Submission:

Private Health Insurance Consultations 2015-16

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Introduction and Overview

Private Healthcare Australia (PHA) welcomes the opportunity to contribute to the national conversation on the Australian health system. Private health insurance (PHI) is an integral part of providing quality healthcare at an affordable price.

In developing a package of suggested reforms, we have set out to achieve four main objectives:

1. Reduce costs and make PHI more sustainable;
2. Remove complexity;
3. Appeal to and attract more younger members to help with intergenerational renewal; and
4. Explore opportunities for PHI to do more for members.

In common with public health funding, the sustainability of private health insurance is under threat from costs rising much faster than general inflation, due to:

- The growth in chronic disease;
- Increasing technology and treatment options;
- The increasing cost of specific healthcare services; and
- An ageing population.

These factors, in the main, are almost entirely beyond the control of private health insurers. Over the last decade, total private health insurance benefits per capita have grown by 5.1%[1] per annum, whilst industry margins have fallen from 5.3% to 4.1% over the same period[2].

The Australian Government is undertaking a number of reviews aimed at ensuring consumers can access quality healthcare at an affordable cost, into the future. PHA and its member health funds very much see private health as part of the solution for delivering quality healthcare at an affordable cost. This aligns closely with Government objectives to shift some of the cost and burden of delivering hospital services from the public sector to the private sector.[3]

This submission recommends a number of important changes to how healthcare is paid for and delivered, aimed at reducing costs and making PHI more sustainable and affordable for consumers.

PHA notes that community rating provides a fundamental underpinning to the Australian private health insurance system, by ensuring affordability for less healthy individuals. PHA reaffirms its support for the principles of community rating. PHA believes that making PHI accessible and affordable to all Australians independent of their health status, risk and claims profile, age or any other demographic factor is a key pillar of the Australian health system. Any changes proposed in this submission are intended to help make PHI more robust and therefore reinforce our world class PHI system.

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[1] Total health insurance population has grown from 10,189,552 in June 2006 to 13,285,907 in June 2015. Total health insurance benefits (general plus hospital) have grown from $8.4b to $18.0b over the same period (APRA, PHA)

[2] APRA/PHIAC report on Operations of the Private Health Insurers 2005-06 and 2013-14

[3] National Commission of Audit http://ncoa.gov.au/report/index.html

PHA strongly believes that the PHI rebate should continue to be applied to both general treatment and hospital treatment. The provision of ancillary services has benefits in reducing future potential hospital admissions and similarly helps ensure that hospital premiums remain affordable.

In the near-term, PHA supports the implementation of a small number of changes to the private healthcare arrangements that can be implemented within one year, and which would address concerns about the value of the private health insurance product. The five areas in which PHA suggests changes be made include:

1. Redefine what constitutes a Complying Health Insurance Product (CHIP) to remove complexity, ensure PHI products deliver more value to consumers and to make cover more relevant to Australia's modern health needs
2. Save up to $800m per annum in PHI prostheses costs by moving to a "reference pricing" system
3. Improve the transparency and comparability across PHI products, while maintaining industry competitiveness and innovation by developing an industry-led solution
4. Improve transparency on healthcare quality and cost information by making minor changes to how currently available data can be shared
5. Improve consumer value by modifying the second tier default benefits currently in place for non-contracted hospitals

These recommended changes to PHI arrangements are described in the "Near Term Priorities" section of this document. There is a range of other changes that have been provided by PHA in previous submissions to the Department of Health, that seek to modernise the regulation of private health insurance in Australia. These, in particular, address ways to reduce red tape and unnecessary regulation, including our current discussion on how to streamline PHI Rules.

The second section of this submission addresses PHA's perspective on several additional topics raised in the Government's discussion paper or elsewhere. Several of these other issues would be addressed if the sector was to undertake broader structural reform, but may not be priorities for change in the near-term.

The recommended package of "quick win" reforms will improve the value available from PHI, as it is structured today. These changes, however, are not a substitute for the broader reform necessary for the Australian healthcare system to deliver much higher quality outcomes at lower cost. This broader reform package is outlined briefly in the "A Blueprint for Broader Healthcare Reform" section of this document, and supported by a paper prepared for PHA last year.

Importantly, the near-term "quick win" priorities outlined in our submission are not just consistent with, they are also prerequisites for, the broader sectoral reforms we believe are necessary.

We note that the Department of Health has provided the industry with some information on other discussions in the health sphere, including the Reform of the Federation White Paper options. We look forward to consultation once the Government has further developed those possibilities. Thus, this submission is structured into the following three sections:

1. Near-Term Priorities For Change
2. Perspectives on Other Issues
3. A Blueprint for Broader Healthcare Reform

Each is addressed in turn.

