

Opening the Black Box: Understanding In-Consultation Clinical and Educational Experiences of GP Registrars

Presenter: Professor Parker Magin

Overview

Professor Parker Magin presented an overview of the **Registrar Clinical Encounters in Training (ReCEnT)** project, describing both its educational purpose and its contribution to research in general practice training. He emphasised that ReCEnT is an integrated education and research program that documents what GP registrars see, do and learn in everyday clinical practice. The project aims to "open the black box" of registrar consultations and use those insights to improve supervision, education and training policy.

What is ReCEnT?

ReCEnT (Registrar Clinical Encounters in Training) began as a pilot project in 2009 and has operated since 2010. It follows GP registrars through their training, collecting data on 60 consecutive office-based consultations during each of their three general practice training terms.

The project now operates across almost all of Australia and combines educational with research functions, and is the largest existing dataset describing registrar/trainee clinical practice.

Educational purpose

ReCEnT operates at three educational levels.

Micro level – Individual registrar learning

The primary educational function is the generation of personalised reflective feedback reports for registrars. These reports summarise consultation patterns and provide a basis for guided reflection with supervisors and medical educators. The greatest educational value comes not simply from receiving the report, but from discussing it with a supervisor.

Meso level – Educational support

Aggregated ReCEnT data provide medical educators with evidence to inform educational activities. Increasingly, these data are also being shared with registrars to support peer learning.

Macro level – Program planning

At a broader level, ReCEnT findings inform educational program development, workforce planning and policy decisions within general practice training.

Research design

ReCEnT is an **inception cohort study**, following registrars from the beginning of vocational training through each of their general practice terms.

Registrars complete consultation records during each training term, allowing researchers to examine:

- clinical presentations
- investigations
- prescribing
- educational experiences
- changes over time.

Because the same registrars are followed longitudinally, ReCEnT provides unique insights into how clinical practice develops during training.

Research themes

Professor Magin described several ways ReCEnT data have been used.

Mapping registrar practice

Early work focused on describing what registrars actually encounter in practice, including:

- menopause management
- dizziness
- low-value care
- antimicrobial prescribing
- many other common clinical presentations.

These studies helped define the breadth of registrar experience and identify educational priorities.

Testing hypotheses

ReCEnT has also been used to answer focused research questions.

Examples included:

- whether rural registrars undertake more after-hours work
- whether telehealth consultations increase antibiotic prescribing
- factors associated with low-value care.

Longitudinal learning

One of ReCEnT's major strengths is its ability to examine changes during training.

Examples included:

- pathology ordering
- benzodiazepine prescribing
- antibiotic prescribing.

Interestingly, some findings were unexpected. For example, pathology ordering increased rather than decreased across training, highlighting the importance of testing assumptions using real-world data.

Evaluating educational interventions

Professor Magin demonstrated how ReCEnT can evaluate educational programs.

Examples included interventions designed to improve:

- antibiotic stewardship
- opioid prescribing
- pathology requesting.

Some interventions produced measurable improvements in prescribing behaviour, while others improved knowledge and attitudes without changing actual clinical practice.

Research informing education

A central theme of the presentation was the cyclical relationship between research and education. Educational questions raised by supervisors, registrars and researchers generate research projects. The findings then feed directly back into educational resources, supervision and curriculum development, often generating further research questions.

Professor Magin highlighted the collaborative nature of the program, particularly its support for GP registrars and academic registrars undertaking research projects.

Validating clinical competence

One of the most significant findings discussed was the relationship between everyday clinical practice and examination performance.

Analyses demonstrated that consultation performance in External Clinical Teaching Visits (ECTVs) and patterns of real-world clinical practice measured by ReCEnT were both predictive of RACGP Fellowship examination performance.

Discussion

The discussion explored several practical issues, including:

- the value of providing ReCEnT reports to training practices
- plans to expand ReCEnT into Aboriginal Medical Services
- the breadth of research generated over the past 15 years.

Professor Magin reflected that one of the most satisfying findings has been demonstrating that high-quality day-to-day clinical practice predicts examination success, reinforcing the importance of focusing on becoming an excellent GP rather than simply preparing for examinations.

Webinar Topic Summary

Key messages

- ReCEnT provides a unique window into the real-world clinical experiences of GP registrars.
- Its greatest educational value lies in structured reflection with supervisors.
- The project integrates education and research, with each informing the other.
- Longitudinal data challenge assumptions and identify opportunities for educational improvement.
- ReCEnT has been successfully used to evaluate educational interventions and improve registrar training.
- Real-world clinical performance is a strong predictor of Fellowship examination success.

Overall, Professor Magin presented ReCEnT as an example of how large-scale educational data can be translated into meaningful improvements in registrar learning, supervision, educational programs and general practice research.