7G1 (19736)
Alignment between learning needs and learning goals of Mini-CEX in clerkships

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Background: Defining learning goals (LG) in alignment with learning needs (LN) is one of the key purposes of formative workplace-based assessment, but studies about this topic are scarce.

Summary of Work: We analysed quantitatively and qualitatively how often trainer-student pairs identified the same LN during Mini Clinical Evaluation Exercises (Mini-CEX) in clerkships and to what degree those LNs were in line with the recorded LGs. Multilevel logistic regression models were used to predict LGs by identified LNs, controlling for context variables.

Summary of Results: 512 trainers and 165 students conducted 1783 Mini-CEX (98% completion rate). Concordantly, trainer-student pairs most often identified LNs in the domains ‘clinical reasoning’ (23% of 1167 complete forms), ‘organisation / efficiency’ (20%) and ‘physical examination’ (20%). At least one ‘defined’ LG was noted on 313 student forms (18% of 1710), with a total of 446 LGs. Of these, the most frequent LGs were ‘physical examination’ (49% of 446 LGs) and ‘history taking’ (21%); corresponding LNs as well as context variables (e.g. clinic size) were found to be predictors of these LGs.

Discussion and Conclusions: Although trainer-student pairs often agreed in their identified LNs, many assessments did not result in an aligned LG or a LG at all. Interventions are needed to enhance the proportion of (aligned) LGs in Mini-CEX in order to tap into its full potential not only as a ‘diagnostic’ but also as an ‘educational tool’.

Take-home messages: The sparseness of LGs, their dependency on context variables and their partial non-alignment with students’ LNs raise the question of how the effectiveness of Mini-CEX can be further enhanced.
7G3 (22306)
Implementing electronic workplace-based assessments: Strategies and challenges

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Background: Workplace-based learning and assessments are key to education and training in medicine and healthcare disciplines. Electronic assessment solutions offer many potential benefits, but face a sizable challenge in clinical environments lacking in available computing equipment and reliable network access.

Summary of Work: St George’s, University of London (SGUL) have been piloting a system, Myprogress, for offline completion of workplace-based assessments on mobile devices. Network access or computers are not required in the clinical environment; assessments are completed on smartphones or tablets and uploaded later when network access is available. Iterative pilots in Medicine and Radiography have evaluated and refined the system from a practical and educational perspective.

Summary of Results: Pilots ran in areas including Critical Care, Paediatrics, Surgery and Geriatrics, at different sites and stages of training. Increased numbers of completed assessments and feedback gathered through online surveys and focus groups indicated that the system was well-received and easy to use, although with less flexibility than paper. Participants perceived considerable value in the long-term adoption of an electronic system, but had short-term concerns about the impact of changes to working practices and time commitments.

Discussion and Conclusions: These concerns can be addressed; providing tablet devices improves user experiences, and facilitates enhanced educational feedback and support when compared with the use of user-owned smartphones.

Take-home messages: Mobile technologies are a viable solution to the challenges of assessing workplace learning in a clinical environment, but it is crucial to make their value clear to both learners and assessors.

7G4 (23074)
Time to supervise WBPAs

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Background: Workplace based assessment is widely used to evaluate trainee performance. The literature suggests, however that WBPA is seen by trainees as being a ‘tick box’ exercise, with limited educational value due to lack of formative feedback. Poor interrater reliability and the retrospective approach to many of the assessments may also compromise confidence. Multiple samples have been shown to improve reliability in assessment of performance, though time pressures may inhibit ability to standardise the assessments, at a time when educational time is limited in consultant job plans.

Summary of Work: The trainee online portfolio of assessment (e-portfolio) yielded minimum numbers of assessment required by FY1 and FY2 doctors and core medical trainees on medical placement over a four month clinical rotation. A calculation of time per assessment was made from recommendations in the literature. This was mapped to the number of medical consultants available to provide WBPAs.

Summary of Results: There were 19 junior trainees in total, and 20 educational supervisors in medicine. Based on minimum e-portfolio requirements in order to either ‘pass’ the clinical attachment or show achievement of curriculum competencies, trainees needed to complete 6-7 WBPAs per 4 month rotation. Using standard times for completion of assessment form the literature, total time to complete each assessment properly would be 20-30 minutes. This gives a total assessment time of between 40-60 hours for the medical department per 4 month rotation. Educational supervisor meetings for each trainee would add a further 19 hours.

Discussion and Conclusions: If a postulated figure of 80 supervisor hours per 4 month rotation is used for junior trainees to achieve minimum assessment requirements to the defined standards, there are clear implications for service delivery. This figure is a gross underestimate, as senior trainee and undergraduate supervision has not been considered.