



Submission to the Senate Inquiry on  
health policy, administration and expenditure

College of Medicine and Dentistry  
James Cook University  
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## **Executive Summary**

Population ageing and rising rates of chronic disease are posing some challenges to the Australian health care system. Most of the recent increases in health care spending are driven by hospital spending on more and more expensive services per person. The best safeguards to ensure a strong and sustainable health care sector in the long term are:

- A strong, universally accessible, adequately resourced primary care sector led by General Practitioners
- Support for the rural pipeline for health workforce training and measures to enhance workforce flexibility
- Support for linked up needs-based health service and workforce planning through careful transition to PHNs

## Introduction

The College of Medicine and Dentistry welcomes the opportunity to make a submission to the Senate Inquiry on health policy, administration and expenditure. This submission reflects the expertise of the College in delivering a health workforce to meet the needs of regional, rural and remote northern Australia.

James Cook University is a distributed regional University with a particular focus on strengthening communities and improving the health and wellbeing of populations in the tropics, particularly rural, remote, Indigenous and tropical populations.

This submission is focused on three broad areas that encompass a number of the Inquiry's Terms of Reference, specifically:

- a. the interaction between elements of the health system, including between aged care and health care;
- b. improvements in the provision of health services, including Indigenous health and rural health;
- c. the better integration and coordination of Medicare services, including access to general practice, specialist medical practitioners, pharmaceuticals, optometry, diagnostic, dental and allied health services; and
- d. health workforce planning

The three topics address:

1. The importance of a strong, universally accessible primary health care system in delivering better health outcomes at lower cost to all Australians;
2. Strategies that work to address the maldistribution of the health workforce including:
  - i. The strengthening evidence for the "rural pipeline" of health workforce training;
  - ii. Incorporation of vertical integration and rural and regional postgraduate training pathways; and
  - iii. Identified threats to the rural pipeline;
3. The importance of linking joined up health workforce education and training with health care planning (at all levels of the health system) to ensure efficient care and a "fit-for-purpose" health workforce.

## **1. The importance of a strong, universally accessible primary health care system in delivering better health outcomes at lower cost to all Australians.**

It has long been established that primary health care provides the most equitable, accessible and acceptable care for individuals and communities.<sup>1,2</sup> As well demonstrated in the international and Australian research literature, General Practitioner (GP) led primary care teams are highly efficient particularly in terms of preventative care and chronic disease care.<sup>3-7</sup> If well supported, primary health care has the potential to increase health outcomes, lower costs, and reduce the need for further costly interventions, including hospital admissions.<sup>2,4</sup> Non-GP specialist care by contrast is reactive and expensive.<sup>8-10</sup> However, the trend continues towards specialisation and sub-specialisation of the medical workforce.<sup>11</sup>

There is concern about a rise in health care costs driven by an increase in Medicare spending. Further analysis suggests that most of the increase in spending has come from an increase in specialist and hospital spending and from areas such as pharmaceuticals and medical imaging (ie. New, improved and more spending per person).<sup>12,13</sup> Productivity commission figures indicate that in 2012-13 Australian Government expenditure on general practice was \$286 per person,<sup>14</sup> but in the same period government spending on public hospitals was \$1792 per person.<sup>15</sup> General practice is not the cost driver in the Medicare Benefit Scheme (MBS). There has also been a dramatic rise in potentially preventable hospital admissions and the bed days that result, explained largely by population ageing and increases in chronic disease cases.<sup>11,16</sup> For remote and very remote areas, the disparities in health and access to health care services is apparent in the rate of potentially preventable hospital admissions, which was more than twice that of metropolitan areas in 2011-12.<sup>16</sup>

Strengthening primary care will involve training and supporting an appropriate multidisciplinary workforce in areas of need, and this will involve changes to funding arrangements. Initiatives aimed at decreasing cost of health care for the population, such as increasing Medicare rebates for GPs, are necessary. Strengthening of general practice through innovative additional funding sources involving capitation<sup>17</sup> and pay for performance will further strengthen primary health care.<sup>18</sup> Expanded scope of practice for practice nurses needs to occur and must include recognition of services they provide, under the lead of GPs, in the MBS. Additionally, ability to see an allied health professional for Medicare supported services such as physiotherapy and podiatry should be based on clinical need. Failing to do so increases costs for patients.<sup>4</sup> Planned government cost-saving measures will further shift the burden of poor health onto populations already experiencing, or at high risk of poor health.