Near-term priorities for change

PHA supports the implementation of five main changes to the private healthcare arrangements that can be implemented quickly, within one year, and which would enhance the value of the private health insurance product.

1. **Redefine what constitutes a Complying Health Insurance Product (CHIP[4]) in order to ensure PHI products deliver more value to consumers**

   PHA believes that the definition of a "CHIP" should be changed along a number of dimensions in an effort to remove some of the complexity and consumer confusion that has resulted from the range of available products. Other changes to the structure of CHIP products can help add value to a wide range of PHI products. The recommended changes include:

   a) **Define a minimum level of cover to qualify as a CHIP.**

      This would include eliminating "restricted cover", which is much more confusing for consumers than offering either inclusions or exclusions. We note that if the minimum level of cover is increased it may be necessary to raise the Medicare Levy Surcharge such that customers are better off taking out private cover than paying the MLS.

      PHA believes that entry-level policies have an important role to play in the attraction and retention of young and healthy members. As such, we would caution against setting the minimum cover at too comprehensive a level. Policies that offer choice to consumers in what they are covered for are important, particularly in order to appeal to this group of healthy people. Encouraging the uptake of policies by the young and healthy, even if they are relatively limited in their coverage of procedures helps spread the cost of PHI over a greater base. On average, each adult covered by a CHIP hospital product contributes approximately $750 per annum to the risk equalisation levy. This contribution is important to ensure the sustainability of Australia's community rating system, and in turn helps fund procedures for the less health, or older population.

      We are establishing an industry working committee to help define the minimum level of cover. This committee will work closely with the Government to ensure that proposed recommendations achieve the desired outcomes of simplicity, broad population coverage and adequate minimum levels of insurance.

   b) **Remove the requirement to provide minimum benefits for palliative, rehabilitation and psychiatric care.**

      As noted above, inclusions and exclusions are relatively well understood concepts. Allowing funds to exclude these services from some products, or offer more complete coverage in others, would provide better value for consumers – both those who choose these features and those who don't.

[4] The significance of a product being designated a "CHIP" is that it is eligible for the Government rebate, which reduces its cost to the consumer, it avoids the consumer paying the Medicare Levy Surcharge and it qualifies for limiting the consumer's Lifetime Health Cover surcharge exposure. Insurers are able to offer non-CHIP hospital/general cover products, but are unlikely to do so, as the consumer does not avoid MLS or a possible LHC loading at a later date.

When these minimum benefits were reviewed, not long after their introduction, the (then) Industry Commission in 1997 concluded "while there may be some justification in the case of psychiatric care – subject to appropriate admission criteria – there is no compelling reason for singling out rehabilitative and palliative care in this way." The Commission therefore recommended that "compulsory coverage for in-hospital rehabilitative and palliative care no longer be required in every hospital table" (Recommendation 6).

The Industry Commission's 1997 recommendations are even more relevant in today's modern healthcare environment. In other countries, many of the programs covered by the Australian private health insurance minimum requirements are delivered in an out of hospital primary care setting. Thus, the evidence-based model suggests that out-of-hospital is often the most appropriate setting. This means that the minimum benefits legislation forces private health insurers to fund treatment in an inappropriate clinical setting.

The Government may choose to require funds to offer at least one product that covers these in full, but should also allow products that exclude them completely. This is consistent with the recommendation that restricted products be excluded from the CHIP designation. Allowing them to be excluded from PHI will provide better value cover for the large majority of customers

c) Increase the maximum excess level.

The current maximum excess is $500 per policyholder per annum. The maximum excess was last set in 1986[5]. So even just indexing the excess to CPI would result in a maximum excess of approximately $1,300; applying the healthcare CPI would suggest a maximum excess of $2,000[6]. PHA acknowledges that setting excesses too high may impact negatively on the system, and therefore suggests a more comprehensive review of options before deciding on a revised maximum excess.

Just like other insurance types, higher excesses enhance the affordability of PHI as they can be priced lower. Excesses allow consumers to select their level of risk with respect to their healthcare expenditures, though it is health funds experience that it does not lead to consumers failing to address their health needs. Further, policyholders with high excesses typically are lower than average claimers and help ensure the sustainability of PHI as a whole. Finally, excess levels are much less confusing for consumers than, for example, restricted cover for specific types of treatments.

d) Introduce "Negative Lifetime Health Cover (NLHC) to encourage consumers in their 20s to take out PHI.

