

Supporting Information

Supplementary methods and results

This appendix was part of the submitted manuscript and has been peer reviewed. It is posted as supplied by the authors.

Appendix to: Anderson E, McGrail MR, Hollins A, et al. Comparison of performance outcomes after general practice training in remote and rural or regional locations in Australia. *Med J Aust* 2023; doi: 10.5694/mja2.51930.

Table 1. Formative assessment tasks in their first year of community training under the James Cook University (JCU) general practice training program

Multiple choice questionnaire (MCQ)

Completed at both the beginning (first six months) and towards the end (months 7 to 10) of the first community training year.

A formative assessment, intended to help identify and provide feedback to trainees and supervisors about areas of strength and weakness of trainees.

The exam is undertaken online and covers the curricula of both the Australian College of Rural and Remote Medicine (ACRRM) and the Royal Australian College of General Practitioners (RACGP).

It is aligned with the requirements of the final exam.

The written MCQ assessment was designed by experienced academics after research finding it a useful programmatic "assessment for learning" tool and a predictor of academic performance in the summative assessment of the Fellowship exams.¹

All trainees who complete the MCQ are provided with a score out of 100 and their quartile within their assessment cohort, as well as additional cohort comparisons in subclinical areas (not used in this study).

The multiple choice questionnaire (MCQ) analysis includes all trainee cohorts during 2016-2021.

Formative assessment is undertaken during the first year of training, the summative MCQ assessment for RACGP and ACRRM is undertaken towards the end of training.

External clinical teaching (ECT) visit

A direct observation of 6–10 randomly selected consultations during one general practice session by the medical educators, using quality indicators of clinical performance (one or more during the first six months and one during the second six months, followed by additional visits in the second year).

Medical educators employed by JCU for general practice training are randomly selected to attend the practice to assess training progress using standardised assessment templates, providing feedback to trainees and supervisors. Aggregate assessment measures and comments are provided.

The examiner (medical educator) completes a feedback sheet for each consultation, with scores aggregated across five learning domains and 22 specific items. The five domains are: medical knowledge (three items); clinical skills and patient care (four items); interpersonal and communication skills (five items); professionalism (six items), and systems of health care (four items).

ECT visits provide a snapshot of a registrar's performance and progress during training, complementing other feedback from supervisor reports and other formative assessments.

During this study, the JCU general practice training program changed the format of some ECT visits, with the second or third visit being replaced by a formal case-based discussion for registrars starting General Practice Training Term One (GPT1) in 2021.

ECT visit analysis includes enrolled general practice trainees who were undertaking their first community placement in 2019 or 2021; the ECT visit in 2020 was excluded, as some visits were completed by telehealth rather than in person because of the COVID-19 pandemic.

Table 2. Multiple choice questionnaire (MCQ) and external clinical teaching (ECT) scores: median scores (interquartile ranges)

	Time 1	Time 2
MCQ		
Remote	55.4 (47.7–60.0)	63.3 (57.4–70.3)
Rural	55.4 (49.6–61.5)	65.0 (56.8–72.1)
Regional	55.4 (49.2–61.5)	64.9 (57.8–70.3)
ECT		
Remote	84.5 (80.7–97.7)	91.7 (87.5–97.7)
Rural	85.7 (66.7–92.9)	88.8 (78.8–96.6)
Regional	84.1 (78.6–92.1)	92.0 (83.3–96.6)

^{1.} Heggarty P, Teague PA, Alele F, et al. Role of formative assessment in predicting academic success among GP registrars: a retrospective longitudinal study. BMJ Open 2020; 10: e040290.