The proposed GP co-payment initiative will weaken general practice and discriminate against the most vulnerable.<sup>19, 20</sup> Health outcomes will be poorer as utilisation of primary health care services by those populations most in need, decreases.<sup>19</sup> The co-payment initiative will have the perverse outcome of driving up overall health care costs through downstream costs associated with delayed and more complex treatment requirements.<sup>19</sup> Mounting evidence supports the role of generalists and GP led primary health care teams in producing better population health outcomes with the added benefit of cost effectiveness.

Support to increase the attractiveness of clinical generalism in the medical workforce, inclusive of general practice, rural generalist practice, general internal medicine and general surgery is necessary. Without policy action, the trend towards sub-specialisation threatens the financial viability of the health care system and will result in poorer health outcomes, particularly for rural and regional populations.<sup>21</sup> While medical specialists are increasing in number, maldistribution exists with the large proportion of specialists in urban and metropolitan areas.<sup>11, 22</sup> Furthermore, some medical specialties are projected to exceed demand by 2025 while other medical specialties and generalists are currently in short supply.<sup>11</sup> Government policies and programs that reinforce generalism as an inferior career choice to speciality practice, such as in the MBS, must be reformed.<sup>23</sup> Additionally, further support for rural and regional training pathways that aim to correct this imbalance should be investigated.

It is well known that populations living outside of metropolitan areas suffer from poorer health outcomes. Investment in prevention, health promotion and strong primary care is the best way to support better population health.<sup>2, 24, 25</sup> This is particularly pertinent for rural dispersed populations where primary care teams are more likely to meet the needs of populations early, populations are sicker and the boundaries between state and federal funding streams are necessarily blurred.

- 2. Strategies that work to address the maldistribution of the health workforce including:**
  - i. The strengthening evidence for the “rural pipeline” of health workforce training;**
  - ii. Incorporation of vertical integration and rural and regional postgraduate training pathways; and**
  - iii. Identified threats to the rural pipeline**

For some years there has been concern about health workforce shortages in rural and remote Australia. Various measures to address these shortages have been introduced including the opening of eight new medical schools, to the extent that there has been a 60% increase of medical graduates in Australia between 2008 and 2012.<sup>26</sup> Despite better supply and overall numbers, maldistribution of the health workforce, with particular reference to doctors, is evident both in terms of geographic distribution and vocational distribution.<sup>27</sup> Increasing specialisation of the health workforce will further magnify existing imbalances across specialities, and specifically, contribute to a projected shortfall of medical generalists.<sup>22, 28</sup> In 1999, 45% of Australian doctors were GPs and by 2009 this figure had dropped to 38%.<sup>29</sup>

Evidence for the effectiveness of the “rural pipeline” across all fields of the health workforce continues to grow.<sup>30-32</sup> The rural pipeline begins at candidate selection and involves a medical school with a strong curriculum focus on primary care in regional and rural areas. Signification portions of practical placements are in rural areas and the pipeline continues into postgraduate training options specifically in rural and regional areas.

James Cook University (JCU) has demonstrated success in contributing to medical workforce distribution to rural and regional Australia.<sup>30-32</sup> The College of Medicine and Dentistry has graduated just over 700 medical graduates in 9 cohorts, with 99% follow-up rates for 627 graduates from the first 8 cohorts. Non-metropolitan internships were undertaken by two thirds of JCU graduates compared with 1 in 6 other graduates.<sup>30</sup> Through to postgraduate year (PGY) 8, more than two thirds of graduates are practising outside metropolitan areas, compared with 20% of all Australian clinicians.<sup>31</sup> Furthermore, JCU has been successful in attracting medical graduates into generalist careers. Of our graduates to date, 65% are training to be general practitioners or rural generalists.<sup>31</sup> While the rural pipeline is proven to attract doctors to geographic and vocational areas of need, current government policy poses some threats to this approach.

