



UNIVERSITY
OF WOLLONGONG
AUSTRALIA

University of Wollongong
Research Online

Faculty of Science, Medicine and Health - Papers

Faculty of Science, Medicine and Health

2011

Strategic approaches to the development of Australia's future primary care workforce

Mark Fort Harris

University of New South Wales, m.f.harris@unsw.edu.au

Nicholas Arnold Zwar

University of New South Wales, nzwar@uow.edu.au

Christine Walker

Chronic Illness Alliance

Sabina M. Knight

Mount Isa Centre For Rural And Remote Health

Publication Details

Harris, M. F., Zwar, N. A., Walker, C. F. & Knight, S. M. (2011). Strategic approaches to the development of Australia's future primary care workforce.. *Medical Journal of Australia*, 194 (11), S88-S91.

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library:
research-pubs@uow.edu.au

Strategic approaches to the development of Australia's future primary care workforce

Abstract

Shortages in, and maldistribution of, the primary health care workforce will continue to limit access to health care. The current health reform proposals and policies recognise workforce development as a priority, but only partially address the barriers to improvement. In particular, there will need to be more systematic development of interdisciplinary education within primary health care services, and funding to support this.

Disciplines

Medicine and Health Sciences | Social and Behavioral Sciences

Publication Details

Harris, M. F., Zwar, N. A., Walker, C. F. & Knight, S. M. (2011). Strategic approaches to the development of Australia's future primary care workforce.. *Medical Journal of Australia*, 194 (11), S88-S91.

Strategic approaches to the development of Australia's future primary care workforce

Mark F Harris, Nicholas A Zwar, Christine F Walker and Sabina M Knight

The Australian Government Department of Health and Ageing's National Primary Health Care Strategy has identified the importance of improving access to a range of primary health care services and reducing disparities in access on the basis of location and disadvantage of population groups.¹ In some aspects of care, disadvantaged and vulnerable groups (including Indigenous Australians) have greater need but lower patterns of use of primary care as reimbursed by Medicare Australia.² Conversely, improving access to primary health care has been demonstrated to help overcome some of the adverse effects of income inequality on health.³

Access is determined by a range of factors, including appropriateness, acceptability and availability of health services in time as well as location, and by direct costs to consumers. Out-of-pocket costs are estimated to be close to 20% of total costs, skewing demand to services funded by the Medicare Benefits Schedule rather than allied health or community services.^{4,5} Inadequacies in current Australian data mean that occasions of service are only reported for medical primary care and some private allied health, and not for community health and other services, which together contribute nearly 50% of care.

Health service funding and service provision, including the health care workforce and its distribution, underpin access to primary health care.^{5,6} Maldistribution or fragmentation of this workforce in Australia continues to be a major issue, despite efforts over two decades to correct the problem. The mean number of health workers varies from over 600/100 000 population in the urban areas to 30/100 000 in remote areas,⁷ leaving access to the full range of primary health services in rural and remote Australia increasingly expensive or logistically difficult.⁸

Challenges from the broader health care context

The mismatch between current workforce supply and the demand for health care services is likely to get worse before it gets better. There is a variety of reasons for this, including population ageing, population growth in outer urban areas, increasing expectations of consumers about the range and availability of services, changes to the way in which health care is delivered (including multidisciplinary team care), increasing duration and specialisation of health professional training, and ageing of many primary health care professional workforce groups.

Population ageing and the rise of complex chronic diseases will continue to put increasing demands on health services. Almost a third of general practice patients have more than one long-term condition.⁹ Prevention and management of chronic diseases require multidisciplinary teams of health professionals who are able to provide well organised, comprehensive care and self-management support. This has emerged as a significant trend since the coordinated care trials and the revamped Enhanced Primary Care program's Team Care Arrangements in 2005, with particular implications for the nursing and allied health professional workforce.^{10,11} However, there are major disparities between the burden of illness (itself in part due to the lack of access to services) and the

ABSTRACT

- Shortages in, and maldistribution of, the primary health care workforce will continue to limit access to health care.
- The current health reform proposals and policies recognise workforce development as a priority, but only partially address the barriers to improvement.
- In particular, there will need to be more systematic development of interdisciplinary education within primary health care services, and funding to support this.

