

Mini- Cex

(Mini- Clinical Evaluation Exercise)

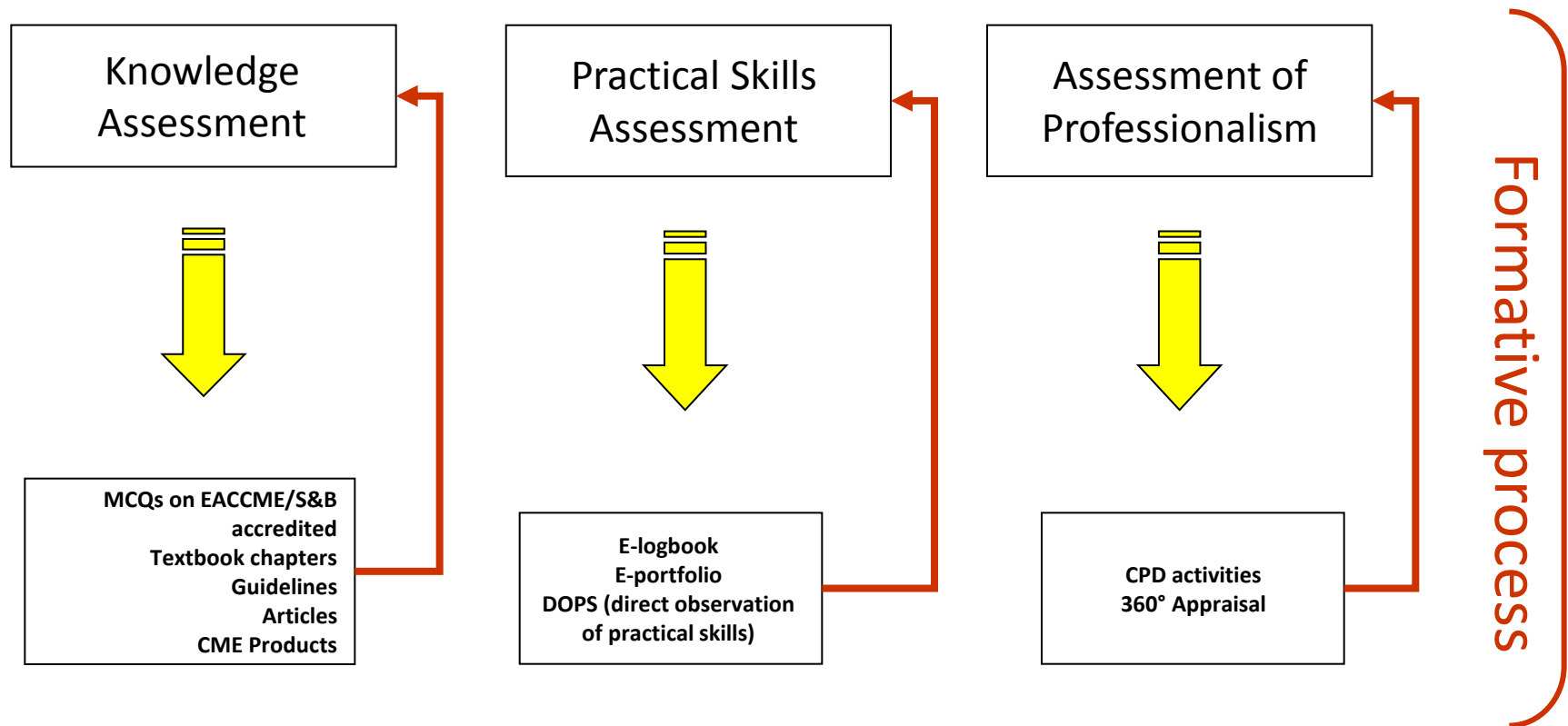
Zeev Goldik



Professional competencies

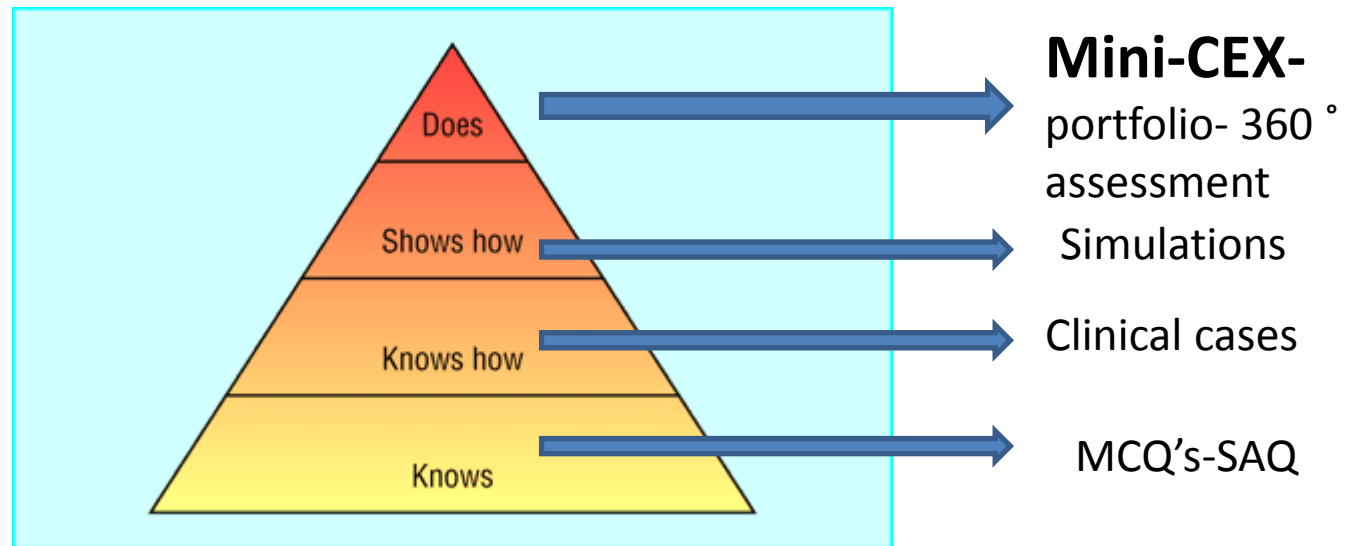
- Require more than one assessment tool
- Reflect competency in different areas of professional practice
- The assessment method helps trainers in decision making

Competence assessment



Workplace based assessment

- Growing concern for developing systems for evaluation of real practice



Mini-CEX

- 1) Direct observation of practice
- 2) Structured assessment (form)
- 3) Subsequent provision of feedback to the resident / student

Mini-CEX

- Assessing the trainees in their own clinical setting.
- Require about half an hour in total for each session
- Such sessions will be aimed at a particular **competency domain**

History

- 1972- American Board of Internal Medicine: CEX- Clinical evaluation exercise: bedside oral exam (evaluation of clinical competence)
- 1995- Norcini, preliminar investigation observational study on Mini-Cex:
- 21 internal medicine programs, 1,228 clinical encounters- in which 421 residents have participated and 316 observers / evaluators

(Holmboe ES, Huot SJ, Chung J, Norcini JJ, Hawkins RE.
Construct validity of the mini-clinical evaluation exercise
-mini-CEX. Acad Med 2003; 78: 826-30)



CEX vs. Mini- CEX

CEX	Mini- CEX
Only one patient	Many patients
Only one observer	Different observers
1 case- 1 environment	Different cases- different environments
Time consuming- around 90 minutes	Time feasible- 15 minutes
No feedback	feedback
Validity and reliability problems	Validity and reliability proved

Validity

- The degree to which the tool measures what it claims to measure.

Reliability

- Is the consistency of a set of measurements or of a measuring instrument, often used to describe a [test](#).

Reliability

- Inter-rater reliability
- Internal consistency
- Inter-case reliability

Adequacy of educational tools

- Transparency