In terms of attracting graduates to general practice, attitudes through medical school are important, as are the number and location of GP placements. As mentioned in the preceding section, generalism needs to be recognised as a first choice career. Too often, general practice is undervalued by the community, other health professionals and this is

sustained in government policies.<sup>23</sup> Over-servicing and workforce drift away from generalism are encouraged by financial incentives for procedural specialty practice under the MBS.<sup>23</sup> Additionally, remuneration is an important factor driving the shift away from generalism, with non-GP specialist average earnings being almost double those of GPs.<sup>18</sup> While the General Practice Rural Incentive Program and other such programs, provide payments to GPs based on remoteness of their practice location, the scheme is based on a flawed remoteness classification structure. Rural incentive payments are based on the ASGC-RA remoteness classification – this classification is not an accurate representation of workforce conditions in different geographic areas of Australia.<sup>22</sup> Financial incentives need to better target the intended workforce. Ensuring workforce and health needs are met locally, would involve a modified remoteness classification system and a decentralised regionally based incentive approach.<sup>11</sup> Further government policy threatening the rural pipeline approach relates to vocational and medical college training.

Currently, systems that support internships, rotations, mentoring and vocational training in rural and regional areas are lacking.<sup>22</sup> A major issue for the general practice training pipeline, has been the loss of the Prevocational General Practice Placements Program (PGPPP). This program provided hospital based junior doctors with the ability to experience general practice while remaining employees of their hospitals. Evidence shows that an effective strategy for increasing recruitment and retention of health professionals involves placements in rural and remote health services.<sup>33</sup> Initiatives such as the PGPPP should be extended and in addition, similar initiatives applied for other health professions. Developing and supporting training programs for regional and rural undergraduate and postgraduate training for the range of health professionals, including nursing and allied health professions, is an important strategy.

Establishment of regional training hubs, innovation around candidate selection, establishment of a regionalised system for training, including regional allowances for specialist training posts for doctors, and continuance of current policies supporting the 'rural pipeline' could further alleviate workforce imbalances.<sup>21, 23</sup> The development of health workforce policies on a 'whole-of-workforce' basis rather than in silos, together with local level planning will ensure responsive regional workforce planning.<sup>34, 35</sup>

Innovative workforce models aimed at optimising skills use, skill mix and workforce adaptability are important in the rural and remote context.<sup>36</sup> Many models of primary health care have arisen out of necessity in rural and remote areas – rural and remote practice is the natural innovation laboratory for such. Professional role extension and flexible delegated and team-based care inclusive of rural generalists, nurse practitioners, physician assistants, pharmacists and generalist allied health is recommended, especially in the rural and remote context to maximise the utility of the available workforce.<sup>36</sup> The rural



pipeline is now well established for the medical workforce, but further work is necessary to extend this to appropriate training and postgraduate pathways for the rest of the health workforce, in particular allied health and dentistry. Primary health care teams, overseen at the local level, will provide the most effective means of delivering safe, high quality health services producing real health outcomes for regional, rural and remote communities.

**3. The importance of linking joined up health workforce education and training with health care planning (at all levels of the health system) to ensure efficient care and a “fit-for-purpose” health workforce.**

Regional health workforce and service delivery planning based on the known needs of local populations is vital. This involves Local Health Networks (called Hospital and Health services in QLD), working together with the proposed Primary Health Networks (PHN), education and training groups, Indigenous peak bodies and professional groups to assess population health needs, determine the services required, the competencies to deliver these services and ensure that an appropriate health workforce is available.<sup>37</sup> Recognition at policy level of the unique issues characteristic of rural and remote areas, including overstretched primary care health professionals and communities dispersed over large distances, must occur for effective health care planning and provision.<sup>38</sup> Many Medicare Locals have developed commendable networks and relationships with communities and service providers in their regions; it is vital that PHNs are able to build on this work.

With sharper lines between 'federally-funded' and 'state-funded' services, rural and remote communities are particularly at risk. The functional lines are necessarily blurry in rural locations across public hospital inpatient and outpatient care, community health, visiting specialist services, aged care, private general practice, public and private dentistry and allied health, public and private pharmacy, and other non-Government Organisation services (such as Aboriginal Community Controlled Health Services) . Mechanisms to plan, fund and coordinate public and private services at the local and regional level are the key. Collaborations between Hospital and Health Services, the planned PHNs and others are vital to coordinate investments whilst integrating care and developing pathways for patients and referring clinicians to navigate care.

