# GOVERNANCE OF HEALTH CARE SYSTEMS IN AN AGEING WORLD – THE CASE OF AUSTRALIA

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## **Abstract**

The main argument of this paper is that because the burden of diseases increases with age, a greater numbers of older individuals will increase the demand for health care, and whether this demand will be met very much depends on how health care systems are governed. This task is particularly complex in jurisdictions with multi-layer governing systems such as the Australian health care system. Governance, described in terms of stewardship of the well-being of the population and as a central component for building effective health care systems, is increasingly considered to be very important for a well performing health care system (World Health Organization, 2000, 2007). Governance is, however, the least studied function in a health care system (Alliance 2009). Furthermore, the limited governance frameworks and assessments that have been developed thus far fail to include the political context in which health care systems operate (Baez-Camargo and Jacobs, 2011). This paper intends to fill this knowledge gap by exploring the political dynamics of the Australian health care system's governance and its accountability. Furthering the discourse on governance is especially important in times when health care systems are confronted with the challenges of ageing populations.

Keywords: Corporate Governance, Australia, Health Care Systems

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## Introduction

Health care systems are defined by the World Health Organization (WHO) (2000, p.5) as being "all activities whose primary purpose is to promote, restore or maintain health". These established systems have been fundamental to improving health care for most of the global population during the 20<sup>th</sup> century, but 100 years ago, organised health care systems hardly existed. Until well into the 19<sup>th</sup> century hospitals were managed by charitable organisations and were primarily used to shelter the orphaned, crippled, destitute or insane. The average life expectancy at that time was 48 years (World Health Organization [WHO], 2000).

High mortality was typically associated with infectious diseases, but advances in the understanding of contagions and infection together with better hygiene and public sanitation in the 19<sup>th</sup> century, and immunisation and medical advances, such as antibiotics, in the 20<sup>th</sup> century, contributed to increases in life expectancy (WHO, 2011). In some countries, life expectancy has increased by approximately 30 years, and if this pace continues, most babies born after 2000, in the countries with long life expectancies, will live 100 years (Christensen et al., 2009). Increased life expectancy is one of the greatest achievements over the previous century; however, a consequence is the ageing of the

world population in the 21st century (Prince et al., 2015)

Population ageing is occurring in practically every country in the world, and it is expected that the number of individuals over the age of 60 will reach two billion by 2050 (United Nations [UN], 2013). As the population ages, health care expenditures tend to grow rapidly because older individuals suffer from multiple chronic diseases and, therefore, require more health care to manage their complex health care needs (OECD, 2013; Australian Institute of Health and Welfare [AIHW], 2014). Approximately two-thirds of those individuals over the age of 65 are affected by multiple conditions (Prince et al., 2015; AIHW, 2014). Multimorbidity is strongly associated with impaired quality of life (Fortin et al., 2006), disability (Wolff et al., 2005) and mortality (Caughey et al., 2011). The cost of debilitating conditions such as dementia, stroke, chronic obstructive pulmonary disease and vision impairment to society is high (Prince et al., 2015). The global cost of dementia was estimated to be US \$604 billion in 2010, and based on current estimates it is expected to increase to US \$1 trillion by 2030 (Alzheimer's Disease International, 2014). The global burden of disease in older people is projected to increase even more, which is consistent with an ageing population being the most important driver of the chronic disease epidemic (Mathers and Loncar, 2006).

An ageing population has led to the realisation that new and more effective ways of organising care, such as the introduction of multidisciplinary stroke units or integrated screening programmes, are needed (McKee et al., 2009). Health care systems, however, that currently specialise in treating individual disorders are not prepared to deliver age-appropriate care, which requires integrating care for complex multimorbidities (Banerjee, 2015, Prince et al., 2015, WHO, 2012). General hospitals that are not equipped or structured to treat patients with multimorbidity, are increasingly occupied by older people who are admitted as an emergency (Kendrick and Conway, 2006). Complex conditions, such as dementia, are often diagnosed late and are managed by many specialists who simply combine treatments for the individual conditions, potentially resulting in adverse drug interactions and unnecessary expense (WHO, 2012; Guthrie et al., 2012, Boyd et al., 2005; Wolff et al., 2002).