- Acceptation
- Feasibility (costs; logistics; technology)
- Educational impact

Mini- CEX

- Discussion between consultant and trainee: how it is done.
- Trainee encountering a patient in his/her own clinical setting
(consultant plays the role of an observer)
- Consultant marks trainees' performance in the mini-CEX evaluation form.

Feedback form

- Positive aspects
- Aspects to improve
- Resident's satisfaction with mCEX
- Observers satisfaction with mCEX
- Comments
- Date
- Signatures



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RACP Formative Mini-Clinical Evaluation Exercise (mini-CEX)

Trainee's name:

Date of assessment: ____ / ____ / ____

Basic training year: 1 2 3

Case number for that year: 1 2 3 4

Assessor's name:

Assessor's position:

Hospital / location:

Assessor's email:

Setting: In-patient Out-patient Emergency Other (*please specify*)

Patient problem / Dx(s):

Specialty domain:

Patient age: Patient gender: Male Female

Problem / Case complexity: Low Moderate High

Strengths:

Suggestions for development:

Please rate the trainee against what you would expect of a trainee in that year of training

	unsatisfactory ¹			satisfactory			superior			not observed
1. Medical interviewing skills	1	2	3	4	5	6	7	8	9	n/o
2. Physical examination skills	1	2	3	4	5	6	7	8	9	n/o
3. Professional qualities/ communication	1	2	3	4	5	6	7	8	9	n/o
4. Counselling skills	1	2	3	4	5	6	7	8	9	n/o
5. Clinical judgement	1	2	3	4	5	6	7	8	9	n/o
6. Organisation / efficiency	1	2	3	4	5	6	7	8	9	n/o
Overall clinical performance	1	2	3	4	5	6	7	8	9	n/o

¹ *Please include suggestions for development in the box above*

Time taken for observation: mins

Time taken for feedback: mins



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RACP Mini-Clinical Evaluation Exercise (mini-CEX)

Ratings:

Unsatisfactory—gaps in knowledge or skills that you would not expect at this level of trainee. Some concerns about professionalism or patient safety.