These collaborations will allow new models of service delivery to be trialled, evaluated and implemented. These new models are expected to improve access, reduce costs and improve health outcomes. An example of a new model responding to local health needs is the NQ teleoncology network. This network has been established to allow treatment of cancer patients closer to home, using telemedicine to provide specialist support and even support for locally delivered chemotherapy in selected cases. The model has been evaluated

and found to be safe, popular with both patients and health care providers and is cost-effective.<sup>39-41</sup>

PHNs should be well placed to facilitate the integration of primary care with acute care for the provision of better chronic disease management. However, there is some concern that successful service delivery provided or commissioned by some Medicare Locals in rural and remote communities may be lost during the transition to PHNs. It is imperative that there is a strong transition plan and reasonable timelines to ensure that vital services and planning in rural and remote areas are not lost.<sup>38</sup> Importantly, PHNs recognise the importance of contributions from GPs, allied health professionals and community members in the governance, strategic direction and development of their local primary care system.<sup>38</sup>

Further collaborations that will strengthen primary care involve education and research institutions. Academic health science centres (AHSC) aim to achieve excellence in clinical service, research and education. AHSCs are an alliance between at least one research-led university, a medical research institute and one or more major tertiary health care providers. These centres, while well-established internationally, are poorly appreciated in Australia despite their strong potential to improve health through translation of research into practice.

A proposal to establish a Tropical Australian AHSC is currently being investigated. This proposal currently involves collaboration between JCU, the Australian Institute of Tropical Health and Medicine and the Townsville Hospital and Health Service, and the Cairns and Hinterland Hospital and Health Service. This centre would be a world-first with its focus on remote and rural health, tropical health and workforce issues.

So, in summary, for a strong health system ready to meet Australia's needs into the future there is a need to support and strengthen GP-led primary care; support the rural pipeline for health workforce training and measures to enhance workforce flexibility; and support linked-up needs-based health service and workforce planning through a careful transition process to Primary Health Networks.

1. Maeseneer J., Willems S., Sutter A., Van de Geuchte I., Billings M. Primary health care as a strategy for achieving equitable care: a literature review commissioned by the Health Systems Knowledge Network. Geneva: World Health Organisation,2007.
2. World Health Organisation. The world health report 2008 - primary health care (now more than ever). Geneva: World Health Organisation,2008.
3. Wilson T, Dawson J. Continuing the conversation on how an NHS facing great pressures can be fit for purpose in 10 years' time. The Health Service Journal. 2013;123(6377):25.
4. Australian Medical Association. General practice in primary care: responding to patient needs. An AMA blueprint for the delivery of primary health care services in Australia: AMA,2008.
5. McDowell JRS, Inverarity K, Gilmour H, Lindsay G. Professionals' perceptions of type 2 diabetes in primary care during a service redesign. European Diabetes Nursing. 2012;9(1):6-11.
6. Jiwa M, Longman G, Sriram D, Sherriff J, Briffa K, Musiello T. Cancer care coordinator: promoting multidisciplinary care -- a pilot study in Australian general practice. Collegian. 2013;20(1):67-73.
7. Australian Medical Association. Primary health care - 2010. 2010; Available from: <https://ama.com.au/position-statement/primary-health-care-2010>.
8. Gunn J, Naccarella L., Palmer V., Kokanovic R., Pope C., Lathlean J. What is the place of generalism in the 2020 primary care team? Canberra: Australian Primary Health Care Research Institute,2007.
9. Naccarella L. Generalism workforce planning: Definitional, pragmatic and transformational issues. Australian Family Physician. 2014;43(1/2):69-72.
10. Starfield B., Shi L, Macinko J. Contribution of primary care to health systems and health. Milbank Q. 2005;83(3):457-502.
11. Mason J. Review of Australian Government Health Workforce Programs: Australian Government Department of Health,2013.
12. Australian Institute of Health and Welfare. Australian health expenditure 2011-2012: Analysis by sector. Health and welfare financing series No. 51. Cat. no. HWE60. Canberra: AIHW; 2013.

