

# Allied health: untapped potential in the Australian health system

*Kathleen Philip* BAppSci (Physio), MMuscSkel Physio, MPH-Health Economics, Grad Dip Health Policy, GAICD, Chief Allied Health Advisor, Victoria; Manager, Health Workforce Innovation & Reform, Department of Health and Human Services Victoria

Department of Health and Human Services, 50 Lonsdale Street, Melbourne, Vic. 3000, Australia.  
Email: [chiefadvisor.alliedhealth@dhhs.vic.gov.au](mailto:chiefadvisor.alliedhealth@dhhs.vic.gov.au)

Received 21 October 2014, accepted 19 March 2015, published online 15 June 2015

Although comprising around 20 per cent of Australia's health care workforce, allied health and its contribution to improving health outcomes remains poorly understood and largely invisible in the Australian health policy and reform environment. There is strong evidence demonstrating the benefits of allied health in improving patient outcomes, minimising risk and harm from illness and improving health system efficiency and capacity to meet increased demand cost effectively. Despite this, the existing health model, funding and culture prevent us from effectively accessing these benefits at a system level. The untapped potential of allied health represents a major underutilised resource to address many of the challenges facing Australia's health system today. A transformational change in the Australian health system in how, where and by whom care is provided is necessary. Australia's health model and culture needs to shift, to genuinely involve the consumer and make full use of all three pillars of the patient care workforce.

## Introduction

Allied health, medicine and nursing together constitute the patient care workforce, each workforce element bringing unique and necessary skills to provide high-quality, patient-centred care. The three workforces can be considered as the three pillars of the patient care workforce, each being equally necessary for the stability, functioning and outcomes of the whole. Despite this, the allied health pillar is largely overlooked at a systems level in Australia. The unrealised potential of allied health represents a major underutilised resource to address many of the challenges facing our health system today. Better use of the allied health workforce can improve health outcomes and reduce overall health system costs by reducing demand and utilisation of acute health facilities.<sup>1</sup> Despite the solutions inherent in this resource, our health system remains unable to access them due to the health system's traditional medical model and focus on acute, episodic care. The health system must adapt in order to meet its core purpose of improving health outcomes and meeting the Australian community's health care needs in a sustainable way. The solutions lie in being clever in using the resources at its disposal, including allied health, to best effect.

## Background

The challenges facing the health system are well documented: the aging population with concomitant increasing demand; chronic disease as the main burden of disease rising with increasing rates of multimorbidity; technological advances increasing the domain and scope of care; rising consumer expectations; and escalating health care costs. Information technology has transformed communications, business models and modes of interaction (social, knowledge transfer and commercial) with instantaneous outcomes and consumer sovereignty becoming the new norm. These are the standards that healthcare is now being measured by. Consumers have increasingly high expectations of the health system and the way health care is provided, and are seeking empowerment and engagement in health transactions.

Other industry sectors have undergone transformative change in how they do business to survive and capitalise on an Information and Communication Technology-enabled and consumer-dominant environment. However, the health industry has remained fundamentally unchanged. Although health has readily embraced technical and technological advances within clinical domains (knowledge, diagnosis, surgery, treatment, genomics) and achieved efficiency and effectiveness improvements in processes, the fundamental business model, provider-focused health transaction and thinking underpinning health and its funding models (who, what and how business is done) are similar to those of the 1940s and 1950s. In those decades, life expectancy for males was approximately 60 years and that for females was 62 years. The major health concerns were infectious disease, maternal and infant mortality and external injury and poison (AIHW; General Record of incidence of Mortality 2014).<sup>2</sup> The prevailing community mindset on health status was life or death. The health system was constructed to combat infectious disease and maternal and/or perinatal mortality. What transpired was a highly medical model of health focused on acute and episodic care that was provided in hospital by doctors and nurses. Autonomous allied health professions other than pharmacists and optometrists were largely non-existent. Health services and systems were funded accordingly.

