

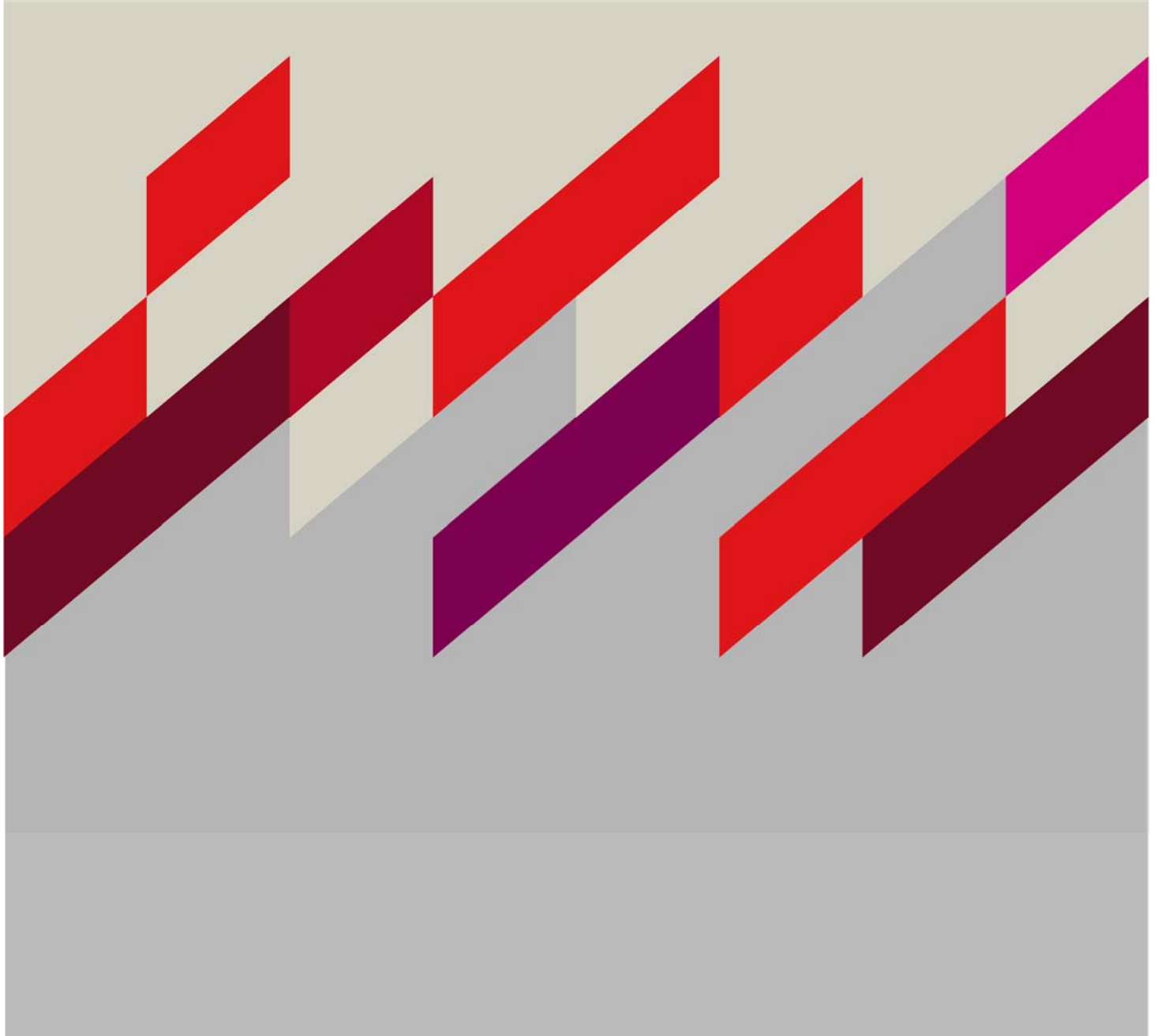


# Competition in health and human services

PRESENTATION - THE HILTON HOTEL, SYDNEY

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DIRECTOR

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# About MUCHE

Macquarie University is recognised as one of Australia's leading research universities, with an enviable reputation for excellence. While still relatively young, success of the past 50 years has positioned our distinctive approach to deliver ground-breaking research with world-changing impact.