13. Daley J, McGannon C, Savage J. Budget pressures on Australian governments. Melbourne: Grattan Institute,2013.
14. Australian Government. Primary and community health: Productivity Commission,2014.
15. Australian Government. Public hospitals: Productivity Commission,2014.
16. Australian Institute of Health and Welfare. Australian hospital statistics 2011-12 Canberra: AIHW,2013.
17. Ozegowski S. Effective policy mechanisms for an equitable geographical distribution of general practitioners: a qualitative comparative analysis of the accessibility of primary care in Europe. *Journal of health services research & policy*. 2013;18(3):151-9.
18. Scott A. Getting the balance right between generalism and specialisation: Does remuneration matter? *Australian Family Physician*. 2014;43(4):229-32.
19. Eckermann S. Avoiding a health system hernia and the associated outcomes and costs. *Australian & New Zealand Journal of Public Health*. 2014;38(4):303-5.
20. Moore M, Yeatman H. 'Killer Budget' attacks prevention and primary health care. *Australian & New Zealand Journal of Public Health*. 2014;38(4):301.
21. Murray R, Larkins S, Russell H, Ewen S, Prideaux D. Medical schools as agents of change: socially accountable medical education. *The Medical Journal of Australia*. 2012;196(10):653.
22. Australian Senate Community Affairs References Committee. Community affairs references committee: The factors affecting the supply of health services and medical professionals in rural areas. Canberra: Commonwealth of Australia,2012.
23. Larkins S, Evans R. Greater support for generalism in rural and regional Australia. *Australian Family Physician*. 2014;43(7):487-90.
24. Schoen C, Osborn R, Squires D, Doty MM. Access, Affordability, And Insurance Complexity Are Often Worse In The United States Compared To Ten Other Countries. *Health Affairs*. 2013;32(12):2205-15.
25. The Department of Health. National primary health care strategic framework: Commonwealth of Australia,2013.
26. Australian Government. Medical graduates: Department of Health,2014.

27. Health Workforce Australia. Health workforce 2025: Doctors, nurses and midwives - Volume 1. Adelaide: Health Workforce Australia,2012.
28. Health Workforce Australia. Health workforce 2025: Volume 3 - Medical specialities: Health Workforce Australia,2012.
29. Australian Institute of Health and Welfare. Medical Workforce 2011. Cat. No. HWL 49. Canberra: AIHW; 2013.
30. Sen Gupta T, Murray R, Hays R, Woolley T. James Cook University MBBS graduate intentions and intern destinations: a comparative study with other Queensland and Australian medical schools. Rural & Remote Health. 2013;13(2):2313.
31. Sen Gupta T, Woolley T, Murray R, Hays R, McCloskey T. Positive impacts on rural and regional workforce from the first seven cohorts of James Cook University medical graduates. Rural & Remote Health. 2014;In press(Journal Article).
32. Woolley T, Sen Gupta T, Murray R, Hays R. Predictors of rural practice location for James Cook University MBBS graduates at postgraduate year 5. The Australian Journal of Rural Health. 2014;22(4):165-71.
33. Crampton PES, McLachlan JC, Illing JC. A systematic literature review of undergraduate clinical placements in underserved areas. Medical Education. 2013;47(10):969-78.
34. Standing Council on Health. National Strategic Framework for Rural and Remote Health. Canberra: Commonwealth of Australia,2012.
35. Humphreys J, Wakerman J, Robert W, Kuipers P, Jones J, Entwistle P. "Beyond workforce": a systemic solution for health service provision in small rural and remote communities. The Medical Journal of Australia. 2008;188(8):77.
36. Health Workforce Australia. National rural and remote workforce innovation and reform strategy. Adelaide, SA: Health Workforce Australia,2013.
37. Larkins S, Panzera A, Beaton N, Murray R, Mills J, Coulter K, et al. Starting with the end in mind: regional health workforce planning in north Queensland. Townsville: James Cook University and Health Workforce Australia; 2014. Available from: [https://www.hwa.gov.au/sites/default/files/Regional-Health-Workforce-Planning-in-NthQld\\_v3.pdf](https://www.hwa.gov.au/sites/default/files/Regional-Health-Workforce-Planning-in-NthQld_v3.pdf).

38. National Rural Health Alliance Inc. Ensuring that new Primary Health Networks will work well in rural and remote areas: Discussion paper. 2014.
39. Sabesan S, Roberts LJ, Aiken P, Joshi A, Larkins S. Timely access to specialist medical oncology services closer to home for rural patients: Experience from the Townsville Teleoncology Model. *Australian Journal of Rural Health*. 2014;22(4):156-9.
40. Sabesan S, Kelly J, Evans R, Larkins S. A teleoncology model replacing face-to-face specialist cancer care: perspectives of patients in north Queensland. *Journal of Telemedicine and Telecare* [serial on the Internet]. 2014: Available from: <http://jtt.sagepub.com/content/early/2014/03/18/1357633X14529237>.
41. Thaker D, Monypenny R, Olver I, Sabesan S. Cost savings from a telemedicine model of care in northern Queensland, Australia. *Medical Journal of Australia*. 2013;199(6):414-7.