In the 1950s and 1960s, two major social influences occurred to change the health paradigm: (1) the influx of returned

soldiers, many living with significant injuries and disabilities; and (2) the poliomyelitis epidemic, which left many survivors with serious and complex disability.<sup>3,4</sup> Both cohorts had substantial and significant ongoing needs that jolted community understanding and need for 'quality of life' as an essential health metric. This catalysed development of allied health professions around specialised skills and knowledge to enhance diagnostic capability, restore function and improve quality of life. Care provision is prolonged and ongoing rather than episodic, with recipients actively participating and taking ownership of their condition within a therapeutic goal-orientated framework. Since then, allied health disciplines, like all of health, have developed greater technical knowledge and clinical expertise through scientific advances within their various technical domains. They work across the continuum of care creating both a new dimension and a new armoury in health care. This non-episodic therapeutic paradigm has particular resonance in the management of chronic conditions. Nevertheless, the health and funding models established around infectious disease and episodic care have not adapted to this new era of health and new potential to manage chronic conditions. The 1960s health model has 'modernised' and changed iteratively by adding at the edges, but has not made full strategic use of allied health as a resource, either in acute settings or by maintaining people in the community and minimising acute hospital presentations.

## Issues

Allied health plays a key role in acute health services in diagnostic technologies, in minimising risk and harm from disease (e.g. swallowing dysfunction, functional decline or medication error), mitigating length of stay and facilitating effective discharge.<sup>5-7</sup> Economic evaluations have shown that increasing allied health services in subacute settings reduces patient 'length of stay' and reduces medication error, providing large cost savings at the health service and health system levels.<sup>5</sup> More recently, allied health is increasingly supporting medical specialists through advanced roles in a range of settings, such as emergency, outpatient clinics, triaging and managing less complex cases requiring conservative management.<sup>8-11</sup> Although not yet 'usual hospital practice', these cost-effective models reduce waiting times, improve patient flow and quality of care making them a 'no-brainer' in health services working to manage increased demand.

Nonetheless, when acute health services have a funding shortfall, allied health services and workforces are usually among the first casualties (Deloitte Access Economics: Victorian Medical Generalist Review; pers. comm.). There are multiple reasons for this, including: (1) the historical dominance of medicine in health and the industrial strength of nursing; (2) the fragmented health system with budget and cost accountability applied to organisations and/or entities within the system rather than as part of an overall system; and (3) a perceived lack of tangible outcomes and quantitative evidence regarding the impact of allied health interventions on performance indicators such as length of stay, adverse events and preventable readmissions. Research attempting to capture this evidence in a more formal way is currently underway in a large multisite study in

Victoria funded by the National Health and Medical Research Council.<sup>12</sup>

Allied health plays an even greater role in chronic disease and multimorbidity management through prevention, early intervention and preventative care, maintaining people's wellness, preventing deterioration and reducing acute episodes requiring hospitalisation. In the community, allied health also optimises people's function, independence and wellness to keep them in their homes. These are areas of significant unrealised potential cost reduction to the health system. Policy makers, funders and health executives recognise that the current health system, relying on episodic medical intervention and acute hospital care, does not provide best practice or cost-effective management of chronic disease. Yet there are barriers to realising the potential health system benefit in allied health. The locus of care needs to shift from acute to community, and focus on long-term management. The funding models must move to facilitate consumers in their self-management appropriately supported by multidisciplinary teams in which allied health plays a key role.

Better allied health services in the community can substantially reduce acute exacerbations of chronic and multimorbid conditions and their expensive impact on the acute health system.<sup>1</sup> There is substantial evidence demonstrating the impact of allied health interventions (e.g. exercise, nutrition, good foot health and mental health) on chronic disease such as diabetes, cardiac and respiratory health and hospital admissions.<sup>12-16</sup> Existing services through community health centres are overwhelmed by demand. Geographically related acute hospital allied health staff are limited in the services they can provide to community patients because of their workload. Changes to the balance of funding between acute and community health to enable adequate community allied health services is imperative.

## Discussion

An improved mechanism of making allied health services meaningfully accessible to those in the community who need them is a critical step in improving the management of chronic disease in Australia. The Medicare Benefit Scheme (MBS) Chronic Disease Management (CDM) plan, although a good start, is set at inadequate levels, with patients unable to meaningfully access the necessary number and range of private allied health services. A large proportion of the scheme is dedicated toward 'gate-keeper' general practitioner (GP) payments for writing the care plan, with a number of disincentives built in for the allied health practitioners who provide the treatments. Expanding and recalibrating the MBS CDM plan, or pooled or capitation funding models based on international experience and Australian trials, such as the Diabetes Care Project, may be the answer.<sup>17</sup> The expertise exists to improve our management of chronic disease, but is not currently provided for in the health system.