Recently, we have invested heavily in infrastructure, with over \$1 billion spent on facilities and buildings. We have also significantly expanded our teaching and research capacity in health, for example, with the development of a new Faculty of Medicine and Health Sciences, and the acquisition of the Australian Institute of Health Innovation.

The University's objectives are to accelerate world-leading research; to prepare world-ready higher degree research candidates; to actively engage externally as a world-recognised research collaborator and partner of choice. We believe collaborating with industries, governments, communities, professions and academic colleagues around the world is paramount to our success.

Macquarie University's Centre for the Health Economy (MUCHE) was recently established as a strategic initiative to undertake innovative research on health, ageing and human services. The Centre's vision is to be the largest health, ageing and human services policy research Centre in Australia within five years, and the first choice for business, government and students.

The primary objective of the Centre is to provide government, business, and not-for-profit organisations with world-leading independent and applied research, which can be used to inform public debate, assist government and business decision-making, and help formulate strategy and policy.

We are interested in investigating the Health Economy at the macro level, with particular focus on the interdependencies of these systems with each other, and the broader economy. This includes investigating factors beyond the health and human services sectors that impact the health and wellbeing of populations.

Our point of difference lies in our approach to research. While MUCHE primarily consists of specialist health economist, we recognise that researching the Health Economy requires many skill sets and experience. Solving problems within health and human services now requires teams with multi-disciplinary skills working closely together.

We therefore work collaboratively with our partners, and across the University, including the Faculty of Business and Economics, Faculty of Human Sciences, and the Faculty of Medicine and Health Sciences. We also work with Macquarie University's world renowned research hubs, such as partners within the Australian Hearing Hub and the Australian Institute of Health Innovation.

We take pride in combining our professional approach to partner engagement, with our academic approach to methodology, to deliver innovative translational research.

Dr Henry Cutler  
Director  
MUCHE

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# Introduction

Good afternoon ladies and gentlemen and welcome to today's event, it's great to have you here on such a cold and miserable day.

My name is Dr Henry Cutler, and I am the inaugural director of the Centre for the Health Economy at Macquarie University, and your host for today.

I would like to begin proceedings by first acknowledging the Gadigal people of the Eora Nation, who are the traditional custodians of this land. I would also like to pay my respects to the elders, both past and present, of the Eora nation. I extend that respect to any other indigenous guests present here today."

I am thrilled you could make it today as I believe this will be an exciting and thought provoking event.

I am grateful that Professor Harper managed to land at Sydney airport, and that you too have managed to battle your way through torrential rain and winds to get here. It's good to see you're not stuck under a tree or bailing out your home full of water.

I myself have been sitting in relative darkness at home for the last two days after water leaked into my electricity box. Unfortunately I still haven't managed to get an electrician over to my house, which suggests the market for electricians doesn't work in times of crisis. Or perhaps it does given the ridiculous prices they were quoting.

But it got me thinking about the need to provide essential services in times of crisis, such as to people relying on the health and human services sector.

While electricity is important, on most occasions blackouts create a mere inconvenience. Compare this to health and human services, where a lack of service can literally mean life or death. People are also at their most vulnerable, and will pay any price to extend their life momentarily.

Nobody wants a health and human services sector that is purely run by competitive forces.

My time spent in darkness also gave me an excuse to look further afield for information on competition and health care. In between searching the usual highbrow literature I came across a joke that was particularly apt for this event.

How many economists does it takes to change a lightbulb?

None. The darkness will cause the lightbulb to change itself

While your reaction suggest I should have found a better joke, the underlying premise of the joke is that markets perfectly adjust as new information comes to hand.

And although financial economists generally believe this is true, health economists are smarter than that. We recognise that within health and human services at least, information is less than perfect, which can create uncertainty and lead to perverse market outcomes unless appropriately regulation.

And that's what we're going to talk about today...the potential to use competition in the pursuit of better quality and increased efficiency, while maintaining social objectives.

This event is the first in a series of Thought Leadership events that will be held throughout the year by the Faculty of Business and Economics, and the first such event held by the Centre for the Health Economy.

