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GENERAL PRACTICE SUPERVISION AUSTRALIA

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FREQUENTLY ASKED QUESTIONS

WEBINAR

What can Findings of the ReCEnT Project Contribute to Supervisors' Training of Their Registrars?

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

The ReCEnT project has been running since 2009. This project incorporates educational and research elements, having been undertaken with the goal of documenting and analysing the nature of the clinical and educational content of GP registrar consultations.

Registrars participating in the project record details of 60 consecutive office-based consultations in each of GP terms 1, 2 and 3. This excludes nursing home and home visits, and specialist clinics such as flu or COVID immunisation clinics.

Despite being conceptualised as a research project, the more imminent educational outcomes – such as collated registrar data providing registrars with reflective feedback and informing RTO training programs – have ended up driving the project to a larger extent.

What are the ReCEnT research aspects and aims?

- To map the territory of registrar experience
  - To open the 'black box' of what registrars see
  - To establish associations of registrars' experiences
- To establish what registrars do
  - Including, do clinical behaviours align with evidence-based recommendations?
  - To establish associations of registrars' behaviours
- To establish if experience and behaviours change during training
  - Individual registrar experience and clinical behaviour
- To establish if experience and behaviours change over time
  - Aggregate registrar experience and clinical behaviour
- To explore how registrars learn within clinical consultations
- To establish if education provided by GP Synergy changes registrars' clinical behaviours

What are the ReCEnT data strengths and limitations?

- Strengths: A large number of variables
  - Collected for the purpose of ReCEnT
  - And internally linked to the problems the registrars are facing during their training
- Limitations: A 'snap shot' of a consultation without a great deal of context
  - Treatment regimens, past illnesses, etc
  - A longitudinal study of registrars, not 'patients'

What is the map of the territory of registrar experience: by condition exposure and registrar gender?

It is already known that trainee GPs see less chronic disease and more acute minor illness. The findings of the ReCEnT study add to this by revealing that, while trainees manage almost exactly the same number of problems per encounter as established GPs:

- Trainees see a different patient demographic and different clinical spectrum compared to established GPs
- Trainees see more new patients, more new problems and less chronic disease
- Trainees have a relative lack of opportunity for continuity of care with patients.

The conditions trainees as a whole are not found to be getting enough exposure to include:

- Cardiovascular disease
- Diabetes
- Musculoskeletal conditions
- Skin issues

In contrast, trainees seem to be getting more exposure to certain conditions than established GPs, most notably in the area of respiratory conditions.



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When the registrar experience is broken into trainees' gender, further disparities become obvious in the study's findings:

- Female trainees had almost 6 times the exposure to problems relating to female genitals
- Female trainees had more than double the exposure to family planning and pregnancy
- Female trainees had negligible exposure to issues relating to male genitals
- Male trainees had marginally more exposure to musculoskeletal conditions
- Female trainees had marginally more exposure to psychological conditions
- Male trainees had marginally more exposure to respiratory issues.

What is the map of the territory of registrar experience: chronic disease, older patients, and continuity of care?

Chronic disease

Compared to established GP's, who recorded chronic disease consultations of 40.7% in male patients and 38.7% in female patients, the percentage for registrars of chronic disease consultations was 29.5%.

The most common chronic diseases encountered by trainees were:

- Uncomplicated hypertension (5.7% of all consultations)
- Depressive disorder (4.2%)
- Lipid disorder (2.5%)
- Asthma (2.2%)
- Oesophageal disease (1.7%)

Older patients

Where 32.5% of established GP consultations were with older patients, only 17.6% of registrar consultations involved patients aged 65 years old and over.

These consultations were more likely to include chronic disease and more complex problems. However, in-consultation information or advice was less likely to be sought and consultations were briefer for the trainees, leading to the conclusion that registrars have relatively limited exposure to older patients coupled with less complex consultations.

Continuity of care

There are concerns that changing general practice structures may be creating a relative deficit in experience of 'interpersonal' continuity of care (a personal relationship of doctor and patient) in GP vocational training. The ReCEnT study confirms that levels of continuity of care in Australian GP trainees' clinical experience are modest, where the nature of the continuity of care that they do experience with older chronic disease patients is not necessarily of high educational utility.

In the study, 43.1% of patients had been seen by the registrar prior to the index consultation (characterised as 'upstream' continuity).

This percentage is associated with:

- Smaller practice size, ie with less than six GP's
- The practice routinely bulk-billing patients
- The practice being located in a lower socio-economic status area
- The consultation involving a chronic disease
- 49.4% of the patients had follow-ups planned with the registrar (characterised as 'downstream' interpersonal continuity).

This finding is associated with:

- Being new to the practice, and new to the registrar
- The practice routinely bulk billing patients
- The consultation involving a chronic disease
- The registrar generating learning goals
- The consultation lasting longer

Of registrars' consultations, 89.9% of the patients for whom follow-up was arranged were to be followed up by the registrar rather than another GP in the practice, ie: interpersonal continuity rather than informational continuity.