Because health care systems need to transform from acute-based models to dealing with the complexity of non-communicable diseases (Kendrick and Conway, 2006), there is a greater demand for leadership in health care systems than ever before. Governance, described by the WHO in terms of stewardship of the well-being of the population and as a central component for building effective health care systems, is increasingly considered to be very important for a well-performing health care system (WHO, 2000, 2007).

However, with few exceptions, most notably from the work of the WHO, only a limited knowledge of health care system governance is available to inform policy and practice (Alliance, 2009). Furthermore, the limited governance frameworks and assessments, which have been developed thus far, fail to include the political context in which health care systems operate (Baez-Camargo and Jacobs, 2011). Nonetheless, governments in most developed countries and many middle-income countries have become central to social policy and health care (WHO, 2000).

This paper offers a contribution to the debate on the governance of health care systems by exploring the political dynamics of the Australian health care system governance. Furthering the discourse on governance is especially important in times when health care systems are confronted with the challenges of ageing populations.

## Australian health care system governance

The Australian health care system is considered to be one of the most efficient health care systems in the world. According to the OECD (2010), Australia, Iceland, Japan, Korea and Switzerland perform best in transforming spending into improved health outcomes. Life expectancy in Australia for a boy born in 2012 is 79.9 years, and for a girl, 84.3 years. Men

who had survived to the age of 65 in 2012 could have expected to live, on average, an additional 19.1 years (to 84.1 years), and women an additional 22.0 years (to 87.0 years). This puts Australia in the top six OECD countries for life expectancy at birth for males, and the top seven for females (AIHW, 2014). However, the OECD (2010, p.8) also stated that assigning responsibility across Australian government levels in a more consistent manner would lead to less duplication and, consequently, would increase efficiency even further.

In Australia, two levels of government, the Commonwealth (federal) and six State and two Territory Governments (hereafter referred to as the State Governments), make decisions on health care policy and health care delivery. The Commonwealth Government is responsible for funding the Medical Benefit Schedule (MBS) (which includes the universal insurance coverage, Medicare) and the Pharmaceutical Benefit Scheme (PBS), as well as aged and community care. The State Governments hold comprehensive powers over the management of hospitals and other services such as ambulance services, community health care services and public health care programmes (health promotion and disease prevention programmes), public dental services, mental health programmes and health policy research and policy development. However, funding services is shared these between Commonwealth and State Governments (Griffith, 2006; Productivity Commission, 2011).

The shared responsibilities imply that no one level of government can be held accountable for the performance of the health care system as a whole. Each level of government formulates and funds policies in relation to its own responsibilities (Australian Government, 2009). This accountability created a complex health care system susceptive to cost shifting and under-provisioning (Warren, 2006). For example, the states may minimise outpatient services forcing patients to visit General Practitioners (GP) who are subsidised by the Commonwealth Government funded Medicare. Because Australians are able to attend the emergency room at the public hospitals (managed by the State Governments), the expansion of primary health care activities by the Commonwealth Government may not be a priority (for example, subsidising after hours GP services) (Hurley et al., 2009).

Older adults being discharged from statemanaged hospitals without appropriate home care (managing home care is the responsibility of the Commonwealth) is one of the typical and all too common results of cost shifting. Delays in the provision of community care results in older Australians being in discomfort and put them at risk from the misuse of medication and accidents. Furthermore, recovery may be undermined by physical or psychological circumstances such as the loss of mobility or depression associated with the loss

of independence (Grimmer, 2004; Seniors Rights Victoria, 2009; Yates and Root, 2010).