Many of you may not be aware of the Centre. We were formed just over a year ago to undertake world-leading independent and applied research in health and human services policy. Our objective is to inform public debate and assist decision making by providing relevant research on current problems.

# Competition in health and human services

## Why investigate competition in health and human services?

So why investigate competition in health and human services?

Australia has one of the healthiest populations in the world, ranking sixth among OECD countries when comparing life expectancy. A male born today can expect to live until their 82 years old, while a female can expect to live until they are 84 years old. Since 1990, Australians have gained an extra five years of life, can expect to live two years more than the OECD average and eight years more than the worst performing country, Mexico.<sup>1</sup>

Our good performance in life expectancy is a combination of our lifestyle, behaviours and health and social care systems.

Our culture around sport, climate and geography encourages many children and adults to participate in outdoor activities. Around 65% of adults will participate in physical activities for recreation, exercise or sport at some time during this year. The most popular activity will be walking. Around 60% of children will participate in organised sport outside of school hours. Boys will mostly be playing soccer while girls will be swimming.<sup>2</sup>

However, since the mid 1990s the average time spent on sport and outdoor activity has fallen by over 20%.<sup>3</sup> Around 65% of adults and three quarters of a million children are either overweight or obese, including over one third of children in lower socioeconomic areas. Obesity is now the second greatest contributor to our burden of disease and we continue to get fatter.

This, coupled with our ageing population, means our health care system has a tough job ahead.

Fortunately it's currently doing ok. In 2013 the Commonwealth Fund ranked the Australian health care system fourth against 11 developed countries, behind the UK, Switzerland and Sweden in that order.<sup>4</sup>

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<sup>1</sup> OECD 2014, OECD Health Statistics 2014. Frequently requested data, <http://www.oecd.org/els/health-systems/oecd-health-statistics-2014-frequently-requested-data.htm>, accessed 16 April 2015

<sup>2</sup> ABS 2012, *Sport and recreation. A statistical overview*, Cat. No. 4156.0, Canberra

<sup>3</sup> Ibid.

<sup>4</sup> Davis K, Stremikis K, Squires D, Schoen C, 2014, *Mirror, mirror on the wall. How the performance of the US health care system compares internationally. 2014 update*, The Commonwealth Fund,

We were ranked 2<sup>nd</sup> for quality behind the UK. Our worst ranking was access to services due to high costs. Australians pay more for their health care than most other developed countries, and only the US had a greater proportion of patients with excessive out of pocket costs.<sup>5</sup>

However, our health care system is less than perfect. Despite community expectations, a large proportion of health care workers are not delivering care based on established evidence or protocol.

The Australian Institute of Health Innovation (AIHI), now based at Macquarie University, undertook a population based study of care appropriateness across 22 common conditions in Australia. The CareTrack study found that Australians get care consistent with evidence or consensus based guidelines in only 57% of encounters. Compliance ranged from 13% to 90% across conditions.<sup>6</sup>

Access to timely care also continues to be a problem. Median waiting times are increasing and public hospitals are struggling to meet National Elective Surgery Targets and clinically recommended timeframes for emergency care.

Around 17,000 people receiving elective surgery as a public patient this year will have waited more than a year.<sup>7</sup> If you have just put your name down for a total knee replacement expect to enter hospital just before Christmas. If you're receiving care outside a major city, it may be April next year. While people in England will wait 70 days on average for a total hip replacement, over 50% of people in NSW will wait for more than 190 days.<sup>8</sup>

Expenditure on health care also continues to grow and will be over \$150 billion this year. Governments will provide around \$100 billion. We spend around 9.7% of GDP on health care, while governments spent around 25% of their tax revenue.<sup>9</sup>

The federal government will also spend another \$14 billion on aged care services this year, and \$8.4 billion on the National Disability Insurance Scheme over the next three years, in addition to \$9 billion from states and territory governments.<sup>10</sup>

Most of this expenditure is on labour to deliver services. The health and human services sector is Australia's largest employer, with around 1.4 million people employed in 2015. The closest sector is retail with around 1.2 million people.

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[http://www.commonwealthfund.org/~media/files/publications/fund-report/2014/jun/1755\\_davis\\_mirror\\_mirror\\_2014.pdf](http://www.commonwealthfund.org/~media/files/publications/fund-report/2014/jun/1755_davis_mirror_mirror_2014.pdf), accessed 16 April 2015

<sup>5</sup> Ibid.

