Workplace-based Assessments
Lessons from Anaesthesiology

E. Van Gessel, MD, MER; University Geneva
The plan

1. Where we are in Anaesthesiology
2. What are the specificities
3. What tools for assessment
4. The barriers
European training guidelines

- What has been done at the European level:
  - New curriculum
  - Competence statements
  - Learning objectives

25) Has your country endorsed the EBA/UEMS training guidelines and syllabus

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Yes</td>
<td>26.3%</td>
</tr>
<tr>
<td>No</td>
<td>52.6%</td>
</tr>
<tr>
<td>To be endorsed soon (next 12 months)</td>
<td>21.1%</td>
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</table>
Assessment of learners / WPBA

- Align training and learning with assessment
Cambridge model

Busy OR, guidelines, patient expectations…

Physical or mental health, family, relationship with peers…

Test situation

Rethans JJ et al, Med Educ 2002
The pluses of Anaesthesiology

- Majority of learning occurs in clinical settings

**Assessment:**

- OR: one to one allows formative interactions
  - Guidance and Motivation
  - Accurate feedback (prescriptive, relevant, focused)
  - Visible technical skills

- Different settings (OR, consultation, labour, emergency, etc…)

- More “linear” training => Duration of time of training can be varied

- Use of simulation tools

- Possibilities of focusing only on certain competencies, interactions…(e.g, team-working)

- Questions on thought process and decision-making

Kathirgamanathan-Woods. BJA-Cont Educ in Anaesth, Crit care & Pain 2011
The minuses of Anaesthesiology

- OR: uncomfortable experience for the novice
- Non-verbal communication
- Patient safety is an issue, patient as primary focus
- Learners may have a more passive role in challenging cases
- Maintaining efficiency of the OR list
- Large number of different clinical teachers => variety in practice is confusing!
- Rapid OR case turnover = no time for questions and discussion
- Identifying “teachable moments”

Teaching, learning, assessing…

Context

Learner

Teacher

Assessment

Wong A Can J Anaesth 2011
The highlights of good WPBA assessment

- Equally valuable for the trainee and the trainer
- Formative tool intended to give feed-back
  - “75% of studies show that trainees/specialists change their behaviour when feedback is provided regularly over several years by recognized experts”.
  

- Different tools from mini-CEX to DOCE: varying sampling numbers, good or excellent reliability and validity

- Training faculty to perform and use these methods
Assessment as a process!

CLINICAL SKILLS

YEAR 1
Evaluation
Evaluation
Evaluation
Evaluation

YEAR 2
Evaluation
Evaluation
Evaluation
Evaluation

YEAR 3
Evaluation
Evaluation
Evaluation
Evaluation

YEAR 4
Evaluation
Evaluation
Evaluation
Evaluation

YEAR 5
Evaluation
Evaluation
Evaluation
Evaluation

EDUCATIONAL PF

Activities
(e.g. M&M presentations, lectures, publications)

Certified modules & courses
(e.g. Congress and seminar, ACLS, PALS, Simulator, Airway management course)

EXAMINATION

In-training
EU exam

European MCQ
Basic & Clinical Sciences

European/Swiss
oral Exam

ASSESSMENT
SUMMARY

∑ Evaluation

∑ ACE credits

∑ Evaluation

∑ ACE credits

∑ Evaluation

∑ ACE credits

∑ Evaluation
At the European level:

- Define an Electronic portfolio
- Propose elements to compose this PF
- Propose and provide tools for structured evaluation
- Provide training sessions for faculty

MONITOR TRAINEE PROGRESS
At national level (CH)

### Trainee evaluation and DOCE = Both evaluations complement each other

### Trainee evaluation tool
- Regular feedback provided during or after training periods, 3-4x/yr
- Provided by email, or on paper (questionnaires...)
- Several evaluators/peers-coworkers (or patients?) over a defined period
- *Summarized over a year* for personal evolution and comparison within groups of trainees

### DOCE: direct observation of clinical encounter
- 2-3x per year? Or more?
- One to one
- Is designed to provide immediate feed-back on a doctor’s performance of clinical skills on the basis of a structured observation

<table>
<thead>
<tr>
<th>YEAR 1</th>
<th>Evaluation</th>
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<td>Evaluation</td>
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The Resident Evaluation Tool (RET)

Evaluation system based on 3 elements:

1. The electronic evaluation system of the Dpt of Anaesthesia, Basel Switzerland

2. The ANTS system from Aberdeen

3. The mini-CEX
The Resident Evaluation Tool (RET) Questionnaire

### Resident Evaluation Tool

<table>
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<tr>
<th>Evaluation</th>
<th>Portefeuille</th>
<th>Administration</th>
<th>Gestion des questions</th>
<th>Aide</th>
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<tbody>
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#### Questionnaire

**Désignation**

Anesthésie Assistenzärzte

**Groupes de questions**

<table>
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<tr>
<th>N°</th>
<th>Désignation</th>
<th>Nombre de questions</th>
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<tr>
<td>1</td>
<td>Compétences cliniques</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Compétences techniques</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Gestion des tâches</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Travail d’équipe</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Conscience de la situation</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Prise de décision</td>
<td>3</td>
</tr>
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<td>7</td>
<td>Formation continue</td>
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</table>
Evaluation diagram generated with the RET

Courtesy of Prof. A. Urwyler, UHBS
Our challenge in Assessment

- We have the competencies; we have the tools!
- Anesthesiology and ICM have been pioneers in many of the concepts populating these competency frameworks
- Do we really do it? Is it working?
- Why not?
- Why does it work in some countries or rather does it work in certain countries??
  - Strong regulatory culture in Canada, USA and UK to ensure application of frameworks to all specialties
  - Top-down manner and process versus bottom-up approach?
The barriers

- **Local level of institution:**
  - Commitment of head of dept
  - Organization of work and EWTD
  - Hospital-based ± Academic system/environment = Balance between research and/or education?
  - Alleviate the assessment system (too cumbersome?) => simplify?
  - Better to implement only 2 good tools versus many different ones that are not used at all (home-grown)?
The barriers

- National and/or European level:
  - Accreditation system: do we find it supportive and helpful?
  - Funding (DRGs)
  - Define “best practices” (collaborative practice, team-work, etc…)
  - Provide the training platform for faculty / performance assessors
  - Obligation towards the public = summative, certification (judgment aspect of assessment)
Conclusions:

The program:
- Roles (CanMeds)
- Competencies
- Objectives: knowledge-case-management-practical skills-attitudes…
- Added syllabus

The evaluation system:
- Comprehensive and multimodal
- Logbook/Portfolio (credit system)
- Formative WPBA + Summative exam periods (pass/fail)
- …
Conclusions:

- We should make it work!
- “Competition” between training institutions?
- Web-based Institution evaluation and ranking of services, public scrutiny?
- Well conducted study to explore the barriers?
- What to do with culture differences?
- Power of accreditation?