Governance of the Australian health care system is further complicated by funding arrangements between the Commonwealth and State Governments. Australia has the highest concentration of taxing powers in its central government of any federation (Bennett and Webb, 2008), and this monopoly over revenue-raising capacity has resulted in the States' reliance on the Commonwealth for financial assistance to provide services such as access to public hospitals (Harris, 1982). This reliance on the Commonwealth for assistance has been the driver of the 'blame game' between two levels of government. Any failure to meet public expectations in relation to the State Governments' provision of health care services inevitably has led to claims and counterclaims about the adequacy of Commonwealth funding (National Health and Hospitals Reform Commission [NHHRC] 2009).

In addition, the funding provided by the Commonwealth to the states has often had conditions attached such as the involvement of Commonwealth Government's departments overseeing the implementation of programmes and the requirement that the State Governments will also contribute to the cost of the programmes (Ramamurthy, 2012). Unfortunately, this process has produced an overlap between the services provided by different programmes run by different governments, and has also been attributed to the 'blame game' as each government has blamed the other for shortcomings attributed to each other's programmes (Ramamurthy, 2012; NHHRC 2009).

In 2008, the then Labor Commonwealth Government acknowledged the need for major reforms to the Australian health care system. The rationales for the reforms were the previously discussed lack of accountability and transparency, duplication, overlap, cost shift, blame shift, ageing population and the explosion of chronic diseases (Rudd and Rixon, 2007).

## **Background and method**

This paper utilises content analysis to review the responses to a call for public consultations on the proposed health care reforms, particularly of the public feedback to the reform proposal of "strengthening health and health care" (NHHRC, 2009). To oversee the health care reform process, the National Health and Hospitals Reform Commission (the Commission) was established in February 2008. One of the areas identified by the Commission in need of reform was the governance of the health care system. The Commission stated, "governance - or who should 'run' the health care system – is without a doubt the single most controversial issue we have been asked to tackle" (NHHRC, 2009, p.19). The Commission acknowledged that "the fragmentation of services creates difficulties in navigating a complex system, and the public does not find it easy to know which government to hold accountable for their access to health care and the quality of care" (NHHRC, 2009, p.20).

The Commission proposed three options for the reform of the health care system for public deliberation. Details of each option are described in the table below.

Table 1. Strengthening health and health care – the reform proposal

#### Under this option, the Commonwealth would take the total responsibility for all funding, policy and regulation of primary health care. The Option A: Commonwealth would continue funding the state and territory managed Continued shared responsibility hospitals based on 40 per cent payment of the efficient costs of the between governments, with clearer accountability and more direct delivery of inpatient and emergency department treatments; and 100 per Commonwealth involvement. cent payment of the efficient costs of the delivery of hospital outpatient treatments. Option B: This option would transfer all responsibility for public funding, policy Commonwealth to be solely and regulation for health care to the Commonwealth. The responsible for all aspects of Commonwealth would establish and fund regional health authorities to health care, delivered through take responsibility for former state health services, such as public regional health authorities. hospitals and community health services. This option would transfer all responsibility for public funding, policy and regulation for health care to the Commonwealth, with the **Option C:** Commonwealth establishing a tax-funded community insurance scheme Commonwealth to be solely under which people would choose from multiple, competing health care responsible for all aspects of plans. The plans would be required to cover a mandatory set of services, health and health care, including hospital, medical, pharmaceutical, allied health and aged care. establishing compulsory social Health care plans would be free to establish their own arrangements with insurance to fund local delivery. providers, including entering into preferred provider arrangements. Copayments for mandatory coverage could be limited by regulation.

Source: NHHRC, 2009

In total, 221 submissions were recorded. The submissions that referred to reform of the health care system and primary health were included in the analysis. This paper identified 50 submissions that included comments on the reform of the health care system's governance. Following are the results of the analysis.

## **Results**

The majority of submissions agreed with the Commission's view that the Australian health care system is fragmented, resulting in confusion, cost and blame shift, funding gaps and policy duplication. However, the opinions were divided as to the directions of the necessary reforms.

**Option** A with the continued shared responsibility between the Commonwealth and State Governments, but with clearer accountability and more involvement of the Commonwealth, was the preferred choice in 14 submissions. It was recognised that significant structural change within the Australian health care system is unlikely and, therefore, Option A had the greatest likelihood of political acceptance (e.g., Australian Health Insurance Association, 2009). This proposal was considered to be much more realistic as it streamlined accountability under the umbrella of a national health care strategy, but allowed the State Governments to retain local level control (e.g., Australian and New Zealand College of Anaesthetists, 2009).

