A sufficient pipeline of doctors for rural communities is vital for Australia's overall medical workforce

The shortage of doctors in remote, rural and regional Australian communities is a longstanding health policy challenge. It is the main reason why almost 3000 overseas-trained doctors enter the labour force annually[1] — a similar number to the domestic graduate output of Australian medical schools.[2] Most overseas-trained doctors end up practising in major cities; 75% of all registered overseas-trained doctors in clinical practice in 2021 were metropolitan based, with major cities also accounting for 76% of the growth in overseas-trained doctors over the 2015–2021 period.[3] In effect, rurally targeted recruitment of overseas-trained doctors compounds the problem of geographic maldistribution that it is meant to solve. Achieving a substantial pipeline of Australian-trained graduates who will willingly pursue regional careers as general practitioners, rural generalists and non-GP specialists is therefore a first order policy priority.

What it takes

The evidence on what influences medical graduates to pursue non-metropolitan careers has been accumulating over several decades.[4] The best understanding is that a systems approach is required — an alchemy that combines the various factors known to enhance rural career choice.[5] Putting aside remuneration and other incentives, a systems design in medical training must consider the full pathway from medical school applications through to GP and non-GP specialist careers.[4,6]

Medical students who have a rural background are more likely to pursue rural careers than their metropolitan counterparts.[4] However, not all students with a rural background will practise in rural areas, nor should they be expected to. Likewise, we cannot assume that all students with a city background are not keen to practise rurally. Strategies that can influence medical graduates to practise rurally include locating medical programs outside of major cities and aligning pathways for graduates with rurally based general practice training.[6] While teasing out individual contributions of other elements of rural program design is difficult, interventions that are common to the programs that have the most success include substantial rural clinical exposure, longitudinal integrated clerkships, a rurally rich curriculum, rural health student clubs, rural teachers, rural clinical mentors, and rural social networks.[4,6] Quality rural experience is also vital, as positive learner experiences are fundamental to driving rural interest.[7]

Australia has a strong record of investment in rural training, which has both applied and contributed to the evidence. This includes long term funding for regional health professional training through rural clinical schools and university departments of rural health.[8] Under current arrangements, a quarter of all domestic medical students undertake at least one year of clinical training in rural and regional locations, with other students having access to shorter rural terms. Participating universities are required to admit at least 25% of their students from rural backgrounds and support rural health student clubs. The positive impacts of programs run by rural clinical schools and university departments of rural health are well documented.[8] Encouragingly, domestic graduates accounted for 72% of the 4645 net growth in regionally practising clinician numbers over the period 2015 to 2021.[3] Rural career interest among medical graduates is substantial, with 39% indicating a preference to work outside of a capital city.[2] While it would seem evident that those graduates should be supported into regional postgraduate training, there are few resources in place to facilitate this. It is largely left to the wit of individuals to navigate the complex, city-centric and large hospital-oriented graduate training system. Much of the rural interest among graduates therefore goes unrealised.

To bridge this continuity gap in regional training, various programs have been devised, albeit on a somewhat piecemeal basis. These include: Australian Government funding for supplementary specialist training posts in regional and private hospitals[9]; a stipulation that half the trainees in the Australian General Practice Training Program undertake their training outside of major cities[10]; and opportunities for a subset of junior doctors to gain rural general practice experience in addition to hospital rotations.[11] In addition, the need for a more comprehensive approach to the regional medical training continuum is increasingly being recognised. Since 2017, the capacity of rural clinical schools to support medical training beyond graduation has been supplemented via the Regional Training Hubs program, with the aims of understanding and responding to regional needs, building regional capacity, and supporting students and graduates to do regional training and pursue regional careers.[8] Despite modest resources and it being early days, this approach appears sound.[8] A key challenge, however, is that while Regional Training Hubs are an Australian Government initiative, it is the state and territory governments that are primarily responsible for junior doctor training, non-GP specialist training and hospital-based components of general practice training through the public hospital system.[8] A stronger collaborative model is therefore needed.

Priority actions

Australia must deliver a domestic medical workforce for the regions. This requires a reform of the medical

Richard B Murray[1,2]
Helen Craig[1]

1 Medical Deans Australia and New Zealand, Sydney, NSW.
2 College of Medicine and Dentistry, James Cook University, QLD.

richard.murray@jcu.edu.au

doi: 10.5694/mja2.52022

training continuum, with buy-in from universities, specialist medical colleges, public and private hospitals, and the primary and community care sectors. The Australian National Medical Workforce Strategy sets out overarching priorities for medical workforce reform, including better collaboration on planning and design of Australia's medical workforce, rebalancing supply and distribution, reform of training pathways and building generalist capability, and flexibility and responsiveness of the medical workforce.[12] In terms of early reforms, and with unanimous support from its members, Medical Deans Australia and New Zealand is advocating four interrelated actions.

Expand professional entry medical training in regional Australia

Our current heavy reliance on overseas recruitment and hospital service demand for junior doctors suggest that a substantial increase in medical school places is required. Although we acknowledge that universities have an economic interest in medical school places, rural medical workforce is an urgent priority. Additional medical school places should therefore be deployed regionally into programs that apply the best evidence for delivering rural and primary care workforce outcomes. This should involve admissions policies, program design, and clinical training experience that emphasises learning in and for the following settings: rural and primary care, Aboriginal community-controlled health services, rural hospitals, aged care services, disability care services, community mental health services and other community-based services.

