

Title: Developing mobile app for workplace-based assessment in India

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What problem was addressed: Indian medical institutions focus largely on summative assessments, especially on assessment of the clinician role, giving little attention to communication, team work, professionalism, and being a scholar. Formative assessment is implemented in India recently in post-graduate education that focusses on conducting theory and practical examinations once in six months. Work-place based assessment (WPBA) has the advantage of directly observing residents' behavior and provision of objective feedback for learning across all the domains and competencies. Direct observation of the resident's behavior and feedback by the faculty coupled with resident's self-reflection has been effective in aiding residents' learning at the University of Alberta. (1) A mobile tool, used by the resident and faculty for WPBA would document residents' self-reflection, authentic faculty feedback, and help the resident to arrive at an action plan for further learning.

What was tried: A "Field-Note App" was developed for residents and faculty to reflect on resident's performance. This app has three questions:

1. What went on well?
2. What could have been done differently?
3. Action plan

There is self-reflection by residents about their performance and faculty feedback after direct observation. An action plan was derived both by the resident and faculty after each clinical precepting session. The residents were rated in the app, using a score of 1 to 5; 1 being the novice and 5 being the expert for each meta-competency.

Five faculty and four residents in the family medicine department of a medical school in India pilot tested the app over one month. Eleven field notes were created after direct observation of the residents by the faculty. Eight field notes assessed the clinical expert role, three assessed the communicator role, and one assessed professional role. Leader, Collaborator, and System-based practitioner were never assessed.

What was learned: All residents and faculty agreed that it was feasible to use the app for WPBA in out-patient, in-patient, and emergency settings. 'Field Note App' helped the faculty to provide real time feedback in an objective and non-judgmental manner. The rating of the competency was not appreciated by the residents, but the action plan helped them to have educational experience. Faculty planned to retrieve the action plans and rating scores at regular time interval to provide feedback of residents' competency milestones.

There is a new "Culture of assessment" being created among the faculty. Direct verbal feedback is still valued by the faculty as superior to the electronic tool, especially for constructive feedback. Even though the implementation of electronic formative assessment faced challenges from faculty and residents, constant communication with stakeholders helped them to accept this innovation. The impact of this WPBA on residents' learning, on competency development, and subsequent improvement in patient care needs to be studied further.

Reference:

Ross. S, Poth. C.N, Donoff. M, Humphries. P, Steiner. I and Schipper. S et al. Competency-Based Achievement System. Using formative feedback to teach and assess family medicine residents' skills; Can Fam Physician 2011; 57:e323-30