Building research capacity

An exploratory model of GPs’ training needs and barriers to research involvement

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AIMS To determine general practitioners’ research training needs, and the barriers to involvement in research.

METHOD Semi-structured interviews with 11 GPs in rural and metropolitan South Australia, analysed using a grounded theory approach.

RESULTS General practitioners’ perceptions about their research needs were limited by their own experience and focussed at an individual level. Overlapping needs and barriers emerged, categorised as: ‘individual issues’ (a lack of research training or experience, concepts and attitudes to research, and research interest) and ‘systems issues’ (funding arrangements for general practice, access to resources, opportunity for publication and the role of The Royal Australian College of General Practitioners [RACGP]).

DISCUSSION Our data provide an exploratory model that may assist in developing suitable strategies for research capacity building programs. General practitioners perceived both individual and systems solutions to building research capacity, including multifaceted interventions.

Less research is done in general practice than in other disciplines such as medicine, surgery and public health.1 In 2000, the Commonwealth Department of Health and Ageing established the Primary Health Care Research Evaluation and Development (PHCRED) program to increase research capacity in primary care. To achieve this increase, there is a need to determine primary health care practitioners’ research training needs and develop a research culture.

In the United Kingdom, the focus has been on the value of multidisciplinary research collaboration, the need for research relevant to primary care,2,3 the need to set research priorities,4 the value of research in promoting the use of evidence based medicine,5,6 the need for dissemination strategies,7,8 and frameworks for research in primary care.9,10 Although research networks have been promoted as a way of developing research capacity in general practice and primary health care, there is little evidence of their effectiveness.11,12

Barriers to general practice or primary health participation in research include a:

• lack of feedback from funding bodies on unsuccessful applications13
• lack of awareness of the research resources available14
• culture that does not encourage GPs to
ask research questions,18 and
• lack of time and staff to collect data,
  and lack of funding.19
We identified a need for further research
to assist strategic development of the
PHCRED program in South Australia,
through allowing the GPs to set the
agenda for research capacity building.
General practitioners’ attitudes and
involvement in research have been
reported.18 We extended this study with
specific reference to PHCRED, develop-
ing an exploratory conceptual model
based on qualitative analysis, to assist the
development of strategies for research
capacity building in the GP workforce.

Method
Two rural and three urban divisions of
general practice in South Australia
agreed to distribute a flyer with their
newsletter, asking GPs with an interest in
doing research to fax back their agree-
ment to participate in the study. In total,
665 GPs were invited to participate in the
survey. Additionally, the three university
departments provided details of GPs with
a known interest in research.

Individual issues
Nine GPs reported having done some
research, understating its significance
(Table 1A). Individual research interests
were often related to clinical practice
(Table 1B). Some responses highlighted
the gap between what might be consid-
ered research and practice based studies
that GPs could readily conduct. For
instance, some thought research was ran-
domised controlled trials and statistical
analysis that required advanced skills.
Even though one interviewee saw a role
for audit and collecting data for those
purposes, s/he suggested that ‘research’
was more about statistical analysis of
data. Different attitudes to the role of
research in general practice emerged.

Some felt they lacked specific research
skills and they perceived this as a barrier
to undertaking research. Perceived train-
ing needs often related to data collection
and analysis, particularly statistical, rather
than fundamental requirements such as
framing a research question. Paradoxically,
interviewees with little or no research
experience were not in a position to say
what skills they needed to acquire (Table
1C). Other specific needs were referencing
software, how to conduct literature
searches using electronic databases and
obtaining ethics approval.

Systems
Lack of time was considered a major
barrier to research. Despite the resources
of PHCRED, including bursaries and
fellowships, interviewees often saw no
way out of their current time constraints.
The fee-for-service funding of GPs, the
business structure of service provision,
and workloads were also considered bar-
riers. One interviewee suggested the
funding of a practice nurse would allevi-
ate workload demands (Table 1D).

Results
Figure 1 illustrates the range of identified
concepts. Concepts were categorised as indi-
vidual issues or systems issues. Overlapping
barriers and solutions are shown.