<sup>6</sup> Runciman WB, Hunt TD, Hannaford NA, Hibbert PD, Westbrook JI, Coiera EW, O Day R, Hindmarsh DM, McGlynn EA, Braithwaite J, 2012, CareTrack: assessing the appropriateness of health care delivery in Australia, *Medical Journal of Australia (MJA)*, Vol. 197, No. 2, pp. 100-105

<sup>7</sup> Australian Institute of Health and Welfare (AIHW) 2013, *Australian Hospital Statistics 2013-14: elective surgery waiting times*, Cat. No. HSE 151, Canberra

<sup>8</sup> Ibid.

<sup>9</sup> Australian Institute of Health and Welfare (AIHW) 2014, *Health Expenditure Australia 2012-13*, Health and Welfare Expenditure Series No. 52

<sup>10</sup> The Treasury 2014, *Budget 2014-15. Budget strategy and outlook. Budget paper No. 1*, Canberra



Needless to say, health and human services represents a significant chunk of the Australian economy. The recent Intergenerational Report also suggests these sectors will become more significant, highlighting a burning platform to better manage expenditure.<sup>11</sup>

Any exploration on the potential to improve Australia's productivity and welfare through changes to competition policy must include a debate around health and human services.

## What is the theory behind competition in health care?

So what is the theory behind competition in health care?

Introducing greater competition in health care is appealing. Standard economic theory suggests increased competition can deliver greater choice and improve productivity.

But health care is complex. It is unlike the retail sector where people are relatively well informed and purchases are repeated. Nor does it operate like utilities, where the product is relatively homogenous and the primary objective for operators is efficiency.

Instead health care is characterised by imperfect information. This leads to large uncertainty around the value of services, such as whether an elective surgery procedure will be effective.

The demand for services is also irregular and unpredictable, and only occurs in the event of illness or disability.<sup>12</sup> Large uncertainty in a world where providers have more information means one of the preconditions for an effective competitive market is muted.

While efficiency is important in health care, society also aims for broader objectives. The notion of a 'fair go' embodies our approach to delivering equitable access to services, which are primarily funded by governments but delivered through a combination of public, private and not-for-profit organisations.

In a departure from the competitive norm, many health care providers price discriminate services to help meet equity objectives, such as bulk billing in GP practices. The political backlash received by the current government in its attempt to introduce GP co-payments is testament to how strongly we feel about a 'fair go' in health care.

Economists have recognised the special characteristics of the health care market for over 50 years, and the potential impacts of increased competition in hospital markets has been an enduring issue.

Theory on hospital competition differs depending on whether hospitals can compete on price and quality, or whether prices are fixed. Considering Australian public hospitals have prices set by government, I will focus on the latter.

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<sup>11</sup> The Treasury 2015, *2015 Intergenerational report. Australia in 2055*, The Commonwealth of Australia, Canberra

<sup>12</sup> The exception is preventative care.

Theory tells us that increased competition can lead to increased quality in hospital markets with fixed prices.<sup>13</sup> Hospitals that operate in more competitive markets are incentivised to undertake greater effort, and offer more variety in services delivered. This improves quality and health outcomes for patients who choose the hospital, and for patients who receive services that are not subject to competition, such as heart attack victims.<sup>14</sup>

While theory offers us some insight, in practice things may differ. There is also a cost associated with entry and exit of new providers, and the benefits of increased competition on quality may diminish as more providers enter the market.<sup>15</sup> And of course, sometimes economists get it wrong.

## What is the impact of competition on outcomes?

So what does the evidence tell us?

While competition in health care is synonymous with the US, in the last 20 years countries with universal coverage, such as the UK and some parts of Europe, have introduced greater competition in an attempt to improve quality and efficiency.

Australia also has a long history of competition to varying degrees, such as between public and private hospitals, and within primary care and diagnostic sectors. Yet there is limited evidence on the impact of competition. Two studies that have investigated the role of competition in the hospital sector suggest that competition can improve efficiency and quality, but this depends on the measures of quality and competition used.<sup>16,17</sup>

One example that I want to talk about today are reforms within the English National Health Service (NHS) that occurred between 2003 and 2008. These were squarely aimed at increasing competition and choice within public hospital services and could offer us some insight into a framework for greater competition in Australia.

