



# How to undertake research in general practice

## *Tips for the novice researcher*

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**T**here is increasing recognition of the importance of research in general practice with the commonwealth government now providing funding to build capacity in primary health care research.

Historically general practice has focussed on practice rather than research. This has left clinicians and policy makers without a strong scientific base upon which to make decisions.<sup>1</sup> Although most general practitioners consider general practice research findings to be useful and that general practice needs a relevant and applicable evidence base,<sup>2</sup> they prefer clinical experience in their own context to research evidence from other disciplines when making clinical decisions.<sup>3</sup>

It has been found that general practice culture and working conditions do not encourage questioning, nor provide time to seek answers.<sup>3</sup> Numerous questions arise in general practice, but few are identified and articulated<sup>4</sup> and only about 30% are pursued.<sup>5</sup>

Significant barriers to research include difficulties in translating practice based wisdom into methodologically sound research, the lack of a critical mass of researchers, a poorly developed research culture, and competing demands faced by investigators.<sup>6</sup> Lack of a supporting infrastructure conducive to research and inconsistent funding are additional problems.<sup>7</sup>

This article illustrates the process of undertaking a small project in a general practice setting. We consider some of the potential barriers to undertaking valid and reliable research in general practice for novice

researchers. We also discuss some of the opportunities available to enhance general practice research.

## The research process

### The research idea

In 2001, New South Wales Health commissioned the development of dementia guidelines. Our project began as a study aimed at assessing the impact of these clinical practice guidelines on GP management of dementia in patients living in the community. We wanted to determine the type of medical, psychological and social support provided to patients with early dementia and their carers, and to identify changes related to use of the guidelines. Although the development of these guidelines was funded by New South Wales Health, we were unable to secure funding for evaluating their usefulness.

Our initial objectives were to:

- give insight into the health status of a sample of dementia patients living in the community and their carers
- determine the current diagnostic, assessment and management strategies used by GPs for patients with early dementia, and
- document the medical and psychological care, and social support provided by GPs to these patients.

In general practice research, careful initial definition of the research question is crucial, especially as the clinical material may be less well defined and patient problems need addressing on many levels (physical, psychological, social, and cultural).

Our project was developed as a pilot study (it is always useful to undertake pilot projects to iron out problems before commencing larger studies).

## Mentorship

Lack of a critical mass of investigators is a major impediment to primary care research. This is worsened by the increasing difference in remuneration between clinical and academic positions. The increasing demands of patient care and teaching also make it difficult for primary care clinicians and academics to focus on innovative research.<sup>8</sup>

Although Australian general practice currently has a weak research culture, there are established GP researchers who are able to provide guidance to novice researchers. Therefore, novice researchers are well served by proactively identifying specific needs that would be met by a mentoring relationship. The Royal Australian College of General Practitioners (RACGP) National Standing Committee for Research, research units in some RACGP faculties, university departments of general practice, and the registrar research and development officer (RRADO) can provide a list of available mentors and supervisors.

Our project was developed by a general practice registrar in partnership with experienced researchers at the RACGP NSW Projects Research and Development Unit.

## Searching the literature

There is a dearth of research evidence from primary care in standard databases such as MEDLINE. However, many general practice papers are published in the 'grey literature' – publications in the form of reports, newsletters and other documents that are not indexed in electronic databases. Furthermore, papers of relevance to general practice may not be indexed as such and can require a sophisticated search strategy to avoid missing articles.

A study by Askew et al<sup>9</sup> found that many GPs are unaware of the information resources to which they have access. All Australian GPs have free internet access to MEDLINE through PubMed, and also to the Cochrane Library. The RACGP library is also a very useful resource for novice researchers as staff can assist in comprehensive literature reviews. General practitioners associated with hospitals and universities can also obtain support from librarians at these institutions in undertaking a literature review.

We utilised MEDLINE and the Cochrane Library. Much of the current literature related to persons with dementia in institutions rather than in the community.

