessment and Learning



Assessment

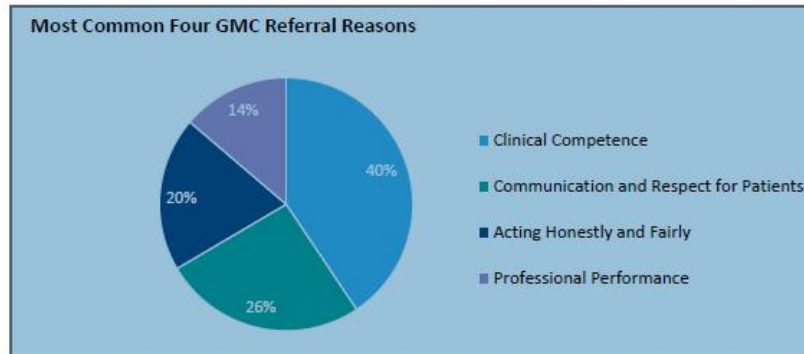
...is the
engine
which drives
student learning

(John Cowan)

- Assessment of Learning (summative)
- Assessment for Learning (formative)

Patient Safety

GMC Generic Professional Capabilities - Why?



"My greatest challenge was how to manage complaints and management issues rather than clinical ones."



GMC fitness to practise data -most concerns about doctors' performance fall into one or more of the nine domains identified in this Generic professional capabilities framework.

Reports from patient safety inquiries recommend the importance of and need for specific training to address individual, team and organisational deficiencies, as well as addressing wider systemic failures.

Shape of Training review 2013 recommended the development of a generic professional capabilities framework based on Good Medical Practice.

GMC Generic Professional Capabilities



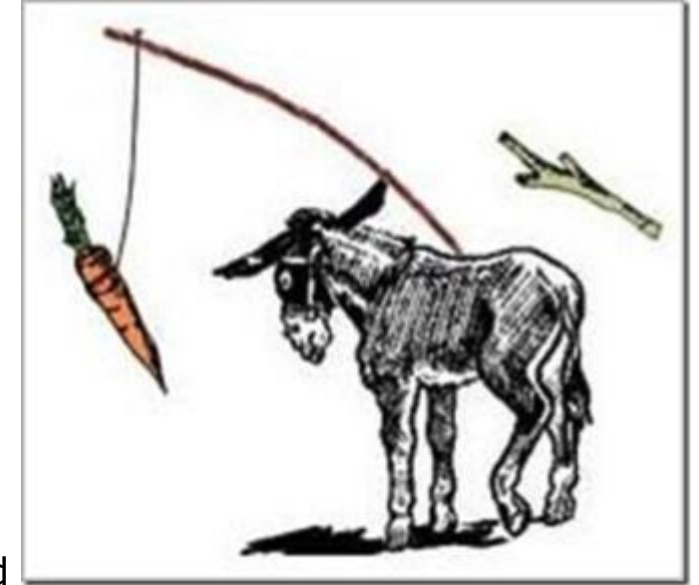
- All curricula had to include GPCs by 2020
- Methods of Assessment via a programme of assessments
- Recognising GPCs are context dependent, not a one time sign off,
 - Evidence can include
 - E portfolio
 - Direct observation
 - Feedback from colleagues
 - Formative and summative assessments
- Minimum requirement
 - CS/ ES reports through the year
 - ES end of year report
 - One MSF per year

Designing and Maintaining Postgraduate Assessment Programmes GMC 2017

- All activity aimed at judging a learner's attainment of curriculum outcomes, whether for summative (determining satisfactory progression in or completion of training), or formative (developmental) purposes.

Assessments need to

- identify learners who have not demonstrated the expected level of performance, attainment or achievement needed to **progress in or complete training** give learners appropriate opportunities to
 - receive timely feedback that provides a basis for action, so that they can understand what is expected at their level of practice and
 - provide them with evidence and guidance as to how they can act to improve their performance and continue to develop.
- As well as reaching minimum standards for safe competent practice, learners should be encouraged and have the opportunities to excel at all stages and levels of training.
- Validity -interpretations and uses of tests that make sense and are supported by appropriate evidence'



