

Incorporating ReCEnT research findings into your approach to teaching and supervision

GP Supervisor Guide Summary

What is the Registrar Clinical Encounters in Training (ReCEnT) project?

Background

ReCEnT is a long-established educational and research project conducted within the Australian general practice specialist vocational training program. GP vocational training operates within an apprenticeship-like model in Australia, whereby registrars consult patients with oversight and mentoring by experienced GP clinical supervisors.

Until the advent of ReCEnT in 2010, the nature and scope of registrars' consultations was unknown. Since 2023 the project has been conducted by the RACGP, with a phased roll-out to all regions of Australia by 2025 planned (expanding from the 2022 footprint of NSW, ACT, Tasmania, and eastern Victoria).

ReCEnT is both an educational tool and a research project. These aspects of ReCEnT are closely integrated.

This document summarizes the full '[GP Supervisor Guide: incorporating ReCEnT research findings into your approach to teaching and supervision](#)' which is available on the [ReCEnT website](#).

Educational aspect

Registrars record the clinical and educational content of 60 consecutive consultations during their training term. These data are processed and returned to them (within two weeks) in a detailed report¹ in which their data are compared to that of their registrar peers, to that of their previous GP terms, and to established GPs.² ReCEnT is a reflective, as opposed to a benchmarking, exercise for registrars. It also provides supervisors and medical educators with valuable evidence in how they approach teaching, supervisory, and mentorship tasks with individual registrars.

Research aspect

Registrars may choose to provide informed consent for their data to also be used for research purposes. The primary research aim of ReCEnT is to uncover the nature and scope of GP registrar experiences and actions. This is explored with the following analyses and findings:

- 'Mapping' analyses
- Exploratory analyses
- Mapping' and exploratory analyses of registrars' educational actions

- Mapping' and exploratory analyses of other outcomes
- Longitudinal 'within-registrar' analyses
- Longitudinal 'within-program' analyses
- Triangulation of 'within-registrar' and 'within-program' findings
- Testing efficacy of educational interventions
- The 'educational-research loop' model
- Combination of ReCEnT data with data from other sources

ReCEnT data strengths and limitations

As with any project, the ReCEnT methodology has both strengths and limitations.

Strengths	Limitations
A large number of variables recorded contemporaneously, providing nuanced context for consultation content and allowing for fine grained adjustment for confounding in statistical models.	A 'snap shot' of a consultation without contextual information – for example, we don't record patient medicines regimens nor patients' past medical histories
Data collected specifically for the purpose of ReCEnT, in a short, focussed period of data collection to facilitate data completeness and reliability	A 'snap shot' of a consultation – ReCEnT is a longitudinal study of registrars (from Term 1 to Term 2 to Term 3), not of patients, so we don't know what happens during follow up.
Registrar 'action' variables - such as prescriptions, referrals, imaging and pathology testing – are directly linked to the problems/diagnoses that prompted the action	For logistical and educational reasons we only collect office-based consultation data – not home visits, aged care facility visits or consultations in specialty clinics (e.g. Flu immunisation clinics)
High response rate and large sample size (for research purposes)	Only a sample (60) of an individual registrar's consultations, which may not be representative (for educational individual purposes)

What has ReCEnT uncovered, and how does this change your approach to teaching and supervision?

Patients and conditions which registrars gain limited exposure to

Overall, registrars see substantially fewer patients aged 65 and above, compared to established GPs³. This, in turn, reduces their exposure to chronic diseases,⁴ especially cardiovascular and endocrine disease, and multimorbidity.⁵ Concerningly, our data suggests that registrars may not be fully engaging in older patient care.³ Practice-level solutions to facilitate greater registrar engagement with older patients include:

- Enlisting practice nurses to work with registrars in chronic disease management.
- Encouraging registrars to participate in nursing home care.
- Having registrars manage supervisors' older patients with the supervisor.
- Receptionists purposively scheduling older patient appointments with registrars.
- Having older patients' care handed over from registrar to registrar at term end.

Influence of registrar gender on patient encounters and experiences

Approximately two-thirds of registrars identify as women. The training experiences of registrars who identify as women and those who identify as men can differ substantially. Registrars who identify as women see a much higher proportion of female patients (68%) than registrars who identify as men

(49%).⁵ Consequently, registrars who identify as women have greater exposure to female genital conditions, pregnancy-related presentations, female reproductive health procedures, and psychological problems and diagnoses. In contrast, registrars who identify as men are more frequently exposed to respiratory and musculoskeletal conditions.