Lifetime Health Cover has been effective at creating an incentive for young people to join before age 31 to avoid the 2% per annum loading that is applied for joining beyond this age.

NLHC might be structured such that a cumulative premium discount of 2% per year is applied for each continuously insured year between ages 25 and 30, with a maximum discount of 10% maintained for a maximum of 10 years. A consumer taking out PHI at age 25 would receive a discount of 10% for a maximum of 10 years, whilst a consumer taking out PHI out at age 28, would receive a discount of 4% for a maximum of 10 years.

This policy change would increase PHI uptake in the 25-29 year age group. Research undertaken by Griffith University on behalf of PHA indicates that PHI coverage would increase by nearly 3 percentage points and average premiums would rise by approximately $50 less per policyholder than they otherwise would.

[5] Medicare Levy Act 1986

[6] CPI has been 3.27% p.a. compound from 1986 to present, and health related expenditure inflation has been 4.89% p.a. compound from 1989 to present, ABS 2015

e) Address the unsustainable growth in benefits paid to public hospitals.

Accommodation benefits paid for private patients in public hospitals reached $1b in FY2015, and have doubled since 2008. Benefits paid to public hospitals have grown at a compound growth rate of 7% per year and now represent 11% of all accommodation payments by health funds. This presents a major conflict with the intent of the rebate, and of PHI itself, which is to remove the burden on public hospitals, in order to offer better access to health services to all.

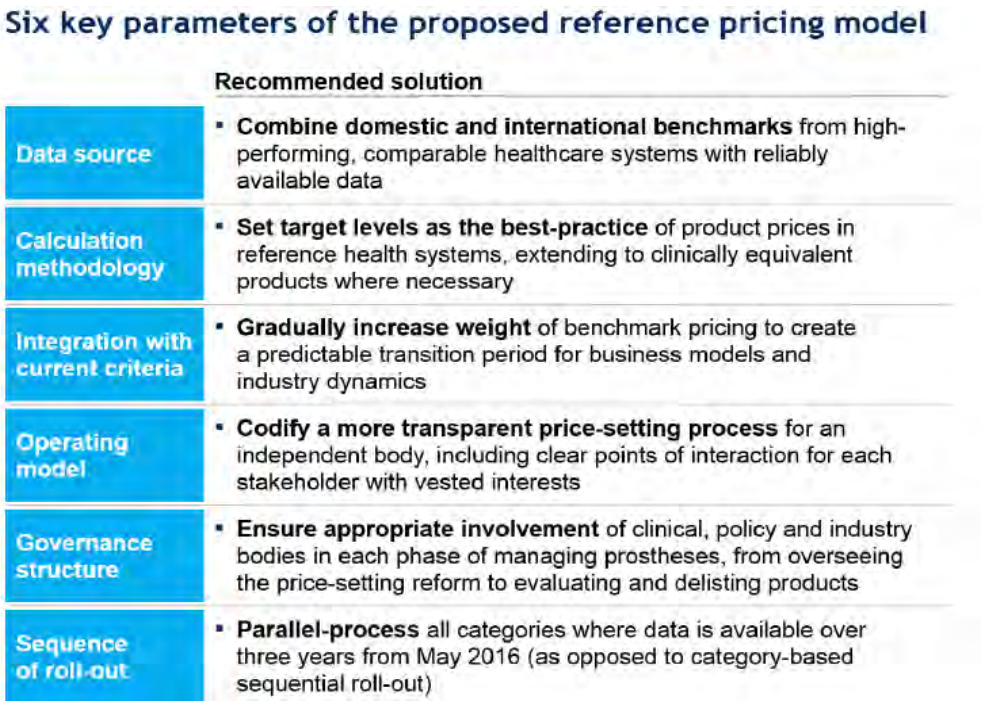
Private health insurance members often receive no additional benefit by being treated as private patients in public hospitals. PHA notes that the increasing trend towards more private patients in public hospitals brings with it new risks for the patients, including unexpected gaps. In fact, private health insurance benefits in non-remote public hospitals adversely impacts private health insurance members by increasing costs, which drives up premiums.

2. More Closely Align Prostheses Benefits with Market Prices[7]

Recent research has (again) highlighted serious shortcomings in Australia's prostheses purchasing and reimbursement mechanisms for private health insurers. Australia pays more for implanted medical devices than other comparable countries. Pricing comparisons indicate that a 45% reduction in the cost of prostheses is a reasonable target. This represents approximately $800m in potential savings per annum, which would result in premiums rising less rapidly than they otherwise would. Over 3 years, this could encourage up to 300,000 people to take up PHI, increasing its sustainability and reducing the burden on the public system.