**Option B** was supported in 16 submissions. It was considered that a single funding authority for the health care sector - the Commonwealth - would produce the most equitable, coordinated and locally responsive system, which would remove the artificial boundaries in a patient's care between the Commonwealth and State authorities. In a country such as Australia with only 21 million people, a single funder with regional purchasing authorities would result in greater efficiency and accountability and increased local responsiveness through the regional bodies This would solve the problem of the 'blame game' and reduce the cost shifting between levels of government (e.g., Aboriginal Medical Service Alliance Northern Territory, 2009; Australian Nursing Federation, 2009; Wakerman and Humphreys, 2009; Royal Australasian College of Surgeons, 2009).

**Option C** was a preferred choice in five submissions. In these submissions, option A and B were essentially considered to be variants and a continuation of the present bureaucratically governed health care system. Conversely, option C would provide significant incentives for healthcare providers to improve their service delivery via competition and an innovative approach. Under this option, the government and bureaucratic initiative would be substituted with the dynamics of the consumer's choice of competing health care plans, whose providers must act as prudent purchasers of health

care on behalf of their members with the purpose of improving integration, efficiency, quality and safety of care (e.g., Francis, 2009; Stoelwinder, 2009).

Six submissions advocated a pathway between option A to B and then to C. The rationale was that Options B and C require significant structural shifts in roles and capacity. Option B expands the roles and capacity of the Commonwealth in areas where they have no experience and expertise. Adopting Option A as a transition to Option B would put emphasis on strengthening primary health care, without the necessity of the competing demands of planning and funding acute care. However, the delivery of health care services through regional health care authorities as proposed under Option B has the potential to replace one bureaucracy with another. Option C overcomes this problem and provides the ability to create an efficient purchasing system that would link both public and private financing, while expanding consumer choice and retaining universal coverage. Immediately adopting Option C, however, would be risky because, to date, the health care insurance sector has been ineffective in a purchasing role. Therefore, Options A and B should be considered as a pathway towards the more significant reform as proposed under Option C (e.g., Australian General Practice Network, 2009; The National Coalition of Public Pathology, 2009; Australian Unity, 2009).

An additional nine submissions did not agree with any of the options and instead proposed their own reform directions. Some advocated that the Commonwealth and State Governments should establish a single entity (Commission) or a central health fund body, to collect all public health funds, and then distribute funding to regions based on their population, adjusted for need (e.g., Doctors Reform Society, 2009). Others suggested that the State Governments should assume full authority for health care services with the Commonwealth limiting its responsibilities to the provision of funding (e.g., Menzies Centre for Health Policies, 2009; ACOSS, 2009).

## Accountability for what, of whom, to whom?

The overwhelming response to the Commission's call for submissions on strengthening public health and health care shows that the public is aware of the complexity of the Australian system and wants to improve it. Though not one option gained overwhelming support, it was apparent that the lack of accountability within the current governance structure of the Australian health care system is a major concern.

In June 2009, the Commission released its final report, "A healthier future for all Australians," which recommended that the Commonwealth Government assume full responsibility for the policy and public funding of primary health care services. It also

recommended that the Commonwealth Government meet 100 per cent of the costs of public hospitals' outpatient services and 40 per cent of the cost of care for every episode of acute and sub-acute care for patients admitted to a hospital or public healthcare facility, and for every attendance at a public hospital emergency department (NHHRC, 2009).

In 2011, the National Hospital Reform (NHRA) was signed the Agreement by Commonwealth and State Governments. agreement was significantly altered from the original proposal. Originally, the Commonwealth proposed to meet hospital funding as per the Commission's recommendations above. In exchange, the State Governments were to agree that the management of hospitals would be overseen by new local entities and new national bodies to be established under the Commonwealth legislation. However, this proposal was rejected by the State Governments because of funding arrangements. Subsequently, a new arrangement was put in place. In the altered agreement, the level of payments were to be linked directly to the number and type of patients treated. The Commonwealth also committed additional funding to fill the gap between the increase in health care costs and current funding arrangements. The management of hospitals would also continue to be the States' responsibility with no interference from the Commonwealth (Anderson 2012).