This variation in patient mix has implications for training opportunities and the breadth of clinical experience. Supervisors and practices—including reception staff, who play an important role in appointment allocation⁶—can help address potential educational imbalances through practice-level policies. These may include directing particular patient groups to registrars who would benefit from greater exposure to specific presentations, or alternatively allocating patients to other GPs within the practice to ensure a more balanced learning experience across registrars.

Registrars who identify with another gender identity, or who prefer not to disclose their gender, should also be supported through equitable access to learning opportunities and a broad range of clinical experiences with practices seeking to ensure access to a broad and balanced range of clinical presentations.

Patient categories and conditions which registrars ‘struggle’ with

These categories and conditions have been identified by the conditions which registrars seek information on most, or which they generate learning goals for post consultation. These areas share the commonality of being poorly represented in junior hospital doctor experience, whilst being common in general practice.

- ‘Community’ paediatrics, specifically management of behavioural, mental health and developmental issues.⁷⁻¹¹
- Dermatology, including the acquisition of skin surgery skills.^{12,13}
- Musculoskeletal problems.

Role of practice location on registrar experience

Registrars who practice in a lower socioeconomic status area¹⁴ or, even more so, in rural locations,¹⁵ are provided with a particularly rich learning environment. This includes seeing more older patients, more continuity of care, seeing more patients of Aboriginal and Torres Strait Islander background, seeing more patients from a non-English-speaking background, and more participation in practices’ after-hours rosters.^{14,15}

Evidence practice gaps

Evidence practice gaps exist in registrars’ medication prescription and pathology test-ordering. Whilst registrars’ clinical behaviours are complex with many determinants, supervisor instruction and role modelling are the primary drivers of registrar behaviours. Thus, there is much that supervisors and their practices can do to positively influence registrars’ adoption of evidence-based practice. Areas which require particular focus include:

- Registrars prescribe antibiotics in excess of guidelines for acute bronchitis,¹⁶ sinusitis,¹⁷ sore throat¹⁸ and otitis media.¹⁷ Positively, their prescribing rate is within quality benchmarks for URTI’s,¹⁶ and lower than established GPs’ antibiotics prescribing for these respiratory infections.
- Opioids are largely being prescribed as maintenance therapy for pre-existing problems, as opposed to acute pain or for those in palliative care.¹⁹

- Pathology test ordering increases significantly throughout a registrar's training,²⁰ and is in excess of the tests ordered by established GPs.²¹ Registrars need specific support from their supervisors during the difficult transition into independent post-Fellowship practice. A proposed exercise to promote rational test-ordering is for supervisors and registrars jointly to do 'test result audit and feedback' ('TRAFk') of registrars' pathology test and imaging requests.²²

Influencing registrars' clinical behaviours

ReCEnT findings have informed the design of educational innovations directed at registrar clinical behaviours. Such programs are designed with elements targeting registrars, supervisors, supervisor-registrar interactions, and practices. However, evaluation of these programs demonstrates that knowledge is 'necessary but not sufficient' for influencing registrars' actual clinical behaviours. Other behaviour change interventions, which are in the domain of the supervisor/practice, are critical to influencing registrar clinical behaviours. Examples of such interventions (directed, for example, at antibiotic stewardship) include:

- Environmental restructuring: to include posters and patient education brochures in the waiting room.
- Modelling: supervisors and other GPs in the practice should model evidence-based prescription of medications.
- Development of standard protocols for common presentations.
- Enablement: by 'licensing' registrars to decline prescription requests, where appropriate.

Implications of ReCEnT-derived data on prediction of FRACGP Fellowship examination performance

Previous non-ReCEnT work has demonstrated the 'exam-style' assessments prior to the commencement of GP Term 1 are quite strongly predictive of FRACGP Fellowship examination performance.²³ Furthermore, the ReCEnT data demonstrates that practicing 'low value, non-evidence-based care' is robustly predictive of poorer Fellowship exam performance and increased failure risk.²⁴ Registrars can be encouraged that developing good practice is optimal exam preparation.

Can I participate in the ReCEnT research as a practice/supervisor/registrar?

Registrars and practices make ReCEnT possible with their contribution to data collection, and the contribution is much appreciated. There is also scope for registrars and supervisors to participate further by collaboration with our ReCEnT team. Registrars and medical students have collaborated extensively with us. While one supervisor has worked with us a great deal and MEs have regularly contributed, there is scope for greater engagement – supervisors are well placed to bring their content expertise and, especially, their relevant clinical/educational questions that may be answerable with ReCEnT analyses.

If you would like to discuss your ideas, contact Parker Magin

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