Associations of interpersonal continuity rather than informational continuity were:

- The registrar working full time
- The registrar generating learning goals
- The consultation lasting longer and addressing more problems/ diagnoses
- Smaller practice size, ie: less than six GP's.



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What do registrars do?

Antibiotic prescribing

The study has found that trainees prescribe antibiotics less than their established GP colleagues, but still well in excess of international evidence-based guidelines:

- 71.5% of sore throat diagnosis
- 21.6% of URTI
- 73.1% of acute bronchitis/bronchiolitis
- 78.8% of acute otitis media
- 71.2% for acute sinusitis

Variables positively associated with prescribing included:

- higher socio-economic practice location
- seeking information from guidelines or a supervisor

Other prescribing

Registrars prescribe a lot of Benzodiazepine and opioids, more than best practice, but still less than established GPs.

Referrals, investigations, procedures etc

See research papers listed under Resources.

Does the registrar experience and behaviours change during training?

Antibiotic prescribing

Moving from an earlier to later term did not significantly influence registrars' antibiotic prescribing:

- for URTI [adjusted odds ratio [OR 0.95 (95% CI 0.87,1.04), P=0.27]
- for acute bronchitis / bronchiolitis [OR 1.01 (95% CI 0.91-1.14),P=0.86]

Benzodiazepine prescribing

There was no significant change in 'within-registrar' prescribing over the registrar term, BUT there was a marked decline (6% per year on average) of registrar prescribing of benzodiazepine generally across the timeframe 2010-2015. This suggests the training environment has changed in that period, emphasising the influence of the training practice on the training outcomes.

How do registrars learn within clinical consultations?

Information and assistance-seeking

Information was sought from the supervisor for 6.9% (95% CI 6.8-7.1) of all problems encountered (and in 9.2% of consultations):

- 11.7% for diagnosis
- 53.1% for management
- 35.2% for both diagnosis and management

In-consultation information was sought for 15.4% (95% CI15.3-15.6) of problems/diagnoses.

Sources were:

- GP in 6.9% of problems / diagnoses
- Other specialists 0.9%
- Other health professionals 0.6%
- Electronic sources 6.5%
- Hard-copy sources 1.5%

Human information-sources are preferentially sought for more complex problems, even by early-career GPs who have trained in the internet era.

Generation of learning goals

Generated for 16.6% of problems / diagnoses in 22.1% of consultations.

Associations of generating learning goals included:

- Earlier registration term
- Being overseas-trained
- Longer consultation duration
- Addressing a chronic disease problem/diagnosis
- Accessing in-consultation information

- 19% of registrars felt in-consultation help-seeking decreases patient impressions of their competence
- 57% perceived that patient impressions are unchanged
- 25% perceived that in-consultation help-seeking increased patient impressions of their competence



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Registrars who felt in-consultation help-seeking decreased patient impressions of their competence:

- were younger, mean age 31 vs 33 years
- have worked in their current training practice for less than six months full time equivalent, ie. 3.85 times as likely

55% of registrars were more comfortable presenting outside the patient's hearing:

- 40% reported no difference in comfort level
- 5% of respondents were less comfortable

Registrars who were more comfortable presenting outside the patient's hearing were more likely to be:

- female, 50% more likely
- younger, mean age 32 vs 33 years

Does GP Synergy education changes registrars' clinical behaviours?

Antibiotics: the ChAP study

A pragmatic non-randomised trial employing non-equivalent control group design

- the intervention included access to online modules (covering evidence for, and communication skills in, management of acute bronchitis, followed by a face-to-face educational session)
- the intervention was delivered to registrars (and their supervisors)

There was no significant reduction in antibiotic prescribing for URTIs.

For bronchitis/bronchiolitis, there was a significant reduction in prescribing

- the adjusted absolute reduction in prescribing was 15.8% (95% CI: 4.2%-27.5%)

Opioid prescribing

A pragmatic non-randomised trial employing a non-equivalent control group design:

- there was no relationship between the training and prescribing after training
- interaction odds ratio: 0.74; 95% CI: 0.48-1.16; P value 0.19

A one-group pre-test / post-test design study, assessing:

- therapeutic intentions of tapering opioid maintenance for pain (in a paper-based clinical vignette)
- therapeutic intentions of tapering opioid maintenance for pain increased from 37 (80.4%) pre-intervention to 44 (95.7%) post-intervention (P=0.039)
- Anticipated initiation of any opioids for a chronic osteoarthritic knee pain clinical vignette
- Anticipated initiation of any opioids reduced from 37 (74.5%) to 24 (51.1%; P=0.012)
- Knowledge and attitude vs clinical practice
- The role of supervisors and of the practice

Overall impression

Education is necessary but not sufficient.

To change behaviours, education needs to be combined with other intervention functions, namely:

- Environmental restructuring
- Modelling
- Enablement
- Relevant training
- Coercion
- Incentivisation
- Persuasion
- Restrictions





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Resources: research papers based on ReCEnT study data

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