MJA 2011; 194: S88–S91

distribution of allied health workers, especially in remote, rural and low socioeconomic areas.

The proposed federal health reforms have implications for the composition and skills required of the health care workforce. For example, a shift away from occasion-of-service to care-over-time and performance payment may require health care workers with increased skills in monitoring processes and outcomes of care. The increased focus on prevention at practice and organisation levels will require new skills in prevention throughout life, including in the early years. The integration of federal- and territory- or state-funded primary health care services will also create increased need for clinical leadership and for the development of skills in teamwork, negotiation and optimisation of roles and responsibilities within services and networks.

Trends in the primary health care workforce

The primary health care workforce is diverse, and includes doctors, nurses, allied health professionals and assistants, pharmacists, dentists, Aboriginal health workers and administrative staff with special expertise in primary health care services. These disciplines have different workforce trends and distribution, often as a result of specific fragmented policies and funding models or migration of workers from other parts of the health system or from public to private practice. Overall, however, there are currently significant shortages across a range of health disciplines.

In 2005, it was estimated (based on current service and funding arrangements) that there was a shortfall of 800–1300 general practitioners — 4%–6% of the workforce.¹² The nursing shortage was estimated at 10 000–12 000 nurses, which would require a doubling of the number of nursing graduates to address.¹² As noted above, these shortages are more acute in rural and remote Australia, particularly among doctors⁷ and allied health professionals.^{1,3} Most sectors of the workforce are affected, but the problem is particularly acute in primary care.^{14,15}

There have been major increases in some subdisciplines — for example, the number of practice nurses more than doubled between 2004 and 2007¹⁶ — but even this large increase has not kept pace with demand. These workforces cannot be considered in isolation because of the overlap and potential for substitution or enhancement in some of their roles and responsibilities.

Key trends that may put pressure on the Australian primary health care workforce

- Continuing shortfalls in primary health care workforce numbers in most disciplines and maldistribution of some disciplines.
- Increasing median age of the primary health care workforce.
- Changing workforce participation and expectations for working hours.
- Changes to the model of care to involve more disciplines in many aspects of primary health care as part of a health care team.
- Increased requirements for placement in primary health care as part of undergraduate, prevocational and vocational training of many disciplines. ♦

The health workforce is ageing, with 16% aged 55 years and older and a mean age of 42 years in 2006.¹⁷ GPs tend to age with their practice populations — thus, some of the most demanding and complex health problems are faced by older GPs, who may be trying to reduce their workloads.¹⁸ Fewer younger doctors, many of whom have young families, are prepared to work in traditional settings that require long, inflexible work hours, or in isolation from other members of the primary health care team, specialist and support services.¹⁹ The need to take time off and/or work part-time to meet parenting responsibilities is also an important factor.

A striking feature of medical workforce training has been the piecemeal, reactive nature of change over the past 20 years. After previous supply restrictions, the past 5 years have seen large increases in funding for students to enter training. These students are expected to graduate between 2011 and 2013, putting increasing demand on postgraduate medical positions in hospitals and pressure for them to be placed in the community.

Additionally, the number of overseas-trained doctors practising in Australia has steadily increased at about 3% a year over the past 5 years, and this group now comprises 41% of the medical workforce in rural and remote areas.^{7,20}

Both these trends are likely to have a significant impact on vocational medical training over the next few years, leading to an announcement by the Australian Government Department of Health and Ageing that the number of general practice training places will be doubled.²¹ The effectiveness of this strategy in meeting workforce demand will depend on a number of other factors, including retention and distribution. There is currently no explicit national strategy to systematically train a nursing or allied health workforce for primary health care (although some local and state programs exist).

As noted above, there have been major changes to the model of care, with an increasing recognition of the value of multidisciplinary team care through more integrated primary health care services such as GP super clinics. Although preference has been given to areas of need in establishing these services, they are still susceptible to the same overall workforce supply issues. Additionally, few have fully integrated existing community health services to optimise the service and patient experience. Furthermore, they will, for the foreseeable future, provide only a fraction of the primary health care services required. Thus, there will continue to be a need to train health professionals, including GPs, nurses, midwives, and allied health professionals, in and for a range of service types, and for health professionals to work in more distributed health teams. This is likely to be an important role of the new “Medicare Locals”.

