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The desire for research in general practice

■ **Have you ever had the desire to do some research? If you answered 'no!' to this question, is that because you don't see yourself as an academic or researcher? Perhaps you don't want to spend inordinate amounts of time recruiting subjects for someone else's study? Previous experience may have taught you that, despite involvement in a piece of research, you only stumbled across the study's results several years after the fact (perhaps because you occasionally find time to read *Australian Family Physician*?) None of these scenarios would surprise us.**

If you have considered participating in general practice research, the chances are that a combination of inherent interest and potential satisfaction drew you toward it. You may want to see the evidence base of general practice expanded; you probably enjoy an intellectual challenge; and you are likely to take pleasure in the sense of achievement this can bring.

What is the nature and extent of your desire?

Clinicians can involve themselves in research in different ways and to varying degrees. According to Glasziou's triangle of research engagement, users, participants and leaders are all essential, and comprise the three levels of research engagement.¹ The research user, namely the clinician, incorporates research evidence into their daily practice, and hopefully seeks out the best available evidence, which is then combined with clinical experience and applied given knowledge of the specific patient. Research participants are research users who also ensure that research can take place by recruiting subjects or collecting data. Ideally, research participants also understand and support the purpose of the research.¹ Research leaders are those who design research, attract funding and publish the results. They don't have to be academics, although in Australia, at present, this tends to be the case. Where do you place yourself in the triangle of research engagement?

Desire lines for general practice research

General practitioners are more likely to engage with research if there is a clear path to follow. In this respect, general practice research can

learn a little from transportation theory. For instance, people walking across an unpaved area create dirt paths, known as desire lines,² which in turn encourage more travel along the same route. Originally desire lines were considered within the context of origin-destination surveys and became paramount among criteria for fixing routes.³ Its definition and use is now rather more nuanced⁴ with some arguing that the optimal way to design pathways in accordance with natural human behaviour, is not to design them at all, but rather pave existing desire lines as they are the 'ultimate expression of human desire or natural purpose'.² We've all seen desire lines at a corner where two paved paths meet. Given the absence of an insurmountable barrier, almost invariably a dirt path will be worn diagonally between the two paved footpaths. The challenge for research leaders is to make the paths GPs wish to travel easier to do so.

Researchers are often exhorted to take into consideration the needs and desires of research users and participants. Understanding and addressing the research needs and wants of GPs is important if GPs are to overcome the barriers they face when engaging in research. The expressed needs and desires of GPs are the equivalent of the urban planners' dirt paths. The message then for research leaders is that they must look to the users and participants for guidance. What topics interest clinicians? What is their current degree of involvement in research? What would encourage them to engage more fully?

Asking these questions will help identify the paths; taking the answers into consideration in the design of research questions and methods will go a long way toward paving those paths. Another way to pave the path for clinicians is to adopt flexible approaches to collaboration and mentoring. An observation of the authors is that GPs often engage in research for the first time through a burning desire to answer a particular question arising from their own clinical practice. Thus research leaders need to be flexible in fostering such research, rather than assuming that inexperienced GP researchers will want to fit into the department's existing research projects or areas of expertise. Similarly, a novice GP researcher's burning research question should not be discouraged even though it may not fit easily into one of the national research priority areas.

Table 1. Contact details for existing PBRNs in Australia

Name	Area covered	Contact details
Network of Research in General Practice (NRGP)	Hunter, New England and Central Coast, NSW	Parker Magin 02 4968 6734
PracNet	ACT and southeast NSW	Kathryn Dwan 02 6244 4956
Primary Health Care Research Network – GP (PHReNet-GP)	Southwest Sydney, South Sydney, East Sydney, Greater Murray, Illawarra and Shoalhaven, NSW	Suzan Mehmet 02 9616 8520 phrenet-gp@unsw.edu.au
South-East Queensland Research Network	Southeast Queensland	www.griffith.edu.au/health/primary-health-care-research-evaluation-development/partnerships-and-collaboration/south-east-queensland-research-network
VicReN	Victoria	Melinda Soós 03 8344 7276 www.gp.unimelb.edu.au/vicren/about.html

Finally, we need to consider the different origins and destinations of the GPs we hope to engage in research. The origin represents an individual's current involvement in general practice research whether as a user or participant. The destination represents the type and level of engagement they currently desire. Some research users, ie. a clinician in practice, may be willing to participate in research and recruit subjects, but have no desire to move beyond that; while some already involved at that level might be interested in gaining further research skills. Therefore, the paths or desire lines, of these two types of GPs will differ and different paths will need to be paved for them. Once again, asking what they want and being flexible in responding to the answers is crucial.

The take home message is that if we pave the path that GPs want to travel, we will make it easier for those coming after them, thereby encouraging more travel, ie. more engagement with research. Users, participants and researchers may then

engage to the greatest possible extent given their location on Glasziou's triangle.