First, prices for elective surgery were centrally set, and hospitals received funding based on the number and type of patients treated, similar to activity based funding in Australia. Information on hospital quality, waiting times and other attributes of care became available to the public.<sup>18</sup> Private hospitals

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<sup>13</sup> Brekke KR, Cellini R, Siciliani L, Straume OR, 2010, Competition and quality in health care markets: A differential-game approach, *Journal of Health Economics*, Vol. 29, No. 10, pp. 508-523

<sup>14</sup> Gaynor M, Town RJ, 2011, *Competition in health care markets*, National Bureau of Economic Research (NBER), Working Paper 17208

<sup>15</sup> Ibid.

<sup>16</sup> Chua CL, Palangkaraya A, Yong J, 2011, Hospital competition, technical efficiency and quality, *The Economic Record*, Vol. 87, No. 277, pp. 252-268

<sup>17</sup> Palangkaraya A, Yong J, 2013, Effects of competition on hospital quality: an examination using hospital administrative data, *European Journal of Health Economics*, Vol. 14, pp. 415-429

<sup>18</sup> Metrics included risk-adjusted mortality rates, hospital activity levels and infection rates. They were delivered through a government created website.

were encouraged to enter the market to compete for NHS funded elective care patients through nationally agreed contracts.

Probably the most significant change was the introduction of hospital choice. Starting in 2006, patients undergoing elective surgery were provided information on the quality, timeliness and distance to care and offered the choice of four to five hospitals by their GP, including one private hospital. By 2008, patients could choose any public or private hospital in the NHS.<sup>19</sup> Prior to these reforms, public patients could not select which hospital they went to.

These reforms were introduced alongside other changes, including substantial growth in the NHS budget, greater autonomy to managers of high performing hospitals, introduction of financial incentives to reduce waiting times, and stronger performance management through rewards and sanctions around targets.<sup>20,21</sup>

Studies investigating these reforms paint a complex picture. While the evaluation is still ongoing, evidence suggests competition has led to improved outcomes and efficiency, but the market must be carefully designed and regulated.

One study found there was a changing pattern of care, with patients in areas with greater competition choosing to receive elective care in hospitals with lower mortality rates and waiting times. The study concluded the reforms had saved lives by reducing the risk of dying without raising costs.<sup>22</sup>

Another study found that death rates from heart attacks decreased quicker in areas with greater hospital competition, estimating the reforms led to 300 fewer deaths per year. Competition for elective patients increased quality across the entire hospital through measures such as undertaking clinical audits, improving governance and management, and investing in new technology.<sup>23</sup>

A further study found competition among public hospitals led to increased efficiency through reduced length of stay, without any evidence of people leaving worse off or hospitals avoiding sicker patients. But it also found that private hospitals were treating healthier patients and leaving public hospitals with costly patients.<sup>24</sup> This highlights the importance of getting regulation and funding models right to drive appropriate behaviours.

One concern voiced by critics of competition was the potential for reduced access to care for those most in need. It was thought competition could motivate hospital managers around their own self-interest rather than pursuing more social objectives. There was also concern that lower

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<sup>19</sup> Cookson R, Laudicella M, Li Donni P, 2013, Does competition harm equity? Evidence from the English National Health Service, *Journal of Health Economics*, Vol. 32, pp. 410-422

<sup>20</sup> Propper C, 2012, Competition, incentives and the English NHS, *Health Economics*, Vol. 21, pp. 33-40

<sup>21</sup> Cookson R, Laudicella M, Li Donni P, 2013, Does competition harm equity? Evidence from the English National Health Service, *Journal of Health Economics*, Vol. 32, pp. 410-422

<sup>22</sup> Gaynor M, Moreno-Serra R, Propper C, 2010, *Death by market power: reform, competition and patient outcomes in the National Health Service*, National Bureau of Economic Research, Working Paper 16164

<sup>23</sup> Cooper Z, Gibbons S, Jones S, McGuire A, 2011, Does hospital competition save lives? Evidence from the English NHS patient choice reforms, *The Economic Journal*, Vol. 121, pp. 228-260

