Advances in the Assessment of Students’ Clinical Competence

Case-Based Discussion
(Chart Stimulated Recall)

College of Medicine
Sultan Qaboos University
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Outline of Session

- Who developed this assessment technique, and why?
- What is the ‘Case-Based Discussion’ technique?
- What does a Case-Based Discussion assess?
- Review and critique of a sample case-based discussion
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Who developed this assessment technique, and why?

- In the early 1980s, the American Board of Emergency Medicine introduced an assessment technique called ‘Chart Stimulated Recall’
- Post graduate trainees were asked to select a sample of their patient charts (typically 2-3)
- A clinical supervisor selected one of these charts, and conducted an interview with the trainee about the entries in the chart
- The interview typically took about 15 minutes, followed by 5 minutes of feedback
Why?

- ABEM was a newly created specialty board
- A feature of their progressive assessment philosophy was to use ‘high fidelity’ (authentic) assessment methods
- ‘Fidelity’ is the degree to which an assessment technique replicates the challenges faced in the real world
- Embedding assessments into the care provided by trainees is the highest form of fidelity available
Who developed this assessment technique, and why?

- More recently, the Foundation Program (PGY1 and PGY2) in the UK adopted this technique as part of its workplace-based assessment program, and renamed it the Case-Based Discussion technique.
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What is a ‘Case-Based Discussion’ (CBD)?

- Trainee selects a sample (usually 2-3) of their patients’ charts
- Assessor/clinical supervisor selects one (or 2) of these charts and conducts an interview with the trainee on the contents of their entries into the chart
- The interview typically takes 15 minutes, followed by a 5 minute feedback session
- The assessor’s judgments (ratings and comments) of the trainee’s performance is then recorded on a Case-Based Discussion rating form.
# Case-Based Discussion Rating Form

**Doctor** ____________________________  **Assessor** ____________________________

(please print name)  (please print name)

**Doctor’s level of appointment (e.g., PGY1)** ____________________________  **Setting** ____________________________

**Problem complexity** (✓ check one)  ___ Low  ___ Moderate  ___ High

**Patient Problem/Dx(s)** ____________________________  **Age** _____  **Gender** ___

**Discipline** ____________________________

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*Following your discussion of this case with the doctor, circle the rating which matches your assessment of their performance.*

1. **Clinical record keeping**
   - 1  2  3  |  4  5  6  |  7  8  9
     - Unsatisfactory  Satisfactory  Superior

2. **Clinical Assessment (including diagnostic skills)**
   - 1  2  3  |  4  5  6  |  7  8  9
     - Unsatisfactory  Satisfactory  Superior

3. **Medical treatment**
   - 1  2  3  |  4  5  6  |  7  8  9
     - Unsatisfactory  Satisfactory  Superior

4. **Investigations and Treatment**
   - 1  2  3  |  4  5  6  |  7  8  9
     - Unsatisfactory  Satisfactory  Superior

5. **Follow-up and Management Plan**
   - 1  2  3  |  4  5  6  |  7  8  9
     - Unsatisfactory  Satisfactory  Superior

6. **Clinical Reasoning**
   - 1  2  3  |  4  5  6  |  7  8  9
     - Unsatisfactory  Satisfactory  Superior

7. **Overall Clinical Care**
   - 1  2  3  |  4  5  6  |  7  8  9
     - Unsatisfactory  Satisfactory  Superior
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What does a CBD assess?

- Simply stated, the focus is on ‘clinical reasoning’
- ... the reasoning underlying the steps taken and decisions made by the trainee in relation to their role in the work-up and management of the patient.
- Record keeping is also assessed
What does a CBD Assess?

- Questions are asked in relation to:
  - Historical, physical examination and laboratory data
  - Diagnoses
  - Treatment, referrals, follow-up, ...

- Questions probe, ‘Why did you elicit this information, what does it mean, what else might you have ordered/asked/examined, did you consider any other diagnoses, why did you select this medication – are their other treatment options, ...
Is their evidence supporting the usefulness of CBD?

- Several studies support its validity
  - Correlations with chart audit scores and certification examination scores (Maatsch, 1983; Solomon, 1990)
  - Correlations with Standardized Patient and oral examination scores (Norman, 1989)
  - Able to distinguish poorly performing doctors (Norman, 1989)
  - Seen by practicing doctors to be a valid measure of their competence (Maatsch, 1983)
The Uses of CBD Results

Formative:
- An excellent source of feedback to trainees on performance on a case
- Feedback that is ‘in context’, specific to a case, based on what the trainee did in a real practice situation – the very best way for new learning to be understood and remembered

Summative:
- Requires deliberate sampling over several cases (cases selected by age, gender, problem, clinical task, ...) – a ‘blueprint’
- Sample size – likely 8-12 cases over a period of time
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Review and Critique of a Sample CBD

- Observe a case-based discussion assessment
  - Which assessment strategies used by the assessor were effective?
  - Which assessment strategies used by the assessor were ineffective – how would you improve on them?
  - Record your ratings of the trainee’s performance on the case-based discussion rating form

- In small group discussions, try to reach consensus on your responses

- Report your responses in a plenary discussion
Closure to the Session

- To complete this session, view a second example of a CBD.
- What did you think of it?