Bringing together a mix of health and community disciplines, which may be privately funded (including Medicare-rebatable), with salaried providers from state governments or primary health care organisations as an effective team will require an understanding of the roles of these providers as well as sophisticated organisational skills. Primary health care practitioners will be practising in a range of services of differing size, governance (including corporate, cooperative, not-for-profit, community-controlled and profession-led) and composition. Providers will need a flexible range of skills and capabilities and to be exposed to a variety of service models and other health professionals during their training. Leadership will be required to cope with differences in organisational culture between the different services (eg, between the more hierarchical culture of salaried state health workers compared with the entrepreneurial culture of private practitioners).

The trends in primary health care that may put pressure on the workforce are summarised in the Box.

Strategic implications for future training

Given the increasing subspecialisation of medical specialists, the ever-shortening length of patient stay in hospital, and increased role of nurses, nurse practitioners, midwives and allied health professionals in prevention and pre- and postacute care, the primary health care medical and nursing workforce will need to have a wider range of skills. This will not be simply a matter of traditional placements in acute facilities, but rather of acquiring specific acute care skills that can be used in community settings outside the hospital. There has been significant investment in community-based teaching in some rural areas and this has been supported by those communities. However, this has been less well developed in urban areas.²²

This also raises important questions about the degree of specialisation of primary health care providers and how their education will be best provided. Telemedicine may be able to provide some specialist expertise and support in rural and remote areas.²³ However, it will be important to train most generalist health disciplines in the management of chronic disease and older people's health. If GPs are to take on roles as medical team leaders, especially in relation to the care of older patients (in subacute and residential aged care) and of patients with complex conditions in the community, they may need to have some of the skills that more generalist physicians have had in the past.

To cope with changing patterns of disease, primary health professionals need to acquire a range of skills to cope with a new range of roles in prevention, early detection and management of chronic disease. These include new methods of screening, risk assessment, health promotion and interventions to modify risk. There is also a need for primary health professionals to acquire skills to better engage with consumers with low health literacy and from diverse cultural backgrounds (including Indigenous people) and to involve patients in decisions about their care and in self-managing their risk factors or chronic diseases.^{24,25}

Many of these new roles will be shared among health professionals, including nurses, midwives, GPs, nurse practitioners and allied health providers. Roles and evidenced-based guidelines will need to be negotiated for effective care of patients, especially those with chronic conditions. There may also be new categories of health workers (such as health assistants) involved in this care.

Although skill-mix innovation has been a feature of several initiatives, the transfer of such innovations across the health system (especially in urban areas) has been slow.²⁶ This suggests a need to develop more integrated educational pathways between health disciplines in community settings during all levels of education and training. This will help develop a better understanding of the roles of different professions, and mutual trust and respect between members of primary health care teams.

Interdisciplinary education is difficult to coordinate, given the very different form of the curricula and professional cultures.²⁷ It could be provided through models of integrated primary health care such as GP super clinics or the primary health care centres or services proposed by the National Health and Hospitals Reform Commission.^{28,29} However, such clinics and centres will be able to provide only a minority of potential training places for the foreseeable future, and thus it will be important to develop capacity (including space) across the range of primary health care services, including existing general practices. Innovative and interdisciplinary models of continuing education of all primary health care workers is important in workforce development.³⁰ Primary health care organisations (Medicare Locals) may have an important role in developing this educational capacity, including in settings outside traditional general practice.³¹

Primary health care clinicians' involvement in managing health services will require clinical leadership training to develop new skills in team management and performance measurement. This has been called for in the health reform documents.^{1,8} However there has been a decline of interest among medical trainees in taking a role in managing practices or community health services. The engagement of primary health care clinicians is essential at all levels to ensure that health service development and improvement is appropriate to the needs of patients and the community. High-quality, well trained management and clinical leadership is essential for bringing about change and creating successful networks of primary health care services. Logically, management training will need to be included in the primary health care reorientation and organisational development.³²

The skills and competencies must be addressed in the curricula without overburdening it. There is a risk that training will become even longer and more complex. This more comprehensive community-based education may be enhanced by vertical integration across the different levels of training and by addressing multiple capabilities within the same learning activity (eg, technical skills in chronic disease management with organisational skills such as teamwork).

