

Will Australia have a fit-for-purpose medical workforce in 2025?

To produce a fit-for-purpose medical workforce, Australia needs streamlined training pathways in all medical disciplines

Around the world, there has been a developing focus over the past decade on the importance of a fit-for-purpose medical workforce¹ with the right skills, providing the right care, in the right place, at the right time, and with skill sets which include leadership skills, communication expertise and the ability to work within teams.² Coupled with this is the perspective that health care should address the needs of patients and the public as its central purpose.³ The underlying assumption is that the provision of medical and other health care should be designed and delivered to meet the health needs of the population being served.

This assumption is consistent with social accountability, which the World Bank describes as “an approach towards building accountability that relies on civic engagement, in which citizens participate directly or indirectly in demanding accountability from service providers and public officials”.⁴ For medical schools, the World Health Organization defines social accountability as “the obligation to direct their education, research and service activities towards addressing the priority health concerns of the community, region, and/or the nation they have a mandate to serve”.⁵

In this context, there is a need for a medical workforce with the right mix and distribution within and between medical disciplines as well as geographically. Within medical disciplines, a key consideration is the mix of generalists and specialists. Gorman contended that New Zealand needs a “core workforce that can be employed flexibly and redeployed quickly” with a “scope of practice that is as general as possible, while such practitioners work at the top end of their licence”.⁶ Gorman also noted the lack of agreed national workforce goals in any jurisdiction⁷ and recommended workforce planning by service aggregates such as mental health or aged care rather than by professional discipline.⁸ In Canada, the Royal College of Physicians and Surgeons of Canada, which represents all medical disciplines except general practice, defines generalism as “a philosophy of care that is distinguished by a commitment to the breadth of practice within each discipline and collaboration with the larger health care team in order to respond to patient and community needs”.⁹ From this perspective, generalism skills and generalist practitioners are required in all medical disciplines, not just general practice and not only in remote, rural and regional communities.

Another consideration is the mix between primary care and other levels of medical care. Starfield and colleagues¹⁰ demonstrated, principally in OECD countries, that health systems in countries with comprehensive primary health care are the most efficient and effective, both in terms of lower overall costs and generally healthier populations. Within countries, areas with higher primary

care physician availability and less specialist availability have healthier populations, and greater primary care physician availability reduces the adverse effects of social inequalities. The authors also found that primary care (in contrast to specialty care) is associated with a more equitable distribution of health in populations, a finding that holds in both cross-national and national studies.¹⁰

Starfield and colleagues identified six mechanisms, alone and in combination, that may account for the beneficial impact of primary care on population health: greater access to necessary services; better quality of care; a greater focus on prevention; early management of health problems; the cumulative effect of the main primary care delivery characteristics; and the role of primary care in reducing unnecessary and potentially harmful specialist care.¹⁰ This evidence again highlights the importance of generalism for a fit-for-purpose workforce.

Regarding geographic distribution, most countries around the world face the same challenge as Australia, which is to ensure that there are sufficient numbers of doctors and other health professionals who have the skills and commitment to provide care where it is most needed, particularly in underserved remote, rural and Indigenous communities.¹¹ Again, this is an issue not only for general practice but for the full range of medical disciplines.

In order to ensure a fit-for-purpose workforce, there needs to be a workforce supply system that produces medical graduates with the capabilities and desire to provide the right care in the right place at the right time. Currently in Australia, workforce supply arrangements are complicated and fragmented, with many components that are not well connected to each other in what could be described at best as a patchwork quilt.

In 2014, Health Workforce Australia specified “three key factors that underpin the importance of national workforce planning for doctors”: “an immediate need to deal with the significant increase in domestic medical students that has occurred in the last 10 years”; the “huge number of doctors [that] will retire from 2025”; and the “lack of coordination across the medical training pipeline”.¹²

Expanding on the third factor, the report indicated that “between governments, universities, medical colleges and the various employers of doctors — there are hundreds of individuals making decisions on how many doctors and what type of doctors are trained in Australia. Ensuring their individual decisions are aligned to what the nation needs from doctors in the future is essential”.¹² A graphic that appeared in the report highlights the multiple individuals, organisations and government entities which contribute to the training of doctors (Box).