After four years of deliberations and negotiations, the outcome of the reforms has been that the Australian health care system will have the same structure as before: the States retain control over the hospitals and community care and the Commonwealth over medical and pharmaceutical benefit schemes and aged care.

## Conclusion

As noted previously, health care systems have been fundamental to improving the health of the world population; however, new challenges exist such as the high prevalence of non-communicable diseases, ageing populations and the rising expenditure on health care tests and health care systems worldwide, including Australia. Despite these challenges, expectations for the effective, efficient and equitable delivery of health care services are growing (WHO, 2007). Strengthening health care systems and their governance is crucial in meeting these expectations; and unless significant reforms are implemented, the ageing-related expenditures, particularly in the area of health care, have the potential to undermine the fiscal sustainability of a country.

In Australia, the conflict in responsibilities between the Commonwealth and State Governments makes this process even more complex, as is apparent in the latest attempt to reform the Australian health care system. Irrespectively, the rapid ageing of the Australian population will hasten the urgency with which society must confront the need for establishing systems capable of meeting the needs of an ever-increasing number of older Australians. Any proposed changes would have to acknowledge the relative success of the Australian health care model in achieving the outcomes that led to the Australian health care system being considered one of the most efficient health care systems in the world (OECD, 2010).

To achieve the best outcome in the context of the Australian complex, a multi-layer health care governance structure, a greater degree of co-operation between the Commonwealth and State Governments would also have to be achieved. However, any changes and improvements would be qualitative rather than quantitative, as the existing channels of revenue distribution and allocation would have to be maintained.

### **References:**

- 1. Aboriginal Medical Service Alliance Northern Territory (2009), submission to the National Health and Hospitals Reform Commission, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/150--interim/\$FILE/150%20-%20Submission%20-%20Aboriginal%20Medical%20 Services%20Alliance%20Northern%20Territory.pdf, accessed 17 August 2015.
- Alliance for Health Policy and Systems Research (2008), "Neglected Health Systems Research: Governance and Accountability", available at: http://www.who.int/alliance-hpsr/AllianceHPSR\_ ResearchIssue\_Governance.pdf, accessed 14 August 2015.
- Alzheimer's Disease International (2014), "World Alzheimer Report 2014 – dementia risk reduction", available at: http://www.alz.co.uk/research/ WorldAlzheimerReport2014.pdf, accessed 14 August 2015.
- Anderson, J. (2012), "Health Policy as Contested Terrain in the Australian Federation", in Kildea, P., Lynch, A. and Williams, G. (eds), Tomorrow's federation: reforming Australian government, The Federation Press, Sydney.
- Australian and New Zealand College of Anaesthetists (2009), submission to the National Health and Hospitals Reform Commission, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/170-interim/\$FILE/170%20-%20Submission%20-%20Australian%20and%20
  - New%20Zealand%20College%20of%20Anaesthetists.pdf, accessed 17 August 2015.
- Australian Council of Social Service (ACOSS) (2009), submission to the National Health and Hospitals Reform Commission, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/134-interim/\$FILE/134%20-%20Submission%20-%20Australian%20 Council%20of%20Social%20Service.pdf, accessed 17
  - Council%20of%20Social%20Service.pdf, accessed 17 August 2015.
- Australian General Practice Network (2009), submission to the National Health and Hospitals Reform Commission, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/143-interim/\$FILE/143%20-%20Submission%20-%20Australian%20General%20 Practice%20Network.pdf, accessed 17 August 2015.