Satisfactory—what you would expect for a trainee at this level at this point during their training year. Generally clinically competent and with satisfactory communication skills and professionalism.

Superior—performing well, above the level they are at. No concerns about their clinical method, professionalism, organisation, communication etc.

The details below outline the skills associated with each domain in this mini-CEX rating form and the mini-CEX framework. Please note that not all skills may be examined during each encounter—this is a guide to show what may be observed and rated.

Medical Interviewing Skills

- Ability to interact with patient
- Ability to direct questions at key problem
- Ability to use second order of questioning to optimise focus
- Ability to incorporate information from questions with other information
- Ability to identify and respond appropriately to non-verbal cues
- Ability to retain a range of diagnostic options

Physical Examination Skills

- Ability to conduct a systematic and structured physical examination
- Shows sensitivity to patient's comfort and modesty
- Ability to detect abnormal signs when present and weigh the significance of these findings
- Informs patient
- Ability to focus the examination on the most important components
- Ability to integrate findings on examination with other information to clarify diagnosis

Professional Qualities / Communication

- Shows respect for patient at all times
- Explains as well as asks
- Listens as well as tells
- Conscious of potentially embarrassing or painful components of interaction
- Shows awareness of issues surrounding confidentiality
- Able to adapt questioning and examination to patient's responses

Counselling Skills

- Explains rationale for test/treatment
- Addresses the transfer of information in a way which is clear and tailored to the patient's needs
- Able to respond to patient and modify or repeat information in a different way
- Recognises patient's own wishes and gives them priority
- Avoids personal opinion and bias

Clinical Judgement

- Ability to weigh importance of potentially conflicting clinical data
- Ability to determine best choice of investigations and management
- Ability to relate management options to the patient's own wishes or situation
- Considers the risks and benefits of the chosen management/treatment options
- Ability to come to a firm decision based on available evidence

Organisation / Efficiency

- Ability to synthesise a collection of data quickly and efficiently
- Demonstrates appropriate judgement and synthesis
- Demonstrates optimal use of time in collection of clinical and investigational data



American Board
of Internal Medicine®

Mini-Clinical Evaluation Exercise (CEX)

Evaluator: _____ Date: _____

Resident: _____ R-1 R-2 R-3

Patient Problem/Dx: _____

Setting: Ambulatory In-patient ED Other _____

Patient: Age: _____ Sex: _____ New Follow-up

Complexity: Low Moderate High

Focus: Data Gathering Diagnosis Therapy Counseling

1. Medical Interviewing Skills (Not observed)

1	2	3	4	5	6	7	8	9
UNSATISFACTORY			SATISFACTORY			SUPERIOR		

2. Physical Examination Skills (Not observed)

1	2	3	4	5	6	7	8	9
UNSATISFACTORY			SATISFACTORY			SUPERIOR		

3. Humanistic Qualities/Professionalism

1	2	3	4	5	6	7	8	9
UNSATISFACTORY			SATISFACTORY			SUPERIOR		

4. Clinical Judgment (Not observed)

1	2	3	4	5	6	7	8	9
UNSATISFACTORY			SATISFACTORY			SUPERIOR		

5. Counseling Skills (Not observed)

1	2	3	4	5	6	7	8	9
UNSATISFACTORY			SATISFACTORY			SUPERIOR		

6. Organization/Efficiency (Not observed)

1	2	3	4	5	6	7	8	9
UNSATISFACTORY			SATISFACTORY			SUPERIOR		

7. Overall Clinical Competence (Not observed)

1	2	3	4	5	6	7	8	9
UNSATISFACTORY			SATISFACTORY			SUPERIOR		

Mini-CEX Time: Observing _____ Mins Providing Feedback: _____ Mins

Evaluator Satisfaction with Mini-CEX

LOW 1 2 3 4 5 6 7 8 9 HIGH

Resident Satisfaction with Mini-CEX

LOW 1 2 3 4 5 6 7 8 9 HIGH

Comments: _____

Resident Signature

Evaluator Signature

After the encounter

- Trainee and consultant sit together reviewing the encounter in relation to the mini-CEX
- Feedback: 10 – 15 minutes (the most important part of the mini-CEX evaluation).

Conclusions

- Mini-CEX assesses residents in a much broader range of clinical situations than the traditional CEX
- Has better reproducibility
- Offers residents greater opportunity for observation and feedback by more than one faculty member and with more than one patient

Conclusions

- More difficult to administer: multiple encounters must be scheduled for each resident.

THANKS