Designing and Maintaining Postgraduate assessment programmes GMC 2017

Assessment strategy based on the validity model




Table 1. Putting assessment methods into six categories

The GMC produced a table that categorises assessments used according to a common purpose. Many of the assessments may be similar and the table does not list all assessments identified within the curricula.

| Category | Focus | Assessments |
|---------------------------|--|---|
| Clinical interaction | Assessment of clinical skills, including specialty-specific variations – consultation, history-taking and clinical reasoning | Mini-CEX, ACE, ECE, Mini-ACE, A-CEX, I-CEX, ICM-CEX, CSA, ACAT, AKT, COT |
| Procedures | An assessment that focuses upon a trainee's procedural competence | DOPS; Rad-DOPS, Mini-IPX, DOST, DORPS, Direct Observation of Clinic, PPS, OSATs, NLS, ALMAT |
| Multisource feedback | Individual assessment involving feedback from colleagues or patients/lay persons with whom the doctor works | MSF, TAB, PS, Mini-PAT, Team Observation, SPRAT, SHEFFPAT/PAED CCF |
| Professional non-clinical | Other professional non-clinical skills | SAIL, AUDIT, AA, PMAT |
| Discussion-based | An assessment that uses discussion to perform an assessment of a trainee's decision-making skills | CbD, PBD, PBA, CP, CBDGA |
| Examination | A formal test usually under timed conditions | AKT, MCQ, EMQ, SCE, SOE, OSCE, KBA, CRP |

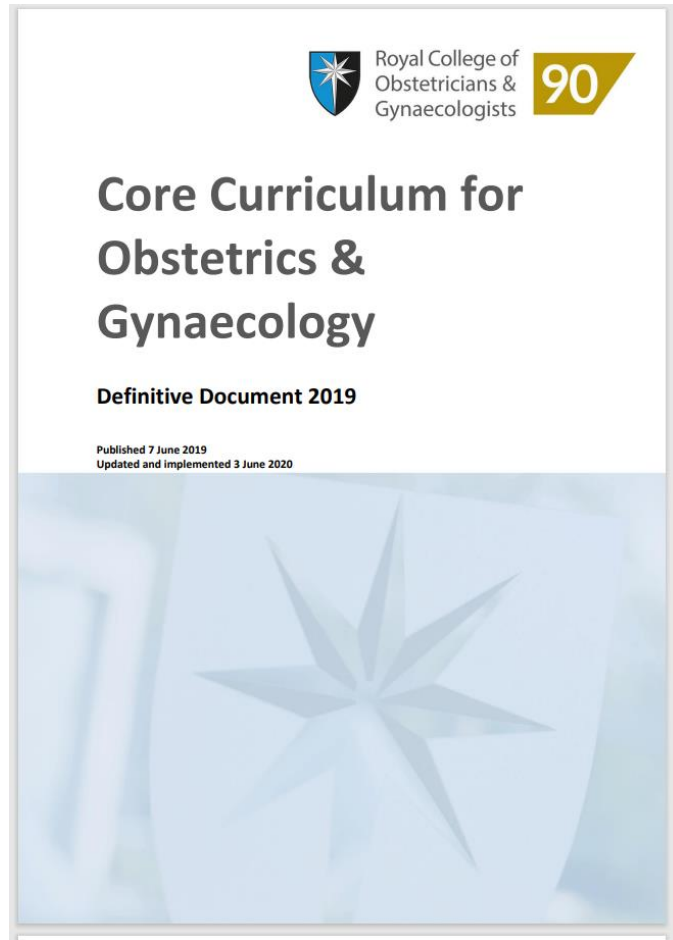
Designing and Maintaining Postgraduate assessment programmes GMC 2017



A programme of assessment refers to the integrated framework of exams, assessments in the workplace and judgements made about a learner during their approved programme of training.

- The importance and centrality of *professional judgment..*
- Assessors must use their *professional expertise and experience.....*
 - A coherent and integrated programme of assessment will include how professional judgements are used and collated to support decisions on progression and satisfactory completion of training.