- Australian Government, (2009), "A Healthier Future for All Australians – Final Report June 2009", the National health and Hospital Reform Commission, Canberra: Commonwealth of Australia, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/content/1AFDEAF1FB76A1D8CA257600000B5BE2/\$File/Final\_Report\_of\_the%20nhhrc\_June\_2009.pdf, accessed 14 August 2015.
- 9. Australian Health Insurance Association (2008), submission to the National Health and Hospitals Reform Commission, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/213-interim/\$FILE/213%20-%20Submission%20-%20Australian%20 Health%20Insurance%20Association.pdf, accessed 17
- Australian Institute of Health and Welfare (2014), "Australia's health 2014 - Australia's Health Series No. 14", Cat. no. AUS 178, Canberra, Australia: Australian Institute of Health and Welfare, available at: http://www.aihw.gov.au/Work Area/Download Asset.aspx? id=60129548150, accessed 15 August 2015.

August 2015.

- 11. Australian Nursing Federation (2009), submission to the National Health and Hospitals Reform Commission, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/133-interim/\$FILE/133%20-%20Submission%20-%20Australian%20Nursing %20Federation.pdf, accessed 17 August 2015
- 12. Australian Unity (2009), submission to the National Health and Hospitals Reform Commission, available at: http://www.health.gov.au/internet/nhhrc/publishing .nsf/Content/111-interim/\$FILE/111%20-%20Submission%20-%20Australian%20Unity.pdf, accessed 17 August 2015.
- Banerjee, S. (2015), "Multimorbidity—older adults need health care that can count past one", The Lancet, Vol. 385 No. 9968, pp.587–589.
- Baez-Camargo, C. and Jacobs, E. (2011), "A Framework to Assess Governance of Health Systems in Low Income Countries", Basel Institute on Governance, available at: https://www.baselgovernance.org/sites/collective.localhost /files/publications/biog\_working\_paper\_11.pdf, accessed 14 August 2015.
- Bennett S. (2006), "The politics of the Australian federal system - Research brief", Canberra:
- Parliament of Australia Department of Parliamentary Services, available at: http://www.aph.gov.au/ binaries/library/pubs/rb/2006-07/07rb04.pdf, accessed 14 August 2015.
- Boyd, C.M., Darer, J., Boult, C., Fried, L.P., Boult, L. and Wu, A.W. (2005), "Clinical practice guidelines and quality of care for older patients with multiple comorbid diseases: implications for pay for performance", JAMA, Vol. 294 No.6, pp. 716–24.
- Caughey, G.E., Ramsay, E.N., Vitry, A.I., Gilbert, A. L., Luszcz, M. A., Ryan, P. and Roughead, E.E. (2010), "Comorbid chronic diseases, discordant impact on mortality in older people: a 14-year longitudinal population study", J Epidemiol Community Health, Vol. 64 No.12, pp. 1036–42.
- Christensen, K., Doblhammer, G., Rau, R. and Vaupel, J.W. (2009), "Ageing populations: the challenges ahead", The Lancet, Vol. 374 No. 9696, pp.1196–1208.
- 20. Doctors Reform Society (2009), submission to the National Health and Hospitals Reform Commission, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/091-interim/\$FILE/091%20-%20Submission%20-%20Doctors%20Beform%20Society.pdf accessed 17
  - %20Doctors%20Reform%20Society.pdf, accessed 1 August 2015.