The evidence on entirely regionally based programs vis-a-vis substantial rural placements is still emerging. However, improving access to medical programs for students and graduates wishing to be rurally based during their training offers additional benefits, and both models should be supported. In addition, to attract junior doctors and stem the loss from regional locations, rural practice must be fulfilling and sustainable throughout doctors' training and careers. This requires funding reforms that enable: flexible business and clinical models; support for rural doctors to flourish in research, teaching and leadership; career paths that recognise fluidity in doctors' vocations; and a flexible, needs-focused approach to skills credentialling.

Invest in the primary care sector as a quality teaching, training and research system

If Australia is to build a stronger primary care system and achieve an equitable distribution of doctors, a greater emphasis on teaching, training and research (TTR) in primary care and rural settings is required. The Australian Government invested $2.2 billion in TTR in public hospitals in the financial year 2022–23,[13] while support for teaching in primary care is limited to payments for GPs to supervise medical students, GP trainees and some junior doctors.[11] Funding reforms must better embed TTR in primary care clinical and business practices; this is essential if the aspiration to "make primary care a first choice career", noted in the Strengthening Medicare Taskforce report, is to be realised.[14] Investment in primary care teaching infrastructure (such as additional consulting rooms, learning spaces and learning technologies) is sorely needed. Other community-based settings need to be included too — Aboriginal community-controlled health services that seek the opportunity, aged care services, disability care services, and community mental health services.

A strong primary care teaching system can create an environment that strengthens vital primary care research and scholarship. It drives primary care-based innovation and attracts and retains the next generation of primary care professionals. To deliver this, we need more equitable funding of TTR between hospitals and primary care or community-based settings, and we need to grow the primary care TTR workforce. We also need: universities and research institutes to champion rural and primary care academics and researchers; medical colleges to preference rural pathways and experiences; hospitals to partner with primary care; and primary care and community-based settings to embed TTR in their practice. This requires leadership, a funded strategy and key performance indicators for primary care TTR, plus more connected pathways into teaching and research for early career clinicians.

Scale up intern and junior doctor posts in primary care settings and rural locations, aligned with the boost to graduate supply

Medical graduates need high quality experiences in rural locations, primary care and other community settings in their junior doctor years, but achieving this is challenging because hospitals rely on trainee doctors to meet service demands.[12] Reducing the reliance of hospitals on trainee doctors is important, as is progressing an outcomes-focused approach to graduate training rather than conventional rotations through specialty units.[12] The new national framework for prevocational medical training, set out by the Australian Medical Council, provides an impetus to take such an approach.[15] That said, the main practical opportunity for growth of intern and junior doctor training in primary care settings and regional locations is aligning this with a substantial boost in graduate supply through medical schools.

To ensure that these rural positions attract graduates and interns, we need to address the "hidden curriculum" that elevates city-based subspecialisation within the training system and the profession. Selection into specialty training programs needs to preference rural experience and ensure strong rural trainee support and professional networks. Trainees need to know that going rural does not mean going it alone.

Establish integrated regionally based postgraduate training capacity via regional training collaboratives

Medical Deans Australia and New Zealand is advocating for the establishment of regional training collaboratives to draw the various currently discontinuous elements of medical training into

functional alignment and deliver critical mass. Building on the Regional Training Hub initiative, regional training collaboratives would leverage two decades of investment in regional medical training. They would also enable stronger connections with regional hospital medical education units and with GP and non-GP specialty training. Such place-based approaches would support local strategies to grow training capacity that are based on local needs, local networks and local opportunities.[16,17] Moving to integrated, collaborative models would coordinate regional training pathways, and provide consistent support for doctors in training, particularly across transition points and for those needing additional support. While a key challenge is connecting federal- and state-funded elements, a principle of the 2020–25 National Health Reform Agreement is "joint planning and funding at a local level".[18] This provides both direction and a mechanism to progress the required collaborative funding, governance and accountability.

Action is needed now

Greater self-sufficiency for Australia's medical workforce has never been more important. A boost to regional graduate supply that is aligned with rural, primary care and community-based training and capacity building will be a key reform in producing medical graduates more aligned to future community need. Leadership, collaboration and a focus on outcomes will be key to delivering on the intent of this investment in Australia's future health care.

Acknowledgements: Richard Murray was President and Chair of the Executive Committee of Medical Deans Australia and New Zealand for 2021–2023 and Helen Craig is its Chief Executive Officer.

Open access: Open access publishing facilitated by James Cook University, as part of the Wiley - James Cook University agreement via the Council of Australian University Librarians.

Competing interests: Richard Murray and Helen Craig work on a contract with the Australian Government that provides funding to Medical Deans Australia and New Zealand to conduct annual surveys of final year medical students, produce annual trend reports, and link data with Australian Health Practitioner Regulation Agency medical registration data. The Australian Government is not directly involved in this work.

Provenance: Commissioned; externally peer reviewed. ■

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