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General practice research: an investment to improve the health of all Australians

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General practice research: an investment to improve the health of all Australians

Opportunities to recognise and invest in general practice research need to be realised

General practice research is essential to quality general practice, building an evidence base for over 27 000 general practitioners working within the specialty who provide medical care to the majority of Australians.¹ Over eight in ten Australians consult with their GP at least once per year, and two million people are seen each week in general practice.^{2,3} General practice, a medical specialty, is the first point of access to the health system, providing longitudinal care for all. It is essential for the delivery of efficient, equitable and effective health care services.⁴ General practice is unique, complex and continuing to evolve. A GP must have a good working knowledge of 167 problems to cover 85% of the conditions that they see most frequently,⁵ and management of multimorbidity has become the norm. The number of general practices appears to be declining, practices are becoming larger, and the proportion of GPs who are practice owners is decreasing.⁶ General practice research is key to optimising health care in this evolving context, but needs to be supported by the profession, funders and our professional colleges.

Current challenges

General practice has traditionally been seen as an applied discipline, rather than one with an academic underpinning, and research has therefore been undervalued. The undervaluing of general practice research is reflected in current research funding and a paucity of opportunities during specialty training. The proportion of National Health and Medical Research Council funding to primary care research has been consistently low,⁷ and this has continued in the current Medical Research Future Fund budget, with only \$5 million of \$392.5 million for the 2019–20 financial year specifically allocated to primary care,⁸ despite primary care being noted as a medical research and innovation priority for 2018–2020.⁹ The Medical Research Future Fund 2019 investigator grant opportunity for early to mid career researchers included primary care research as one of its 11 research priority areas, but it will not be known if general practice research specifically has been supported until the results of that round are released. In the context of this undervaluing, GPs who have completed PhDs have expressed concerns about insecure academic career pathways,¹⁰ and the current ageing GP research workforce may not be replaced.¹¹ Additional barriers to general practice research include lack of funding

for Australia and New Zealand's academic primary care peak body (the Australasian Association for Academic Primary Care), general practice research networks, and payments to adequately compensate practices for the time and resources required to participate in research.

Recent achievements

Despite the challenges, general practice has a long tradition of rigorous, detailed and credible scientific research. This work covers a broad range of research questions, utilising a range of methodologies and frameworks (Box). However, general practice research outcomes are often less visible as hospital admissions avoided, diseases prevented, complications averted and health services redirected are key outcomes.⁴ The generalist nature of primary care means that research must deal with heterogeneous populations, multimorbidity and complex health service delivery.

What would health care look like without general practice research?

Primary care is the most efficient, equitable and effective place to deliver health care for most of the population,⁴ and is underpinned by a growing scientific knowledge base as research in and about general practice has evolved and grown over the past 50 years.¹² Research in this setting is required as never before, with an ageing population, increasing rates of multimorbidity, and management continuing to move out of the hospital and into the community setting.¹³ There is no other academic specialty that will focus on generalist care in the community, and general practice is integral to research translation. Without general practice, the health outcomes of the population will be poorer and less equitable, and associated with increased health costs.⁴

Contextual knowledge of primary care is essential for credible and relevant general practice research. It is hard to imagine research into cardiology, for example, without the involvement of cardiologists. However, it is not uncommon for research in health services and primary care to not involve GPs, or to involve them at a late stage in development. Without GP involvement, research outcomes are unlikely to be fit for the general practice environment or appropriate for patients attending primary care.

Academic GPs play important roles in both research and teaching, including training academic GP registrars and supervision of primary care researchers and students more broadly. They contribute to shaping the policy and practice environment through representing general practice on guideline development groups and engaging with international colleagues to develop and implement research methodologies suitable for the primary care environment. Without support of general practice research and training, this expertise would be lost. GPs and practice staff work with academic GPs and play a critical role in the development and implementation of interventions, recruitment and data collection and interpretation. Without compensation for their time (participation in research often results in loss of income) and without the infrastructure of practice-based research networks, this practice knowledge cannot be harnessed. Data collected from

general practice that is not interpreted through a generalist lens with an understanding of the context in which general practice operates can result in conclusions that do not reflect practice.

A lack of focus on general practice research and academic opportunities will have a flow-on effect to the recruitment of new GPs. To build interest in general practice more broadly, attention needs to be paid to medical students who often believe there is little intellectual challenge in the profession and a lack of academic opportunities.¹⁴ The national General Practice Student Network, a network for medical students interested in general practice supported by General Practice Registrars Australia, provides an opportunity for academic GPs and the Royal Australian College of General Practitioners (RACGP) to link with medical students to showcase opportunities for GP research, teaching and academic training.

Towards the future

Vocational training will be transitioned to the RACGP and the Australian College of Rural and Remote Medicine from the federal Department of Health in January 2022. This presents a real opportunity for shaping the future of general practice training by acknowledging the importance of research to the discipline, expanding current academic registrar programs and encompassing key Australian Medical Council accreditation recommendations, including that appropriate candidates can enter research training during specialist medical training with opportunities to undertake intercalated research degrees.¹⁵ This would provide a foundation for a supported path in GP academia. The RACGP Expert Committee – Research is currently developing a research strategy that will address these issues.