- Fortin, M., Bravo, G., Hudon, C., Lapointe, L., Almirall, J., Dubois, M-F. and Vanasse, A. (2006), "Relationship between multimorbidity and health-related quality of life of patients in primary care". Qual Life Res, Vol. 15 No.1, pp. 83–91.
- Francis. A. (2009), submission to the National Health and Hospitals Reform Commission, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/048-interim/\$FILE/048%20-%20Submission%20-%20Andrew%20Francis.pdf, accessed 17 August 2015.
- Griffith, G. (2006), "Commonwealth-State Responsibilities for Health - 'Big Bang' or Incremental Reform?", Briefing Paper No 17/06. NSW: Parliamentary Library Research Service, available at: http://www.parliament.nsw.gov.au/prod/parlment/publicati ons.nsf/0/87738255CB204176CA25722E00251D8D/\$File /health.pdf, accessed 14 August 2015.
- Grimmer, K., Moss, J. and Falco, J. (2004), "Experiences of elderly patients regarding independent community living after discharge from hospital: a longitudinal study", International Journal for Quality in Health Care, Vol. 16 No. 6, pp. 465–72.
- Guthrie, B., Payne, K., Alderson, P., McMurdo, M.E. and Mercer, S.W. (2012), "Adapting clinical guidelines to take account of multimorbidity", BMJ Vol. 345, pp. e6341.
- Harris, C.P. (1982), Relationships between Federal and State Governments in Australia, Australian Government Publishing Services (AGPS), Canberra.
- 27. Hurley, E. (2009), "The Australian Health Care System: the potential for efficiency gains a review of the literature", the National Health and Hospitals Reform Commission, Canberra: the Australian Government, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/content/a5665b8b9eab34b2ca2575cb00184fb9/\$file/potential%20efficiency%20gains%20-%20nhhrc%20background%20paper.pdf, accessed 14 August 2015.
- Kendrick, S. and Conway, M. (2006), "Demographic and social change: implications for use of acute care services in Scotland", Eur J Population, Vol. 22 No 3, pp. 281–307.
- 29. Mathers, C.D. and Loncar D. (2006), "Projections of global mortality and burden of disease from 2002 to 2030", PLoS Med, Vol. 3 No. 11, pp. e442.
- McKee, M., Suhrcke, M., Lessof, S., Figueras, J., Duran, A. and Menabde, N. (2009), "Health systems, health, and wealth: a European perspective", The Lancet, Vol. 373, pp. 349–51.
- 31. Menzies Centre for Health Policies (2009), submission to the National Health and Hospitals Reform Commission, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/199-interim/\$FILE/199%20-%20Submission%20-%20Menzies%20Centre%20for%20Health%20Policy.pdf, accessed 17 August 2015
- 32. National Health and Hospitals Reform Commission (2009), "A Healthier Future for All Australians: Interim Report December 2008", Australia, Canberra: Australian Government, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/BA7D3EF4EC7A1F2BCA25755B001817EC/\$File/NHHRC.pdf, accessed 16 August 2015.
- National Health and Hospitals Reform Commission (2009), "A Healthier Future for All Australians: Final Report June 2009", Australia, Canberra: Australian Government, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/1AFDEAF1FB76A 1D8CA257600000B5BE2/\$File/Final\_Report\_of\_the%20 nhhrc\_June\_2009.pdf, accessed 16 August 2015.

- 34. Organisation for Economic Co-operation and Development (2013), "Health at a Glance 2013: OECD Indicators", OECD Publishing, available at: http://www.oecd-ilibrary.org/social-issues- migration-health/health-at-a-glance-2013\_health\_glance-2013-en, accessed 14 August 2015).
- 35. Organisation for Economic Cooperation and Development (OECD) (2010), "Health care systems: Getting more value for money", OECD Economics Department Policy Notes, No. 2, available at: http://www.oecd.org/eco/growth/46508904.pdf, accessed 14 August 2015.
- Prince, M.J., Wu, F., Guo, Y., Robledo, L.M.G., O'Donnell, M., Sullivan, R. and Yusuf, S. (2015), "The burden of disease in older people and implications for health policy and practice", The Lancet, Vol. 385 No.9967, pp.549–62.
- Productivity Commission (2011), "Caring for Older Australians", Canberra: Australian Government, available at: http://www.pc.gov.au/inquiries/completed/ agedcare/report/aged-care-overview-booklet.pdf, accessed 14 August 2015.
- Ramamurthy, V. (2012), "Tied Grants and Policy Reforms in Public Hospitals and Schools", in Kildea, P., Lynch, A. and Williams, G. (editors), Tomorrow's federation: reforming Australian government, The Federation Press, Sydney, pp.114-40.
- Reich, M.R., Takemi, K., Roberts, M.J., and Hsiao, W.C. (2008), "Global action on health systems: a proposal for the Toyako G8 summit", The Lancet, Vol. 371, pp.865-69.
- 40. Royal Australasian College of Surgeons (2009), submission to the National Health and Hospitals Reform Commission, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/246-interim/\$FILE/246%20-%20Submission%20-%20Royal%20Australasian%20College%20of%20Surgeons.pdf, accessed 17 August 2015.
- 41. Rudd, K. and Rixon, N. (2007), "New Directions for Australian Health Taking responsibility: Labor's plan for ending the blame game on health and hospital care", available at: http://parlinfo.aph.gov.au/parlInfo/download/library/partypol/GT1O6/upload\_binary/gt1o62.pdf;fileType=application%2Fpdf#search=%22library/part ypol/GT1O6%22, accessed 16 August 2015.
- Seniors Rights Victoria (2009), "Recognising the Rights of Older Australians", Submission to the National Human Rights Consultation, Melbourne, Australia: Seniors Rights Victoria, available at: http://seniorsrights.org.au/wp content/uploads/2014/03/srv\_nhrc\_final\_submission\_1506 09.pdf, accessed 14 August 2015.
- 43. Stoelwinder, J. and Paolucci, F. (2009), submission to the National Health and Hospitals Reform Commission, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/223-interim/\$FILE/223%20-%20Submission%20-%20Professor%20Just%20Stoelwinder%20et%20al.pdf, accessed 17 August 2015.