Creating a flexible primary care health workforce that engages at a multidisciplinary level as well as with consumers and the community requires considerable resourcing, including for the retraining of existing primary health care providers. There will be additional pressure and may be some degree of competition among the various needs of different levels of training (eg, university, postgraduate, and vocational training) and among the different disciplines. This competition needs to be managed to prevent it from leading to further fragmentation. This is relevant not only to GPs, but also to nursing and allied health providers, who are increasingly supervising students in the community.

The National Primary Health Care Strategy and the National Health and Hospitals Reform Commission reports suggest that we need to create appropriate practice or service environments that function effectively as both service delivery and training precincts

for multidisciplinary teams and provide suitable infrastructure and professional capacity for teaching.^{29,33} Although a doubling of general practice training places has been recently announced,²¹ this has not been matched in other primary health care disciplines. Also, it is unclear how the capacity for this training will be developed, especially for community-based interdisciplinary education and training, as there are significant practical barriers to the implementation of more integrated multidisciplinary teaching models. Stronger incentives and practical support are required to enable curriculum planners and teachers to translate into practice what has been, up until now, an often unattainable ideal.

Conclusion

Workforce planning needs to improve — Health Workforce Australia is an important initiative but will need to build trust and relationships with professional groups and settings. Currently, most skills-mix innovation is driven by necessity in rural or highly specialised environments but is not generalised across the system.²⁶ There needs to be greater investment in supporting community practitioners to engage in education and training at all levels and to ensure greater integration across levels of education and disciplines. There also needs to be greater investment in research to evaluate the impact of the new models of funding and care on the primary health care workforce and its capacity to train the next generation of providers.

Competing interests

Mark Harris was a member of the Australian Government Department of Health and Ageing Expert Advisory Group on Primary Health Care Strategy. Christine Walker is a member of the Australian Commission for Safety and Quality in Health Care Primary Health Care Subcommittee.

Author details

Mark F Harris, FRACGP, MD, Professor of General Practice, Centre for Primary Health Care and Equity¹

Nicholas A Zwar, PhD, FRACGP, Professor, School of Public Health and Community Medicine¹

Christine F Walker, PhD, Executive Officer²

Sabina M Knight, RN, MTH, FRCNA, Professor,³ and Director⁴

¹ University of New South Wales, Sydney, NSW.

² Chronic Illness Alliance, Melbourne, VIC.

³ Centre for Remote Health, Flinders University, Alice Springs, NT.

⁴ Mount Isa Centre for Rural and Remote Health, Mount Isa, QLD.

Correspondence: m.f.harris@unsw.edu.au

References

- 1 Australian Government Department of Health and Ageing. Building a 21st century primary health care system: a draft of Australia's first National Primary Health Care Strategy. Canberra: DoHA, 2009. (Report No. P3-5479.)
- 2 Furler JS, Harris E, Chondros P, et al. The inverse care law revisited: impact of disadvantaged location on accessing longer GP consultation times. *Med J Aust* 2002; 177: 80-83.
- 3 Shi L MB, Starfield J, Wulu J, et al. The relationship between primary care, income inequality and morality in the United States 1980-1995. *J Am Board Fam Pract* 2003; 16: 412-422.
- 4 Doggett J. Out of pocket: rethinking health co-payments. *Australian Policy Online* 2009; Jul 22. <http://apo.org.au/node/17852> (accessed May 2011).
- 5 Australian Institute of Health and Welfare. Health expenditure Australia 2006-07. Canberra: AIHW, 2008.

