

Improving general practice research in Australia

**Michael Tran, Renae Lawrence,
Christabel Abalo,
Jo-Anne Manski-Nankervis,
Clare Heal, Kirsty Douglas, Joel Rhee**

This article is part of a longitudinal series about the GP workforce.

GENERAL PRACTICE as a specialty is critical to the provision of efficient and effective healthcare. Almost 90% of the Australian population claimed at least one general practice service from Medicare in the 2021–22 financial year,¹ with 189 million consultations¹ delivered by approximately 31,000 general practitioners (GPs; 30% of the total health workforce in Australia),² all at a cost of 9% of total health expenditure.¹

The care provided by specialist GPs differs from that provided by many non-GP specialists due to the higher proportion of undifferentiated patient presentations, management of comorbidities in the context of complex social determinants of health and illness and the unique focus on disease prevention and facilitating interdisciplinary longitudinal patient care.

Current state of general practice research in Australia

Despite GPs providing the majority of medical care in Australia, most medical research is hospital based and conducted by non-GP specialists.³ In 2007, GPs in Australia published at a rate of three publications per 1000 GPs per year, for

internal medicine (159.5 publications per 1000 physicians) and surgery (67.8 publications per 1000 surgeons).⁴

There is a shortage of Australian academic GPs, as well as GPs embarking on this career path.⁵ This has been exacerbated by the defunding of several Australian primary care research capacity-building initiatives, such as the Primary Health Care Research, Evaluation and Development strategy and the Bettering the Evaluation and Care of Health programs.⁶

Many university general practice departments are disadvantaged by heavy teaching and administrative loads that leave little room for research.³ Funding tends to favour biomedical and disease-focused research conducted by tertiary hospital-based teams. Job security is limited, because many academic GPs are employed on temporary or short-term contracts.⁵ There is no funding to allow protected time for research by clinical GPs. In contrast to many hospital-based specialities, research by GP clinicians does not result in promotion or employment opportunities. Unsurprisingly, general practice-based research is often unfunded, small scale and done informally, with academic GPs working in relative isolation.

Benefits of general practice research

We are faced with a situation where a significant proportion of the studies used to inform national guidelines regarding

general practice care were not conducted in the general practice setting. Up to two-thirds of publications cited to support general practice recommendations are of uncertain relevance to patients in general practice.⁷ GPs are less likely to follow guidelines that are not clearly applicable to their own practice context.⁸

Research conducted in the general practice environment, led by GPs, has several advantages. It allows the incorporation of the unique and important characteristics of general practice, including managing uncertainty, chronic illnesses, comorbidities and polypharmacy.³ There is facilitation of rapid research translation into general practice and narrowing of the mismatch between the burden of diseases commonly managed in general practice and research focusing on these issues.⁹ Research may be facilitated by funding of local and national practice-based research networks, allowing larger, potentially more impactful studies. However, these must be led by GPs and primary care academics for the purpose of general practice and primary care research, rather than being created for the purpose of recruiting patients for tertiary care projects.

Recommendations to improve general practice-based research

We have outlined several strategies for improving general practice-based research (Table 1). These include capacity building, supporting academic general practice

Table 1. Recommendations for improving general practice-based research

Priority area	Recommendation
Capacity building in university departments of general practice and primary care	<p>Promote academic GP leadership at university, independent research institutes and research funding bodies</p> <p>Reinstate government academic capacity building funding in general practice and primary care</p> <p>Fund local GP-based research networks within a national structure to facilitate skill sharing and enable large-scale research</p> <p>Enable university departments of general practice to gain access to data obtained from GP clinical information systems</p> <p>Encourage publishing in local primary care journals and presenting at local conferences to better disseminate Australian-based research among peers and local clinicians</p>
Supporting general practices and primary care clinicians to be active partners in research	<p>Provide adequate compensation in all research budgets to facilitate general practice participation in research</p> <p>Establish a funding model for participation by clinical GPs in general practice-based research (including the possibility of Medicare item numbers and/or practice incentive payments)</p> <p>Provide funded research facilitator roles in beacon research practices</p> <p>Provide research-ready practice certification</p>
Supporting academic general practice careers	<p>Expand the number of academic GP registrar posts, including ring-fenced posts for rural and Aboriginal and Torres Strait Islander registrars and those enrolling in a higher degree by research</p> <p>Establish clearer pathways in academic practice upon completion of GP training/academic posts and for experienced GPs who may wish to develop research skills (eg through competitive primary care research fellowship positions in university departments)</p> <p>Invest in PhD and higher degree by research positions for GPs, including part-time options and funding to compete with clinical-only career paths</p>
Funding research that addresses issues and priorities in general practice, including disease related, population health and health services research priorities	<p>Policymakers and funding bodies should consider funding research in topics of priority in general practice identified by GPs, including: quality of care, use of evidence-based medicine, models of primary care delivery, consumer focus, multimorbidity management, mental health, collaborative care, avoiding hospitalisations, chronic pain and quality use of medicines¹⁰</p> <p>Fund studies to improve the use of general practice data and research methodologies</p>
Competitive research grants for research led by GPs	<p>Dedicated National Health and Medical Research Council and Medical Research Future Fund funding, including for GP-led primary care research, and tightening the definition of GP and primary care clinician-led research</p> <p>Establishing grant assessment panels specific to general practice</p>

GP, general practitioner.

careers, encouraging research upskilling in the GP workforce and incentivising research in key focus areas to benefit the Australian public.