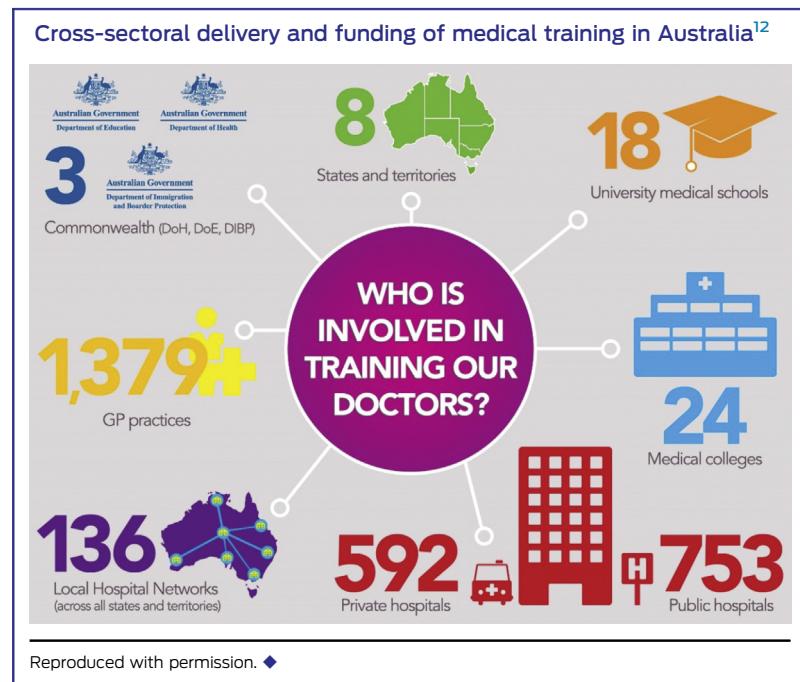
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University medical schools recruit students straight from high school or after another university degree and provide undergraduate medical education based at the university, and in hospitals and other clinical settings. Graduates then undertake one or two years of clinical service as junior doctors, mostly in hospitals, followed by entry into vocational training for general practice or another specialty. This vocational training or postgraduate medical education is overseen by one of the 24 medical colleges and takes the form of in-service training combined with clinical service delivery. The trainees, usually known as residents or registrars, apply each year for a new appointment while pursuing studies to prepare for the certifying examinations for Fellowship of the relevant medical college. The colleges set the standards, accredit training positions and, through the Fellowship examinations, award entry to specialty vocational registration. After completing vocational training, the doctors then enter unsupervised clinical practice with the requirement to keep up-to-date through continuing medical education.

In Canada, these aspects of education and training are much more streamlined. Specifically, university medical schools are responsible for delivering all levels of medical education — undergraduate, postgraduate and continuing medical education. There are no separate internships or foundation years, so final year medical students apply to undertake postgraduate medical education, known as residency training. They are encouraged to apply for training in any specialty, in any medical school, anywhere in Canada via the Canadian Resident Matching Service (<https://www.carms.ca/en>). Depending on the specialty, residency training consists of 2 to 5 years of postgraduate medical education in which the trainees, known as residents, provide clinical service to enhance their learning. As long as the resident meets requirements, employment is guaranteed for the entire training program with no need to re-apply each year.

There are two medical colleges in Canada: the College of Family Physicians of Canada, for family medicine (the Canadian equivalent to general practice), and the Royal College of Physicians and Surgeons of Canada, for all other medical specialties. The colleges set the curriculum, accredit the residency programs (delivered by medical schools), and set the examinations which certify the doctor as competent in a specific medical specialty, including family medicine.

In effect, the involvement of medical schools in all levels of medical education creates an integrated education and training pathway. For example, the Northern Ontario School of Medicine (NOSM) provides residency training in family medicine and eight other general specialties. Ninety-two per cent of NOSM medical students have grown up in

Northern Ontario and 94% of the doctors who completed undergraduate and postgraduate education with NOSM are practising in historically underserved Northern Ontario, including 33% in remote rural communities.¹³

In Australia, the only integrated training pathways are the Remote Vocational Training Scheme (www.rvts.org.au),¹¹ and the rural generalist training pathway which began in Queensland¹⁴ and now occurs in some other states and the Northern Territory. The recent appointment of Australia's first National Rural Health Commissioner is intended to ensure development of National Rural Generalist Pathways in multiple medical disciplines, not only general practice, and ultimately other health professions as well.¹⁵

If Australia is to have a fit-for-purpose medical workforce in 2025, there is an urgent need to establish full streamlined education and training pathways in all medical disciplines, not only general practice. There should be a mix of urban- and rural-based training programs with educational curricula that emphasise generalism skills¹⁶ and ensure year-by-year continuity of employment for trainees. Learning generalism skills will encourage adaptability and the potential for medical workforce redeployment in response to changing population health needs. Planning and implementation of these training pathways will need to be informed by the national systematic collection, analysis and interpretation of medical workforce supply data. It will also require evidence-informed sustainable health service models that are guided by social accountability and designed with active community participation to address population health needs.¹⁷

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References are available online at www.mja.com.au.