Advanced Health Research Translation Centres and Centres for Innovation in Regional Health exist around Australia, and are partnerships of hospitals, research institutes and universities developed to accelerate translation of research into clinical care. As these structures currently stand, primary care often gets lost among the multitude of hospital partners, and clinicians and researchers who have little experience of, or interaction with, general practice. The Centres work together as the Australian Health Research Alliance, which currently does not include primary care as one of its system level initiatives. A focus on primary care would provide a more meaningful option for engaging with community general practice and primary care, working collaboratively with properly funded and sustainable practice-based research networks that have led to successful innovations in other parts of the world. The GP academic community would welcome closer collaboration with both the Medical Research Future Fund and the Australian Health Research Alliance.

The promise of big data has huge implications for general practice, with many heralding this as the beginning of a new era, but big data without appropriate expert interpretation is likely to lead to misunderstanding. General practice has a long history of working with data, starting with Charles Bridges-Webb developing the first general practice survey in 1961, laying the groundwork for the Bettering the Evaluation and Care

of Health (BEACH) program.² Large general practice datasets are now held by NPS MedicineInsight, Primary Health Networks, and departments of general practice (for example, the UNSW electronic Practice Based Research Network and the Data for Decisions program at the University of Melbourne). The ability to track the patient journey between primary care and hospitals is being realised through linked datasets. The National Primary Health Care Data Asset is now under development, and it is critical that this includes oversight and input of GP clinician-scientists to ensure that data are not misinterpreted.

General practice is an academic specialty based on an international body of literature and decades of research. However, in Australia we still have a way to go to understand why primary care works in our context, how to best implement change, and how to teach best practice to new clinicians. Recognising and investing in the value of general practice research will require a systems approach that includes medical student training, vocational training, and support of research infrastructure and GP clinician-scientists to enable research and research training in general practice and translation into practice and policy. This investment in general practice research and infrastructure should reflect the size of general practice in Australia, the population it serves, and the proportion of the associated Medicare spend.

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[Box]

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Examples of general practice research informing clinical practice and health service design

Research	Key findings and implications for general practice	General practice research involvement
ASpirin in Reducing Event in the Elderly (ASPREE) ¹²	Higher all-cause mortality was found in healthy older adults in Australia aged over 70 years of age that received daily aspirin. This suggests that aspirin may not be of benefit for primary prevention of cardiovascular disease in this age group	Mark Nelson (principal investigator) and Nigel Stocks were authors on this randomised controlled trial. Australian GP Associate Investigators in clinical practice recruited 87% of the 19 114 patient participants
What treatments are effective for common colds in adults and children?	Decongestants alone, or with antihistamines or analgesics, can be helpful for adults with nasal symptoms, but other commonly recommended treatments such as echinacea, vapour rub and heated, humidified air have no evidence of effect	Systematic review led by Mieke van Driel ¹³
Comparing non-sterile to sterile gloves for minor surgery: a prospective randomised controlled non-inferiority trial ¹⁴	Non-sterile gloves are not inferior to sterile gloves in regard to wound infection for minor skin excisions in general practice	Trial led by Clare Heal, conducted in a single private general practice in Mackay, Queensland
How to increase uptake of long acting reversible contraception (LARC) through general practice ¹⁵	Online GP training in effectiveness-based contraceptive counselling, together with GP access to rapid referral to a LARC insertion clinic increases LARC uptake by women	Cluster randomised controlled trial in 57 general practices in Melbourne led by Danielle Mazza
Bettering the Evaluation and Care of Health (BEACH) ²	The BEACH dataset, consisting of almost 1.8 million GP–patient encounters recorded between 1998 and 2016, has been used to inform the general practice research, education and policy	Each year, about 1000 GPs recorded data about 100 consecutive patient encounters, contributing to the development of the BEACH dataset. Graeme Miller was the Medical Director of BEACH
Clinical outcomes of an integrated primary–secondary model of care for individuals	GPs with special interests working with a Beacon model of integrated care for diabetes	Claire Jackson co-led the development and evaluation of the Beacon model, which

with complex type 2 diabetes: achieved clinical outcomes has now also been adapted
a non-inferiority randomised that were not inferior to and utilised in Western
controlled trial¹⁶ hospital-based specialist Australia
clinics, with greater patient
satisfaction

Composite Abuse Scale¹⁷ The Composite Abuse Scale The Composite Abuse Scale
was developed as a research was developed by Kelsey
tool to classify women Hegarty and used in a cluster
according to type and severity randomised controlled trial to
of abuse. It has been identify women who screened
translated into eight languages positive to intimate partner
and is considered the standard violence who may benefit
for assessing women's self- from brief counselling from
reported experiences of abuse their GP

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