<sup>24</sup> Cooper Z, Gibbons S, Jones S, McGuire A, 2012, *Does competition improve hospitals' efficiency? Evidence from a quasi-experiment in the English National Health Services*, Centre for Economic Performance, London School of Economics, London

socioeconomic groups may face greater barriers to using information on quality, and would have their choice restricted because they were less able to travel.<sup>25</sup>

A study that explored these issues concluded that competition slightly increased the use of hospital services in deprived areas, while there was no change in non-deprived areas. Competition had improved access to care for those most in need.<sup>26</sup> Another study found that hospitals in more competitive areas treated a greater proportion of patients with less wealth.<sup>27</sup>

Despite these positive results, some evidence suggests competition does not change the behaviour of hospital managers, or can lead to worse outcomes such as increased mortality.<sup>28</sup> These findings primarily relate to pro-competitive UK reforms introduced in the 1990s that separated providers and funders, and created an internal market for hospital services.

However, the 1990s reforms were very different to those in the 2000s. Hospitals could compete on quality and price, there was limited information on the quality of hospitals to make informed choices. Incentives for managers to improve quality were also relatively weak.<sup>29</sup> A reduction in hospital quality is consistent with theory when providers are allowed to compete on price.<sup>30</sup>

More recently, there has been some criticism around additional competition reforms introduced by the UK government through the *Health and Social Care Act* in 2012. These reforms gave GPs and other clinicians primary responsibility for commissioning health care through clinical commissioning groups. While evidence on the impact of these reforms is still forming, many critics argue competition has stifled co-operation and worsened outcomes. Labour has promised to repeal the Act if elected.<sup>31</sup>

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<sup>25</sup> Cookson R, Laudicella M, Li Donni P, 2013, Does hospital competition harm equity? Evidence from the English National Health Service, *Journal of Health Economics*, Vol. 32, pp. 410-422

<sup>26</sup> Ibid.

<sup>27</sup> Cooper Z, Gibbons S, Jones S, McGuire A, 2012, *Does competition improve hospitals' efficiency? Evidence from a quasi-experiment in the English National Health Services*, Centre for Economic Performance, London School of Economics, London

<sup>28</sup> Propper C, Burgess S, Gossage D, 2008, Competition and quality: evidence from the NHS internal market 1991-9, *The Economic Journal*, Vol. 118, pp. 138-170

<sup>29</sup> Propper C, 2012, Competition, incentives and the English NHS, *Health Economics*, Vol. 21, pp. 33-40

<sup>30</sup> Gaynor M, Town RJ, 2011, *Competition in health care markets*, National Bureau of Economic Research (NBER), Working Paper 17208

<sup>31</sup> Limb M, 2015, Labour promises to abolish competition in NHS and promote "true integration", *British Medical Journal (BMJ)*, Vol. 350:h1507, March

# Closing remarks

While it is problematic to transfer results from the UK to the Australian setting, the conclusion is that competition in hospital markets with fixed prices can improve clinical quality, efficiency and access under the right conditions.

Australian governments should therefore explore the use of greater choice across public hospitals and within hospitals, such as choice over who provides care. This should be done in the context of a carefully designed framework that can harness the good and mitigate the bad.

But any attempt to introduce greater competition must be done with full recognition of the social objectives these sectors are trying to achieve. Particular attention must be paid to areas where competition may not be effective due to a smaller number of providers, such as rural and remote areas.

Regulated input markets, such as labour and capital should also be reviewed as they may also limit positive outcomes. Any discussion around competition should also consider opening up some of the constraints within the health care workforce while ensuring safety is maintained, such as recognition of overseas qualifications and the ability for multiple types of health care professionals to offer services.

The argument around increased competition is not about a 'one size fits all' approach where more competition is better. Any debate should also include institutional, regulatory, and funding frameworks.

The question is not whether competition should be introduced into health and human services, but what level of competition is appropriate, and what needs to change within our regulatory and institutional environment, and our contractual and funding landscape to facilitate that level of competition.

There's a lot more research that needs to be done on competition and choice in health and human services, and we are seeking to lead some of that in the immediate future.