- 1 Campbell J. Towards universal health coverage: a health workforce fit for purpose and practice. *Bull World Health Organ* 2013; 91: 886.
- 2 Medical Reference Group, Health Workforce Advisory Committee. Fit for purpose and for practice. Advice to the Minister of Health on the issues concerning the medical workforce in New Zealand. Wellington: Health Workforce Advisory Committee, 2006. <https://www.health.govt.nz/system/files/documents/publications/hwac-fit-for-purpose-practice.pdf> (viewed Nov 2017).
- 3 Health Foundation. Fit for purpose? Workforce policy in the English NHS. London, Health Foundation, 2016. <http://www.health.org.uk/publication/fit-purpose> (viewed Jan 2018).
- 4 Agarwal S, Heltberg R, Diachok M. Scaling-up social accountability in World Bank operations. Washington, DC: World Bank, 2009. <http://documents.worldbank.org/curated/en/423211468164948681/Scaling-up-social-accountability-in-World-Bank-operations> (viewed Nov 2017).
- 5 Boelen C, Heck JE. Defining and measuring the social accountability of medical schools. Geneva: World Health Organization, 1995. http://apps.who.int/iris/bitstream/10665/59441/1/WHO_HRH_95.7.pdf (viewed Nov 2017).
- 6 Gorman DF. Towards a sustainable and fit-for-purpose health workforce – lessons from New Zealand. *Med J Aust* 2013; 199 (5 Suppl): 32-36. <https://www.mja.com.au/journal/2013/199/5/towards-sustainable-and-fit-purpose-health-workforce-lessons-new-zealand>
- 7 Gorman DF. Matching the production of doctors with national needs. *Med Educ* 2018; 52: 103-113.
- 8 Gorman DF. Developing health care workforces for uncertain futures. *Acad Med* 2015; 90: 400-403.
- 9 Royal College of Physicians and Surgeons of Canada. Final report of the Generalism and Generalist Task Force. July 2013. <http://www.royalcollege.ca/rsite/educational-initiatives/generalism-medical-education-e> (viewed Jan 2018).
- 10 Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Milbank Q* 2005; 83: 457-502.
- 11 Strasser R. Learning in context: education for remote rural health care. *Rural and Remote Health* 2016; 16: 4033. <https://www.rhh.org.au/journal/article/4033> (viewed Nov 2017).
- 12 Health Workforce Australia. Australia's future health workforce – doctors. Canberra: Department of Health, 2014. <http://www.health.gov.au/internet/main/publishing.nsf/Content/australias-future-health-workforce-doctors> (viewed Nov 2017).
- 13 Strasser R. Delivering on social accountability: Canada's Northern Ontario School of Medicine. *The Asia-Pacific Scholar* 2016; 1: 1-6.
- 14 Sen Gupta TK, Manahan DL, Lennox DR, Taylor NL. The Queensland Health Rural Generalist Pathway: providing a medical workforce for the bush. *Rural and Remote Health* 2013; 13: 2319. <https://www.rhh.org.au/journal/article/2319> (viewed Nov 2017).
- 15 Gillespie D. Health Insurance Amendment Bill (National Rural Health Commissioner) Bill 2017 [media release]. www.health.gov.au/internet/ministers/publishing.nsf/Content/health-medirel-yr2017-gillespiel70209.htm (Viewed Nov 2017).
- 16 Gorman DF. Seven steps to redistributing doctors to meet health needs better. *Intern Med J* 2017; 47: 845-847.
- 17 Strasser RP. Recruiting and retaining a rural medical workforce: the value of active community participation. *Med J Aust* 2017; 207: 152-153. <https://www.mja.com.au/journal/2017/207/4/recruiting-and-retaining-rural-medical-workforce-value-active-community> ■