Conclusion

Improving general practice-based research will enable the development and use of contextually relevant evidence-based medicine and recommendations in general

practice, ultimately benefitting the public of Australia, the majority of whom access general practice services.

Authors

Michael Tran MBBS (Hons), BSc (Med) (Hons), DCH, FRACGP, AFHEA, General Practitioner, Erskineville Doctors, Newtown, NSW; Lecturer in General Practice, Discipline of General Practice, School of Population Health, UNSW Medicine & Health, Sydney, NSW

Renae Lawrence BMed/MD, SCHP, FRACGP, AFHEA, General Practitioner, Kareela Family Practice, Kareela, NSW; Lecturer in General Practice, Discipline of General Practice, School of Population Health, UNSW Medicine & Health, Sydney, NSW
Christabel Abalo BPharm (Hons), MD, General Practice Registrar, Discipline of General Practice, School of Population Health, UNSW Medicine & Health, Sydney, NSW

Jo-Anne Manski-Nankervis BSc (Hons), MBBS (Hons), CHIA, PhD, FRACGP, Academic General Practitioner; Lead – Data Driven Quality Improvement Research Theme, Department of General Practice, The University of Melbourne, Melbourne, Vic

Clare Heal MBChB, DRANZCOG, DipGUMed, SM Epi, FRACGP, MPHMT, PhD, General Practitioner; Promotional Chair, Discipline of General Practice, Mackay Clinical School, College of Medicine and Dentistry, James Cook University, Mackay, Qld

Kirsty Douglas MBBS, DipRACOG, MD, FRACGP, General Practitioner at Interchange Health Cooperative, Greenway, ACT; Professor of General Practice, Australian National University School of Medicine and Psychology, Canberra, ACT; Director, Academic Unit of General Practice, Office of Professions, Leadership and Education, Health System, Policy and Research Division, ACT Health Directorate, Canberra, ACT

Joel Rhee BSc (Med), MBBS (Hons), GCULT, PhD, FRACGP, General Practitioner, Residential Aged Care Homes, Sydney, NSW; Head of Discipline of General Practice, School of Population Health, UNSW Medicine & Health, Sydney, NSW

Competing interests: RL and CA report support from The Royal Australian College of General Practitioners (RACGP), during the conduct of the study. JM-N reports having received personal fees from the RACGP, grants from the Medical Research Future Fund and grants from National Health and Medical Research Council outside the submitted work; and being the Director of Torch Recruit, which has developed software to identify people eligible to participate in clinical trials. CH and JR are on the Editorial Advisory Committee for the *Australian Journal of General Practice*. MT and KD have nothing to disclose.

Funding: None

Provenance and peer review: Commissioned, externally peer reviewed.

Correspondence to:

j.rhee@unsw.edu.au

References

1. Australian Government Department of Health and Aged Care. Medicare annual statistics – state and territory 2009–2010 to 2021–2022. 2022. Available at www.health.gov.au/resources/publications/medicare-annual-statistics-state-and-territory-2009-10-to-2021-22 [Accessed 1 December 2022].
2. Australian Government Department of Health and Aged Care. Medical doctors and specialists in Australia. 2022. Available at www.health.gov.au/topics/doctors-and-specialists/in-australia [Accessed 1 December 2022].
3. Driel MV, Deckx L, Cooke G, Pirota M, Gill GF, Winzenberg T. Growing and retaining general practice research leaders in Australia: How can we do better? *Aust Fam Physician* 2017;46(10):757–62.
4. Askew DA, Schluter PJ, Gunn JM. Research productivity in Australian general practice: What has changed since the 1990s? *Med J Aust* 2008;189(2):103–04. doi: 10.5694/j.1326-5377.2008.tb01931.x.
5. Barton C, Reeve J, Adams A, McIntyre E. Australian academic primary health-care careers: A scoping survey. *Aust J Prim Health* 2016;22(2):167–73. doi: 10.1071/PY14129.
6. Winzenberg TM, Gill GF. Prioritising general practice research. *Med J Aust* 2016;205(11):529. doi: 10.5694/mja16.00984.
7. Steel N, Abdelhamid A, Stokes T, et al. A review of clinical practice guidelines found that they were often based on evidence of uncertain relevance to primary care patients. *J Clin Epidemiol* 2014;67(11):1251–57. doi: 10.1016/j.jclinepi.2014.05.020.
8. Lugtenberg M, Burgers JS, Besters CF, Han D, Westert GP. Perceived barriers to guideline adherence: A survey among general practitioners. *BMC Fam Pract* 2011;12(1):98. doi: 10.1186/1471-2296-12-98.
9. Cooke G, Valenti L, Glasziou P, Britt H. Common general practice presentations and publication frequency. *Aust Fam Physician* 2013;42(1–2):65–68.
10. Heal C, Roberts G. General practice research priority setting in Australia: Informing a research agenda to deliver best patient care. *Aust J Gen Pract* 2019;48(11):789–95. doi: 10.31128/AJGP-05-19-4928.

correspondence ajgp@racgp.org.au