Implementing New Curriculum - RCOG experience



- *A highly skilled Obstetrician and Gynaecologist with the appropriate knowledge and attitudes to lead and deliver high quality care; taking account of patient's needs and advocating for women's healthcare.*
- *This will involve a questioning approach to research and quality improvement.*
- *Working well in teams is essential for safe, effective patient care; obstetricians and gynaecologists must be good communicators, supportive of staff and happy to share their expertise and experience as well as being open to the views of others.*
- *On completing training the individual will be prepared for lifelong learning, which will allow them to be adaptable and flexible for a modern NHS.*

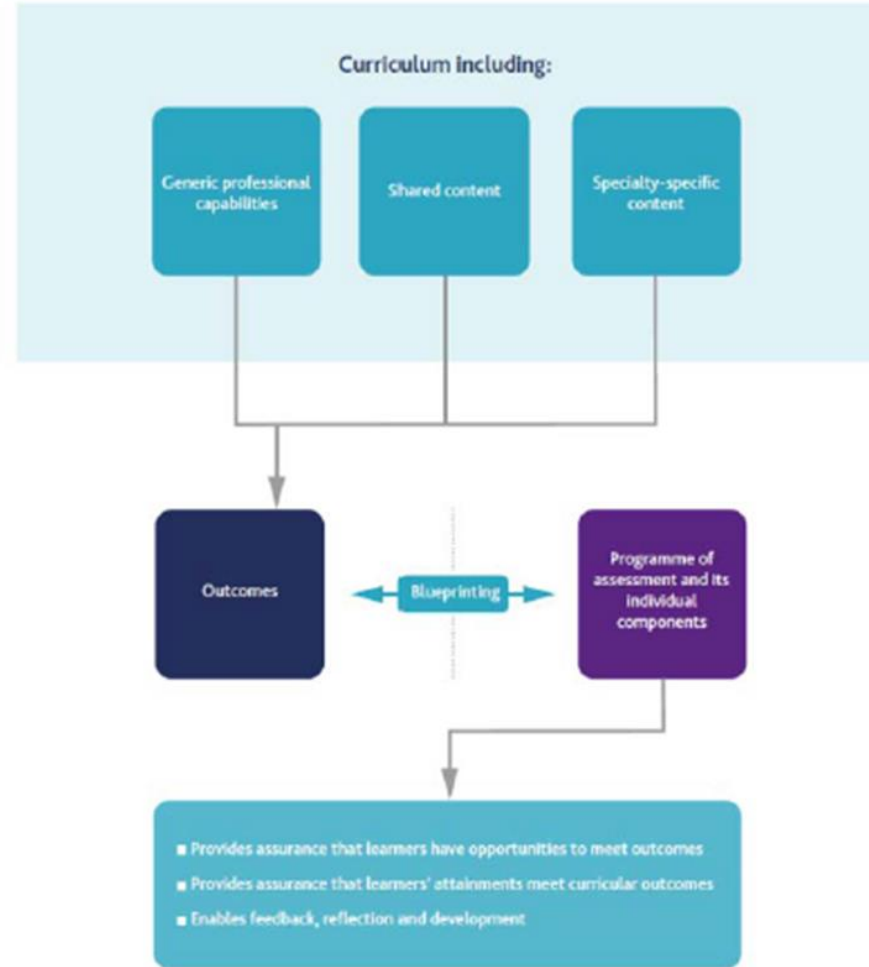
Capabilities in Practice

Table 1 – Professional Identities and Capabilities in Practice

| Developing the doctor (generic) | |
|---|---|
| <i>PROFESSIONAL IDENTITY: HEALTHCARE PROFESSIONAL</i> | |
| CiP 1 | The doctor is able to apply medical knowledge, clinical skills and professional values for the provision of high-quality and safe patient-centred care |
| CiP 2 | The doctor is able to successfully work within health organisations |
| CiP 3 | The doctor is a leader who has vision, engages and delivers results |
| CiP 4 | The doctor is able to design and implement quality improvement projects or interventions |
| CiP 5 | The doctor understands and applies basic Human Factors principles and practice at individual, team, organisational and system levels |
| <i>PROFESSIONAL IDENTITY: RESEARCHER, SCHOLAR AND EDUCATOR</i> | |
| CiP6 | The doctor takes an active role in helping self and others to develop |
| CiP7 | The doctor is able to engage with research and promote innovation |
| CiP8 | The doctor is effective as a teacher and supervisor of healthcare professionals |
| Developing the Obstetrician & Gynaecologist (specialty-specific) | |
| <i>PROFESSIONAL IDENTITY: CLINICAL EXPERT</i> | |
| CiP9 | The doctor is competent in recognising, assessing and managing emergencies in gynaecology and early pregnancy |
| CiP10 | The doctor is competent in recognising, assessing and managing emergencies in obstetrics |
| CiP11 | The doctor is competent in recognising, assessing and managing non-emergency gynaecology and early pregnancy care |
| CiP12 | The doctor is competent in recognising, assessing and managing non-emergency obstetrics care |
| <i>PROFESSIONAL IDENTITY: CHAMPION FOR WOMEN'S HEALTH</i> | |
| CiP13 | The doctor is able to champion the healthcare needs of people from all groups within society. |
| CiP14 | The doctor takes an active role in implementing public health priorities for women and works within local, national and international structures to promote health and prevent disease. |