Paving the way for research – PBRNs

Practice based research networks (PBRNs) attempt to pave the way for general practice research. The networks are groups of local practices supported to undertake research relevant to general practice and the local community's needs. They tend to be supported by a university department of general practice, which provides the necessary organisational structure and academic expertise. The networks are based on the premise that 'the experience, wisdom and insight of the practising physician are powerful tools for identifying and framing research questions that are relevant to practice'.⁵ As the current President of the World Organisation of Family Doctors (WONCA) pointed out in 2002, the major challenge for research networks is to include the context of general practice in their data and analysis.⁶

Table 2. PracNet

Network PracNet comprises six practices based in Canberra and four rural practices across southeast NSW. The network was established mid 2006 and meets approximately five times a year to discuss the progress of existing research and to consider future research topics

Research topic – *Propionibacterium acnes* in general practice

Research objectives – to examine whether *P. acnes* is becoming more resistant to antibiotics; to examine whether *Streptococcus pneumoniae* and *Staphylococcus aureus* are also becoming more resistant to antibiotics

Research method – a skin swab, nose swab and antibiotic history collected from 120 patients (aged 14–40 years) attending one of 10 practices in the ACT and southeast NSW

Rationale – recommended dosages of antibiotics for the treatment of acne in Australia are considerably lower than those recommended internationally. If patients are being prescribed insufficient dosages, Australian GPs may be doing their patients a disservice on two fronts: by not treating the condition effectively, and by increasing the likelihood that *P. acnes* will become more resistant to antibiotics that are prescribed

What happens with the results? Study results will be discussed with the network member practices and may lead to local recommendations regarding antibiotic dosage for acne

Table 3. Network of Research in General Practice (NRGP)

Network The Hunter/New England/Central Coast research network comprises 12 practices (rural and urban, large group and solo practices) with 70 GP members (and approximately twice that number of non-GP support staff). The Network was founded in 2007 and held its first annual research meeting in November 2007

Research topic – violence against general practice receptionists and practice nurses

Research objective – to explore the experiences of occupational violence of non-GP general practice staff

Research method – a qualitative study employing semi-structured interviews (20–25 interviews anticipated) followed by a quantitative questionnaire based study

Rationale – GPs report their staff, especially their receptionists, are 'bearing the brunt' of much patient frustration, anger, aggression and violence. But there is a paucity of receptionist and other non-GP staff 'voices' in this research

What happens with the results? Study results will be fed back to participants; network members are likely to inform measures to increase the occupational safety of network practice staff

However, it is important that GPs are able to participate in a way that suits them and their practice.

The United Kingdom and the Netherlands have a history of PBRNs, and Australian researchers are learning from their experience. Having studied these approaches, Zwar et al⁷ recently listed the essential attributes of these research networks. Nonacademic GPs will be pleased to note that involving GP clinicians in the choice of research topics and their subsequent implementation is a priority, as is providing relevant and timely feedback to participating GPs about the research outcomes. We believe that if these two attributes are present, research via PBRNs will give GPs what they desire.

On the most recent count, at least five PBRNs are operating in Australia, with another network likely to emerge from collaboration between Flinders University and a local division of general practice. Western Australia and the Northern Territory are the only states currently without such networks (*Table 1*). Ideally these PBRNs achieve the following goals:⁷

- link general practices with researchers
- provide a system to ensure the practices are not over taxed by their involvement in research
- provide relevant and timely feedback on the network's projects
- provide a means for feedback and discussion about network research
- facilitate training for members with an interest in furthering their research skills
- remunerate practices and practitioners for their involvement in research, and
- support researchers and coordination staff who can provide outreach and face-to-face contact with practitioners.

The practice network in *Table 2* demonstrates how GPs interested in research can explore a hypothesis generated in practice by one of its members. The practice network in *Table 3* aims to contribute to an evidence base that will eventually improve the safety of those working in general practice. It has the further advantage of helping to engage non-GP practice staff in the research process and culture within the practice.

Research networks may sound all too good to be true! Indeed, considerable barriers remain, the central one being financial support. Governmental funding of PBRNs, as occurs in the United Kingdom

and Netherlands, doesn't yet exist in Australia. Nevertheless, several universities are supporting PBRNs from within existing Commonwealth Government funded Primary Health Care Research Evaluation and Development (PHCRED) program funds or with small grants from their own institutions. We would strongly argue that dedicated funding of these networks, linked to defined aims, strategies and key indicators,⁸ is needed to improve the quality and quantity of primary care research in Australia.

At present, clinician participation in research is a labour of love and, as Glasziou's triangle would suggest, not for everyone. Nevertheless, we feel research networks may pave the way for greater GP engagement with research and, ultimately, fulfil the desire for a solid evidence base in general practice.

Conflict of interest: none declared.

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