- 6 Pechansky R, Thomas W. The concept of access. *Med Care* 1981; 19: 127-140.
- 7 Australian Government Department of Health and Ageing. Report on the Audit of Health Workforce in Rural and Regional Australia. Canberra: DoHA, 2008.
- 8 National Health and Hospitals Reform Commission. A healthier future for all Australians. Interim report. Canberra: NHHRC, 2008.
- 9 Family Medicine Research Centre. Prevalence of multimorbidity and most common referrals for health priority areas. Canberra: Australian Government Department of Health and Ageing, 2008.
- 10 Esterman AJ, Ben-Tovim DI. The Australian coordinated care trials: success or failure? *Med J Aust* 2002; 177: 469-470.
- 11 Australian Government Department of Health and Ageing. Chronic Disease Management (CDM) Medicare items. Canberra: DoHA, 2010. <http://www.health.gov.au/internet/main/publishing.nsf/Content/mbspri- marycare-chronicdiseasemanagement> (accessed May 2011).
- 12 Australian Government Productivity Commission. Australia's health work- force. Canberra: PC, 2005.
- 13 National Rural Health Alliance. Current issues for Australia's rural and remote health workforce. Position paper. Canberra: NRHA, 2004.
- 14 Australian Medical Workforce Advisory Committee. The general practice workforce in Australia: supply and requirements to 2013. Sydney: AMWAC, 2005.
- 15 Brooks PM, Lapsley HM, Butt DB. Medical workforce issues in Australia: "tomorrow's doctors — too few, too far". *Med J Aust* 2003; 179: 206-208.
- 16 Hordacre, AL, Howard S, Moretti C, Kalucy E. Moving ahead. Report of the 2006–2007 Annual Survey of Divisions of General Practice. Adelaide: Primary Health Care Research and Information Service, 2008.
- 17 Australian Institute of Health and Welfare. Health and community serv- ices labour force, 2001. Canberra: AIHW, 2003.
- 18 Britt H, Miller GC, editors. General practice in Australia, health priorities and policy 1998–2008. Canberra: AIHW, 2009.
- 19 Thistlethwaite J, Shaw T, Kidd M, et al. Attracting health professionals into primary health care: strategies for recruitment. Canberra: Australian National University, Australian Primary Care Research Institute, 2007.
- 20 Australian Government Department of Health and Ageing. Portfolio Budget statements 2009–10. Canberra: DoHA, 2009.
- 21 Grattan M, Medew J, Austin P. Rudd's big cash boost for GP training. *The Age* (Melbourne) 2010; 16 Mar. <http://www.theage.com.au/national/ rudds-big-cash-boost-for-gp-training-20100315-q9n6.html> (accessed May 2011).
- 22 Hudson JN, Weston KM, Farmer EE, et al. Are patients willing partici- pants in the new wave of community-based medical education in regional and rural Australia? *Med J Aust* 2010; 192: 150-153.
- 23 Smith AC, Gray LC. Telemedicine across the ages. *Med J Aust* 2009; 190: 15-19.
- 24 Adams RJ, Stocks NP, Wilson DH, et al. Health literacy — a new concept for general practice? *Aust Fam Physician* 2009; 38: 144-147.
- 25 Nutbeam D. The evolving concept of health literacy. *Soc Sci Med* 2008; 67: 2072-2078.
- 26 Dennis S, May J, Perkins D, et al. What evidence is there to support skill mix changes between GPs, pharmacists and practice nurses in the care of elderly people living in the community? *Aust New Zealand Health Policy* 2009; 6: 23.
- 27 Pecukonis E, Doyle O, Bliss DL. Reducing barriers to interprofessional training: promoting interprofessional cultural competence. *J Interprof Care* 2010; 22: 417-428.
- 28 Australian Government Department of Health and Ageing. GP Super Clinics. Canberra: DoHA, 2010. <http://www.health.gov.au/internet/main/ publishing.nsf/Content/pacd-gpsuperclinics> (accessed May 2011).
- 29 National Health and Hospitals Reform Commission. A healthier future for all Australians. Final report of the National Health and Hospitals Reform Commission. Canberra: NHHRC, 2009.
- 30 Humphreys J, Wakerman J, Wells R, et al. Improving primary health care workforce retention in small rural and remote communities: how impor- tant is ongoing education and training? Canberra: Australian National University, Australian Primary Health Care Research Institute, 2007.
- 31 Council of Australian Governments. National Health and Hospitals Net- work Agreement: schedule B. Canberra: COAG, 2010.
- 32 Dunbar JA, Reddy P, McAvoy B, et al. The contribution of approaches to organisational change in optimising the primary health care workforce. Canberra: Australian National University, Australian Primary Health Care Research Institute, 2007.
- 33 Australian Government Department of Health and Ageing. Primary health care reform in Australia: report to support Australia's first National Primary Health Care Strategy. Canberra: DoHA, 2009.

(Received 11 Jun 2010, accepted 2 Aug 2010)

□