GMC Linking Curriculum and Assessment

Assessment should link to curriculum through a coherent strategy and blueprint



Programme of Assessment

Table 9 - Blueprint of Assessments mapped to CIPs

| CIPs (short title) | OSATS | Mini-CEX | CbD | NOTSS | TO1/TO2 | Reflective practice | MRCOG | | |
|---|-------|----------|-----|-------|---------|---------------------|--------|--------|--------|
| | | | | | | | Part 1 | Part 2 | Part 3 |
| Developing the doctor - Generic CIPs | | | | | | | | | |
| 1. Clinical skills and patient care | | X | X | X | X | X | | | X |
| 2. Working in health organisations | | X | | | X | | | X | |
| 3. Leadership | | | | X | X | X | | | |
| 4. Quality improvement | | | | | | | | | |
| 5. Human factors | | | | X | X | X | | | |
| 6. Developing self and others | | | | X | X | X | X | | |
| 7. Innovation and research | | | | | | | | | |
| 8. Educator | | | | | X | X | | | X |
| Developing the obstetrician and gynaecologist- Specialty CIPs | | | | | | | | | |
| 9. Emergency gynaecology and early pregnancy | X | X | X | X | X | X | | X | |
| 10. Emergency obstetrics | X | X | X | X | X | X | | X | |
| 11. Non-emergency gynaecology and early pregnancy | X | X | X | X | X | X | | X | |
| 12. Non-emergency obstetrics | X | X | X | X | X | X | | X | |
| 13. Non-discrimination and inclusion | | | | | X | X | | | X |
| 14. Health promotion | | X | X | | | X | | | X |

5.8 Blueprint of assessments mapped to CIPs


Table 8 – Matrix of Progression

| | Basic | | Intermediate | | | Advanced | |
|---|-------------------------|-----------|--------------|-----------|-----------|-------------|---|
| | ST1 | ST2 | ST3 | ST4 | ST5 | ST6 and ST7 | |
| Formative workplace-based assessments | | | | | | | |
| These are encouraged as a method to provide evidence for CIPs. The aim is for quality over quantity. Useful WBAs will challenge, act as a stimulus and mechanism for reflection, uncover learning needs and provide an opportunity for developmental feedback | | | | | | | |
| Mini-CEX | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| CBD | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| NOTSS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Reflective practice | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Formative OSATS | Optional but encouraged | | | | | | |
| Summative workplace-based assessments | | | | | | | |
| Competent Summative OSATS* | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| TO2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Other evidence required for ARCP (to be specified in guidance for each CIP) | | | | | | | |
| MRCOG examinations | | | | | | | |
| Part 1 | desirable | essential | | | | | |
| Part 2 | | | desirable | desirable | essential | | |
| Part 3 | | | | desirable | essential | | |
| Educational Supervisor's Report | | | | | | | |
| Supervisor's report | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Trainee feedback | | | | | | | |
| Training evaluation form (TEF) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

*Each procedural skill requires 3 summative OSATS assessed as being competent prior to being able to perform the practical procedure independently with support.

Entrustable Professional Activities (EPA)

‘A clinical activity which a trainee can be trusted to complete with indirect supervision once they have demonstrated the necessary competence’
(Olle ten Cate, 2005)




Complements
competency by
translating the
broad concept of
competency in to
everyday practice


AoMRC-2016

- EPAs are units of professional practice defined as tasks or responsibilities that trainees are entrusted to perform unsupervised once they have attained sufficient specific competence.
- An EPA is a description of a **clinical task** that frames competencies within the context of clinical practice. The implementation of EPAs in a training programme requires the identification of appropriate professional activities as EPAs.

