# **CAEP GEMeS**

Great Evidence in Medical education Summary

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## EDUCATIONAL DILEMMA:

Workplace-based assessment (WBA) often relies on judgements made on rating scales. Given that judgements are subjective, are there WBA design characteristics that can be modified to optimise validity and reliability?<sup>1</sup>

#### **Article Reference:**

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. PMID: 22150194

http://www.ncbi.nlm.nih.gov/pubmed/22150194

#### Why is it relevant to Emergency Medicine education?

There exists an intimate relationship between learning and assessment<sup>2</sup>. WBAs have become an increasingly important means of assessing trainees in day-to-day clinical practice. Further, WBA plays an important role in reporting expert judgments of trainee competence. Developing an understanding of how to optimise the validity and reliability of WBAs is a critical step to improving the utility of these forms of assessment.

#### **Level of Evidence**

Not applicable

#### **Funding Sources**

None

#### **Study Design**

The authors present evidence from selected studies in combination with expert opinion to produce this think piece.

#### Setting

Academic Unit of Medical Education, University of Sheffield, Sheffield, United Kingdom

#### Level of Learning

UGME, PGME, CME

#### **Synopsis**

In this selective narrative review, the authors begin with an argument that most WBAs demonstrate poor psychometric properties, are vulnerable to assessor differences, and do not discriminate between trainees. Based on this, the authors

attempt to identify features of WBA design that may contribute to improved validity and reliability. Four general principles emerged from their study:

- 1. The response scale should be aligned to the reality map of the judges (i.e. anchors that resonate with assessors' experiences might be a more profitable avenue of exploration than abstract descriptors such as 'satisfactory')
- 2. Judgements rather than objective observations should be sought (i.e. subjective judgments about outcome-level performance may result in more assessor agreement than objective responses about what actually took place)
- 3. The assessment should focus on competencies that are central to the activity observed (i.e. assessment tools should target those domains of performance that are clearly demonstrated in the activity being observed)
- 4. The assessors who are best-placed to judge performance should be asked to participate (i.e. individuals who have the competence to judge an aspect of performance, and have had the opportunity to observe it should be asked to assess the trainee)

#### References

- 1. Crossley J, Jolly B. Making sense of work-based assessment: Ask the right questions, in the right way, about the right things, of the right people. Med Educ. 2012;46(1):28-37. doi:10.1111/j.1365-2923.2011.04166
- 2. Norcini J, Burch V. Workplace-based assessment as an educational tool: AMEE Guide No. 31. Med Teach. 2007;29(9):855-871. doi:10.1080/01421590701775453.

### **BOTTOM LINE:**

In this study, the authors suggest four general principles that might enhance the reliability and validity of WBA. (1) The response scale should be aligned to the reality map of the judges (i.e. scales should be clinically anchored); (2) Judgments rather than objective observations should be sought; (3) The assessment should focus on competencies that are central to the activity observed, and (4) The individuals who are best-placed to judge performance should be asked to participate.