Figure 1. Emergent model
Table 1. Representative comments

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<th>Individual issues</th>
<th>Systems issues</th>
<th>Solutions</th>
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<td>A ‘Yeah a little bit (of research), not very much...I have done a survey that I hope to publish...but I haven’t got any further with that. We coordinated and did a combined survey and we used a few instruments and tools to try and increase the validity of the survey...and I just wanted to publish how successful our process was’.</td>
<td>D ‘...there’s this business administration but now there’s more paper work involved in showing your level of care for patients in terms of getting the enhanced primary care items and other items...it feels like there’s lots of demands for GPs and so thinking about research, I can understand why it would come pretty low on a lot of GPs’ priorities’.</td>
<td>G ‘I think you probably need almost a traineeship, you need someone to hold your hand a little bit to get started...because the leap from just general practice to being confident in research...it’s quite a leap to start with’.</td>
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<td>B ‘My interests are women’s health and paediatrics. There is certainly a lot going on with osteoporosis and that sounds quite interesting. I haven’t had any specific thoughts, but they are the two areas that I deal with. Most of my patients would fall into those two groups’.</td>
<td>E ‘Just imagine who would get the grants? They’re the people who get the grants all the time, and the people who least deserve it...probably the type of research projects that won’t yield a lot of useful information anyway’.</td>
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<td>C ‘What I’d like is the statistical analysis, I have some, but I’ll be honest I wasn’t that interested then, but now I am interested, and I want to know more about it, in fact with this project I need help with my statistics’.</td>
<td>F ‘I’ve got a study that I could publish but I know that it wouldn’t matter how well I wrote it up, it won’t get published because they’ll be critiques of methodology, they’ll say retrospective analysis isn’t good enough...’</td>
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<td>Solutions</td>
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<td>Proposed solutions included overcoming the isolation of doing research by links with a mentor, being part of a network with colleagues or other interested researchers and extensive training in research skills (Table 1G).</td>
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<td>There was no clear consensus on delivery of training, with suggestions ranging from supplying reading materials to computer based learning, evening seminars, and weekend or day time sessions. Face-to-face learning rather than distance methods were preferred. For some rural practitioners this would require attendance at regional centres, such as a technical and further education college with facilities for searching electronic databases. Some GPs who had already drawn on the resources of the PHCRED program referred to benefits such as funding for time out from practice and library searches. However, there were few other comments on the role of PHCRED.</td>
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<td>Discussion</td>
<td>These interviews provide an exploratory model that may assist in developing suitable strategies for research capacity building programs. One of the limitations is that until GPs embark on their own research, they may not be fully aware of gaps in their knowledge and skills. Another limitation is the small sample. However, we identified specific issues for some GPs, and these can be compared to previously identified systems related barriers. They could be addressed through multilevel strategies, including multidisciplinary research collaboration and setting research priorities. Experiences and needs varied, not only from professional to professional, but also at different career points. There is therefore no panacea for building research capacity. However, there are some clear messages for the PHCRED program. Resources such as statistical support, seeding grants and assistance with library searches have matched the type of support identified as relevant in this study. To prevent isolation, there may be a role for PHCRED to place more emphasis on mentoring and to link with common research topics as well as to provide a network through which to explore research issues. Few data exist to demonstrate whether networks can realise this potential. There may be a need for further exploration of the role of the RACGP and potential links with organisations such as GP training consortia. While supporting individuals is important, there is also a place for programs such as PHCRED to lobby for systems changes to promote research activity at primary care level, including grant funding. Our findings corroborate those of a recent Queensland study. Our model has suggestions for developing the PHCRED</td>
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program. Building research capacity is a lengthy process. The adoption of strategies to address both individual and systems issues may be important to the success of the PHCRED program.

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References

Conflict of interest: none declared.

Implications of this study for general practice

- Barriers to conducting research have been identified at an individual and systems level.
- GPs wanting to conduct research may need to identify local supportive networks.
- GPs may become aware of specific skills they need to further their research only after beginning that research.
- Any strategy aimed at building research capacity should address the individual needs as well as influence systems change.

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