Funding changes require a fundamental shift, and it has to start with our doctors. Individually and intellectually, most doctors embrace multidisciplinary health teams as best practice and providing best patient outcomes, and work as key players in interdisciplinary teams. However, collectively, the culture of health is conservative and medicine within that milieu

historically wields undue power and decision making influence. This extends to influence over the roles and practice of other health professions and around how organisational resources are allocated.<sup>18–22</sup> This influence is rooted more in the conservative culture of health, tradition and custom rather than on evidence-based and contemporary practice knowledge. The change that has transformed other business sectors will need to start here and be embraced, if not led, by our senior doctors. It should be informed by evidence of safety, clinical appropriateness, efficacy and cost-effectiveness rather than ‘how we have always done it’.

The public invests heavily in training our health professionals, including allied health professionals, and is entitled to the best possible return on this investment. Currently, many new allied health graduates do not enter the health sector because they cannot find positions. Many more (~30%) leave the health workforce within 7–8 years after graduation<sup>23</sup> because there are so few career opportunities within allied health professions. This is in addition to a systemic lack of understanding of allied health expertise and advanced practice roles and potential.<sup>24</sup> This poor return on public investment could be remedied by better using and recognising the potential resources of allied health in a health system that is adapted and funded to combat chronic disease effectively and sustainably.

## Conclusion

A transformational change in the health system in how, where and by whom care is provided is necessary. The health system of the 2020s should be based on achieving best health and consumer outcomes, the most effective and cost-effective management in the most effective and cost-effective setting by the most effective and cost-effective provider. Because funding drives behaviour (both provider and consumer), the funding models and culture of the health system must change to support this. The health model and culture needs to genuinely involve the consumer and all three pillars of the patient care workforce.

## Competing interests

None declared.

