



CAME Voice/Voix

Is the mini-CEX an optimal tool in the era of Competency Based Education?

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The mini Clinical Evaluation Exercise (or as it's more commonly known, the mini-CEX) involves short direct observation of a trainee-patient interaction for assessment purposes. The mini-CEX has been studied in both undergraduate and postgraduate contexts, across numerous specialties. Many studies have demonstrated the reliability and construct, concurrent and predictive validity of this method. Moreover, the mini-CEX allows for more frequent observation and feedback to the learner. Despite the research evidence, concerns have been raised with regard to the design of the tool as well as what it measures.

Hawkins et al. (2010) evaluated the mini-CEX research from 1995 to 2009 and found scoring for the mini-CEX was similar to other global rating forms; raters did not use the full nine-point scale with the lower end of the scale largely unused. Additionally, individual competencies tended to be highly correlated, probably because the rating forms had overlapping descriptors. The scale used in the mini-CEX is designed for linear gradations of performance but with no point of reference to map a trainee's performance to a category or score causing faculty assessors to resort to norm referencing (Crossley & Jolly, 2012).

Crossley et al. (2011) looked to address these problems by taking three work-based assessment (WBA) tools, namely the mini-CEX, the acute care assessment tool (ACAT) and the case-based discussion (CBD) and developed new scales with behaviorally anchored descriptors aligned to training levels and milestones. Using the modified scale, clinicians' were better able to discriminate between high and low performing trainees and showed greater agreement about a trainee's performance. Crossley and Jolly (2012) have suggested the following recommendations to improve the WBA tool:

1. WBA assessment tools should have anchors linked to the construct of clinical independence, measuring the trainees' level of progression and development
2. Assessors need to make more reliable judgments of performances in a particular context or activity. WBA assessment tools should focus on the competence relevant to the activity, and avoid having multiple competencies to assess at the same time.

These two simple steps should be considered by anyone working with the mini-CEX or similar WBA assessment tools.

Crossley J, Johnson G, Booth JWade W. 2011. Good questions, good answers: Construct alignment improves the performance of workplace-based assessment scales. *Medical Education*, 45(6), 560-569.

Crossley J, Jolly B. 2012. Making sense of work-based assessment: Ask the right questions, in the right way, about the right things, of the right people. *Medical Education*, 46(1), 28-37.

Hawkins, RE, Margolis MJ, Durning SJ, Norcini JJ. 2010. Constructing a validity argument for the mini-clinical evaluation exercise: A review of the research. *Academic Medicine*, 85(9), 1453-1461.