## Ethics approval

Gaining ethical approval is usually a time consuming process. If the study involves more than one state, it may be necessary to obtain ethical approval from multiple research ethics committees. The RACGP's ethics committee, however, provides a unique service that enables researchers to obtain national ethics approval.

We gained ethics approval for our study from the RACGP's Research and Evaluation Ethics Committee, which is suitably GP focussed.

## Development of study material

Practice based research networks are an important resource for GP researchers who require clinical perspectives and access to patient populations.<sup>8</sup>

Our research materials were developed through collaboration with persons involved in dementia care. This process was made easier with research unit support. Accessing GPs associated with the research unit was also helpful in piloting our questionnaires. Presenting our ideas at conferences and division meetings was another useful means of receiving feedback.

Critical feedback early – and then on a regular basis – can be very helpful for novice researchers.

## Funding

Funding opportunities available to novice researchers include: Primary Health Care Research and Evaluation Development (PHCRED) primary health care fellowships, National Health Medical Research Council (NHMRC) primary health care scholarships, and specific foundations such as Rotary or trusts. The PHCRIS website ([www.phcris.org/resources/research/grants\\_frameset.html](http://www.phcris.org/resources/research/grants_frameset.html)) is a good source of up-to-date grant information. It has been shown that research focussed primary care fellowships are associated with greater research development.<sup>9</sup>

Academic posts that provide research experience during general practice vocational training should develop a critical mass of GPs to participate in research. These posts provide protected time for registrars to undertake research in a supervised environment.

Funding for our project was obtained through the Registrar Research and Scholarship Fund, which is administered by General Practice Education and Training (GPET). This small grant allowed us to develop the study design, present our ideas to colleagues, prepare study materials and commence the recruitment process. However, funding was not sufficient to promote the project widely enough to recruit sufficient GPs. We were unsuccessful in gaining funding for this project through Alzheimer disease support and advocacy associations. As we had received a grant for another larger project to improve the care and support provided by GPs to carers of patients with dementia, we were able to collect the required data through the larger project. Flexible approaches are essential in completing a project.

## Recruiting patients and GPs

A study by De Wit et al<sup>10</sup> suggested that successful patient recruitment in primary care research is determined more by the motivation of the research group than by financial incentives, the research topic, or research experience.

Recruiting patients and GPs was our major barrier. To recruit GPs, we advertised our study in the local division newsletter and attended a divisional education session about dementia to further promote our project. Unfortunately, we were unsuccessful in recruiting GPs through these means. To improve recruitment rates, strategies such as personal contact, quality assurance points, or participant payments can be useful. For our larger study, we were able to allocate additional resources to improve the recruitment process by persisting with advertising our project widely through our local division. We were also able to offer quality assurance points for the educational component of the project.

## Research opportunities

There are several opportunities for novice researchers to get involved with current research projects or to seek assistance in developing their own project.

The RACGP research units in some states, university departments of general practice or rural health, and PHCRED schemes established through university departments are good places to start. For registrars, there are specific research opportunities including academic registrar posts, and working as the RRADO through GPET.

## Research training

To improve skills in research methods, training can be accessed through university departments of general practice, the RACGP, or local divisions of general practice. There are some specific courses available such as the University of Sydney's online critical thinking skills workshop, or PHCRED funded courses. In most cases, the best learning tool is hands-on experience.

## Recommendations for novice researchers

The characteristics positively associated with initiating research include an involvement in teaching, access to academic mentors and information resources, the availability of protected time, a supportive environment within practices where more than one GP is research active, and opportunities to participate in reputable, established research activities relevant to general practice. Lack of time, support and money are the main constraints to carrying out research.<sup>11</sup>

### Tips for good research

- Have a genuine interest in the topic.
- Seek out colleagues to collaborate with.
- Network and encourage each other.
- Be flexible and don't get trapped.
- Be prepared to have a go.
- Start small.

Conflict of interest: none declared.

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