## References

- Smith SM, Soubhi H, Fortin M, Hudon C, O'Dowd T. Managing patients with multimorbidity: systematic review of interventions in primary care and community settings. *BMJ* 2012; 345: e5205. doi:10.1136/bmj.e5205
- Australian Institute of Health and Welfare: General Record of Incidence of Mortality (GRIM) Books. Available from: <http://aihw.gov.au/deaths/grim-books/> [verified 19 January 2015].
- PolioAustralia. Australian Polio History, 2014. Available from: <http://www.polioaustralia.org.au/> [verified 11 February 2015].
- National Centre for Immunisation Research and Surveillance. Poliomyelitis Fact Sheet. 2009. Available from: <http://www.ncirs.edu.au/immunisation/fact-sheets/polio-fact-sheet.pdf> [verified 11 February 2015].
- Peiris CL, Taylor NF, Shields N. Extra physical therapy reduces patient length of stay and improves functional outcomes and quality of life in people with acute or subacute conditions: a systematic review. *Arch Phys Med Rehabil* 2011; 92: 1490–500. doi:10.1016/j.apmr.2011.04.005
- Morris PE, Griffin L, Berry M, Thompson C, Hite RD, Winkelman C, Hopkins RO, Ross A, Dixon L, Leach S, Haponik E. Receiving early mobility during an intensive care unit admission is a predictor of improved outcomes in acute respiratory failure. *Am J Med Sci* 2011; 341: 373–7. doi:10.1097/MAJ.0b013e31820ab4f6
- Denehy L, Skinner EH, Edbrooke L, Haines K, Warrillow S, Hawthorne G, Gough K, Vander Hoorn S, Morris ME, Berney S. Exercise rehabilitation for patients with critical illness: a randomized controlled trial with 12 months of follow-up. *Crit Care* 2013; 17: R156. doi:10.1186/cc12835
- Oldmeadow LB, Bedi HS, Burch HT, Smith JS, Leahy ES, Goldwasser M. Experienced physiotherapists as gatekeepers to hospital orthopaedic outpatient care. *Med J Aust* 2007; 186: 625–8.
- Large K, Page C, Brock K, Dowsey MM, Choong PFM. Physiotherapy-led arthroplasty review clinic: a preliminary outcomes analysis. *Aust Health Rev* 2014; 38: 510–6. doi:10.1071/AH13238
- Homemeing L. Orthopedic podiatry triage: process outcomes of a skill mix initiative. *Aust Health Rev* 2012; 36: 457–60. doi:10.1071/AH11102
- The State of Queensland (Queensland Health). Ministerial taskforce on health practitioner expanded scope of practice: final report. Brisbane: Allied Health Professions Office of Queensland; 2014.
- Haines T, Elizabeth Skinner E, Deb Mitchell D, Lisa O'Brien L, Bowles K, Markham D, Plumb S, Chui T, May K, Haas R, Lescai D, Philip K, McDermott F. Protocol for two multi-centre, stepped-wedge, cluster randomised trials to compare the effectiveness and safety of current weekend allied health services and a new stakeholder-driven model for acute medical/surgical patients versus no weekend allied health services. Melbourne: Monash Health, Western Health, Department of Health & Human Services Victoria; 2014.
- ExTraMATCH Collaborative. Exercise training meta-analysis of trials in patients with chronic heart failure (ExTraMATCH). *BMJ* 2004; 328: 189. doi:10.1136/bmj.37938.645220.EE
- Taylor R, Brown A, Ebrahim S, Jolliffe J, Noorani H, Rees K, Skidmore B, Stone JA, Thompson DR, Oldridge N. Exercise-based rehabilitation for patients with coronary heart disease: systematic review and meta-analysis of randomized controlled trials. *Am J Med* 2004; 116: 682–92. doi:10.1016/j.amjmed.2004.01.009
- McCarthy B, Casey D, Devane D, Murphy K, Murphy E, Lacasse Y. Pulmonary rehabilitation for chronic obstructive pulmonary disease. *Cochrane Database Syst Rev* 2015; : CD003793. doi:10.1002/14651858
- Oldridge N. Exercise-based cardiac rehabilitation in patients with coronary heart disease: meta-analysis outcomes revisited. *Future Cardiol* 2012; 8: 729–51. doi:10.2217/fca.12.34
- Barbaric M, Brooks E, Moore L, Cheifetz O. Effects of physical activity on cancer survival: a systematic review. *Physiother Canada* 2010; 62: 25–34. doi:10.3138/physio.62.1.25
- Siver P. New funding models are a long term alternative to Medicare payments. The Conversation (2015). Available from: <http://theconversation.com/new-funding-models-are-a-long-term-alternative-to-medicare-co-payments-35382> [verified 27 January 2015].
- Russell L. The AMA and Medicare: a love-hate relationship. The Conversation (2015). Available from: <http://theconversation.com/the-ama-and-medicare-a-love-hate-relationship-36346> [verified 21 January 2015].
- Cameron D. GESA Position Statement on Nurse Endoscopists. The Gastroenterological Society of Australia (2015). Available from: <http://www.gesa.org.au/news.asp?id=518> [verified 21 January 2015].

- 21 Australian Medical Association. AMA guidance for GPs regarding nurse practitioners. Australian Medical Association (2011). Available from: <https://ama.com.au/ausmed/ama-guidance-gps-regarding-nurse-practitioners> [verified 13 February 2015].
- 22 Australian Medical Association. Inquiry into community pharmacy in Victoria AMA Victoria Submission. Available from: [http://amavic.com.au/icms\\_docs/192339\\_Inquiry\\_into\\_community\\_pharmacy\\_in\\_Victoria\\_AMA\\_Victoria\\_Submission.pdf](http://amavic.com.au/icms_docs/192339_Inquiry_into_community_pharmacy_in_Victoria_AMA_Victoria_Submission.pdf) [verified 21 January 2015].
- 23 Department of Health and Human Services Victoria, 2013: data triangulated from *Health Services Payroll and Workforce Minimum Employee Dataset*; Source: June 2012, *State Services Authority (Victoria) Workforce Data Collection*; Source: *2011 Census*, Source: *2011 Census and consolidated SSA and Payroll datasets*, June 2012 workforce available from the *Census*, the Australian Health Practitioner Registration Agency the Health Services Payroll and *Workforce Minimum Employee Dataset*, the *SSA Workforce Data Collection* and the Department of Education, Employment and Workplace Relations.
- 24 McMeeken J, Phillips B. Drivers of attrition from the physiotherapy workforce in Victoria: 2006. Melbourne: School of Physiotherapy, The University of Melbourne; 2006.