- 44. The National Coalition of Public Pathology (2009), submission to the National Health and Hospitals Reform Commission, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/154-interim/\$FILE/154%20-%20Submission%20-%20National%20Coalition%20of%20Public%20Patholog y.pdf, accessed 17 August 2015.
- 45. Wakerman, J. and Humphreys, J. (2009), submission to the National Health and Hospitals Reform Commission, available at: http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/146-interim/\$FILE/146%20-%20Submission%20-%20Profs%20John%20Wakerman%20&%20John%20Humphreys.pdf, accessed 17 August 2015.
- Warren, N. (2006), "Benchmarking Australia's Intergovernmental Fiscal Arrangements: Interim Report", Sydney: New South Wales Government, available at: http://www.treasury.nsw.gov.au/\_ data/assets/pdf\_file/0007/5794/int-bench-rep.pdf, accessed 14 August 2015.
- 47. Wolff, J.L., Boult, C., Boyd, C. and Anderson, G. (2005), "Newly reported chronic conditions and onset of functional dependency", J Am Geriatr Soc, Vol. 53 No.5, pp. 851–55.
- World Health Organization (2000), "The World Health Report 2000 - Health systems: improving performance", Geneva: World Health Organization, available at: http://www.who.int/whr/2000/en/ whr00\_en.pdf?ua=1, accessed 14 August 2015.
- World Health Organization (2007), "The World Health Report 2007 – A safer future", Geneva: World Health Organization, available at: http://www.who.int/whr/ 2007/whr07\_en.pdf, accessed 14 August 2015.
- World Health Organization (2011), "Global Health and Aging", Geneva: World Health Organization, available at: https://niaprodfiles.s3.amazonaws.com/s3fspublic/global\_health\_and\_aging.pdf, accessed 14 August 2015
- 51. World Health Organization (2012), "Dementia: a public health priority", Geneva: World Health Organization, available at: http://apps.who.int/iris/bitstream/10665/75263/1/9789241564458\_eng.pdf?ua=1, accessed 14 August 2015.
- 52. United Nations, 2013, "World Population Ageing 2013", New York: Department of Economic and Social Affairs, Population Division, available at: http://www.un.org/en/development/desa/population/public ations/pdf/ageing/WorldPopulationAgeing2013.pdf, accessed 14 August 2015.
- 53. Yates, I. and Root, J. (2010), "COTA Australia submission to Productivity Commission Inquiry into Caring for Older Australians, Adelaide, Australia: COTA Australia; available at: http://cotansw.com.au/wp-content/uploads/2012/03/COTA-Australia-Submission-to-the-PC-Inquiry-into-the-Care-of-Older-Australians.pdf, accessed 14 August 2015.