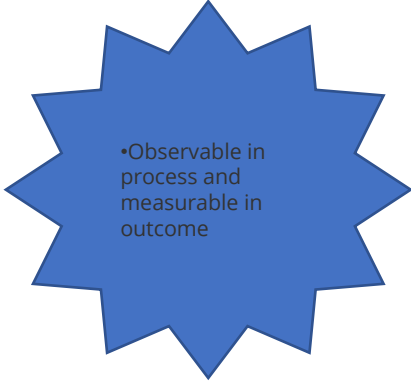
Features of entrustable professional activities (AMEE Guide 140)



Has a clearly defined beginning and end




specific and focused




•Observable in process and measurable in outcome




Describes a task




•Reflects work that is essential and important to the profession



Involves application and integration of multiple domains of competence

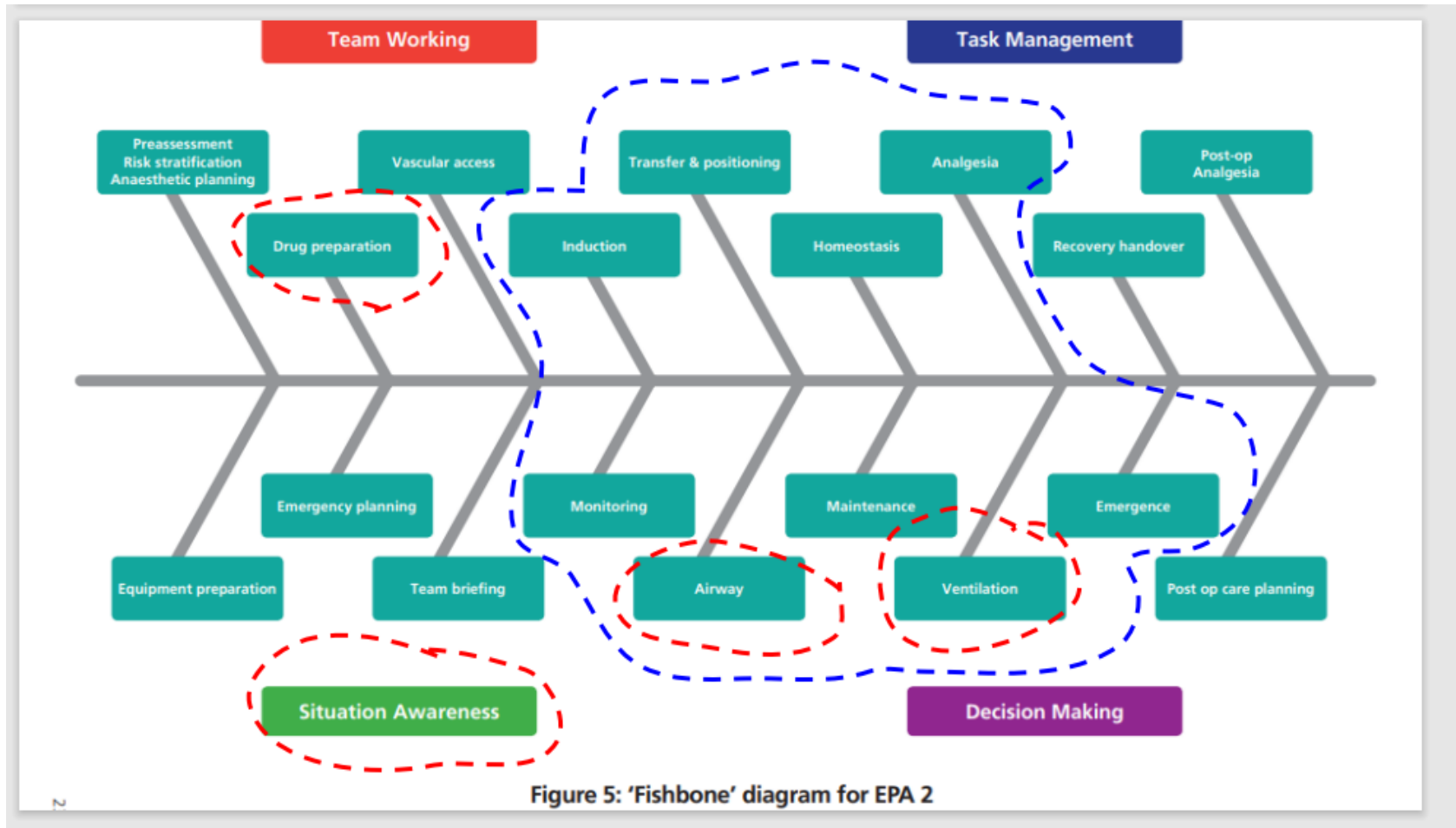


Requires application of knowledge, skills, and/or attitudes acquired through training



•Independently executable to achieve a defined clinical outcome

Royal College of Anaesthetists



What to use to Assess EPAs

Table 2 of 2

Table 2. Assessment tools suitable as sources of information in the workplace to inform EPA entrustment decisions.

| Approaches | Methods | Tools |
|-------------------|-------------------------------|--|
| Watching | Brief and focused observation | Mini Clinical Examination exercise (mini-CEX); Direct observation of procedural skills (DOPS) (with or without video recording); in some cases <i>insitu</i> simulation (Patterson et al. 2013) or audio-based evaluation (Sanatani et al. 2020) |
| | Longitudinal observation | Multisource feedback (MSF) or 360 ⁰ Evaluation |
| Talking | Brief conversations | Case-based discussions, Chart-Stimulated Recall, One-minute Preceptor, SNAPPS, Entrustment-based discussions |
| Reviewing results | Product evaluation | Entries in Electronic Health Record; Discharge letters; QI reports; Resident-Sensitive Quality Measures (RSQM)(Schumacher et al. 2018) |

CSV

RCOG Entrustability Scale

Table 3 shows the five supervision levels that are based on an entrustability scale which is a behaviourally anchored ordinal scale based on progression to competence and reflects judgments that have clinical meaning for assessors¹.

Table 3 – Levels of supervision

| Level | Descriptor |
|---------|---|
| Level 1 | Entrusted to observe |
| Level 2 | Entrusted to act under direct supervision: (within sight of the supervisor). |
| Level 3 | Entrusted to act under indirect supervision: (supervisor immediately available on site if needed to provide direct supervision) |
| Level 4 | Entrusted to act independently with support (supervisor not required to be immediately available on site, but there is provision for advice or to attend if required) |
| Level 5 | Entrusted to act independently |

Entrustability Scales - Questions for Trainers

Table 1

The Ottawa Surgical Competency Operating Room (O-SCORE) Scale^a: An Entrustability-Aligned Anchor Scale

| Level | Descriptor |
|-------|--|
| 1 | "I had to do" (i.e., requires complete hands on guidance, did not do, or was not given the opportunity to do) |
| 2 | "I had to talk them through" (i.e., able to perform tasks but requires constant direction) |
| 3 | "I had to prompt them from time to time" (i.e., demonstrates some independence, but requires intermittent direction) |
| 4 | "I needed to be there in the room just in case" (i.e., independence but unaware of risks and still requires supervision for safe practice) |
| 5 | "I did not need to be there" (i.e., complete independence, understands risks and performs safely, practice ready) |

^aThe authors adapted the scale from Gofton W, Dudek N, Wood T, Balaa F, Hamstra S. The Ottawa surgical competency operating room evaluation (O-SCORE): A tool to assess surgical competence. Acad Med. 2012;87:1401-407.

Promoting Excellence

Figure 4. Level descriptors for excellence

| Things that we do – needs to be observed (OSATs) | |
|--|--|
| Levels | Descriptor |
| 10 does and creates | Develops new technique |
| 9 does and inspires | Skills widely (regionally/internationally) recognised |
| 8 does and teaches | Teaches, rescues (does not need to take over) |
| 7 does and teaches | Teaches, rescues (able to get someone out of trouble but takes over) |
| 6 does and teaches | Teaches |
| 5 does | Independently (unsupervised) |
| 4 does | Independently (indirect supervision) |
| 3 does | Supervised |
| 2 does | Simulation |
| 1 sees | Real, simulation, video and text |

My Final Reflection

See one, do one, teach one