Having analysed a number of options for achieving the potential cost savings, the industry-sponsored research suggests adopting a reference pricing model. The core principle in the proposed reference model is that reimbursement levels for each clinical category of products would be adjusted to bring them in line with comparable health systems, and outlines six key parameters for its implementation (see exhibit below).

[7] This section draws on a report, *Costing an Arm and a Leg*, October, 2015, prepared on behalf of a number of health funds; the paper has been attached to this submission.



It is anticipated that the Commonwealth Government would play a major role in prostheses reform. This is not a major change from current practice, where prostheses sponsors must include international pricing in all new applications to the Prostheses List Advisory Committee (PLAC).

For example, the Government could take the lead in implementing a PBS-style approach, in which manufacturers would be required to provide reference prices from other jurisdictions as part of their approval process. Other roles that the Commonwealth could facilitate include refining the model for the PLAC, creating a new steering committee to oversee the effectiveness of the PLAC and more generally working with the public and private healthcare sector to plan and implement the move to a reference pricing model.

3. Develop an industry-led solution to improve the transparency and comparability across products, while maintaining industry competitiveness.

In its recent report on the health insurance sector, the Australian Competition and Consumer Commission noted that the industry's products are complex and that consumers have a difficult time comparing them both within one fund and across funds.

PHA and its members accept that there is a vast array of products available in the marketplace and that differentiating amongst them is not always easy. In part, of course, this is an inevitable result of an industry with more than 30 competitors actively seeking new customers. Each competitor typically offers several levels of hospital coverage, combined with the option of various levels of general treatment cover, as well.

There has been substantial innovation in the design of health insurance products over time. Thus, there is an inherent trade-off between product proliferation and complexity and the degree of competitiveness in the market. It would certainly be possible to simplify the product range across competitors (through regulation limiting product design), but this would result in many customers having to buy products that were not as well targeted to their needs.

Despite (or maybe in part due to!) this complexity, product "shopping" and switching is increasingly common. Comparator sites, such as iSelect and Compare the Market, are making

comparison shopping easier. Together, the funds and the comparator sites are estimated to spend $100-150 million each year on advertising that promotes shopping and switching behaviour. Industry initiatives facilitate portability across funds.

Nonetheless, the industry is committed to launch a process to identify how aspects of the products, or the descriptions of products, can be standardised. The industry will seek solutions that improve the transparency and comparability of products while maintaining the highly competitive nature of the health insurance market.

We are currently investigating options to improve transparency and comparability across the industry, including the Industry Code of Conduct as the preferred mechanism for implementation. In addition, some of the existing efforts to provide standard product descriptions, such as the Standard Information Statements (SIS) may need to be simplified or eliminated. The SIS, though well-intentioned, is of limited value in assisting consumers in their product selection process.[8]

The solution is to remove the requirements for SIS altogether and replace it with the minimum requirements. This could take a product disclosure statement-style, which consumers are already familiar with from other products they purchase.

There also needs to be consideration given to the fact that some information, such as patients' liability for gap payments to doctors, is simply not available to health funds before the patients receive their bills, as they have no insight into doctors' billing practices.

The industry would commit to undertake this review to improve transparency and comparability across private health insurance during 2016 and to report back to the Commonwealth at the end of that period.

4. Improve transparency on healthcare quality and cost information by making minor changes to how currently available data can be shared.

The lack of access to fact-based information hinders the system's quality and cost outcomes in a number of ways.

First, without appropriate information, patients find it difficult to make choices about the type of treatment that is most appropriate to their circumstances. When adequate information as to the costs and possible consequences of various treatment options are presented to patients they often opt for less invasive, lower cost treatments.

Even assuming there is more information available to inform patients on the choice of treatment, there is little or no information to guide patients as to their choice of provider (hospital or specialist). There is no easy way, for example, to compare the experience level of specialists (i.e. the number of procedures completed to date), let alone their charges or quality of outcomes.

Australia is falling behind other countries in providing access to key healthcare information.[9] In a number of areas data exists but cannot be shared due to privacy restrictions.

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[8] Australian Competition and Consumer Commission "Private Health Insurance Report 2013-14".

[9] International best practice, led by France, Holland and the United States, includes:

- transparency and disclosure of all relationships between the health industry and health professionals. (eg Harvey K "Submission to the Senate on Therapeutic Goods Amendment (Pharmaceutical Transparency) Bill 2013; and
- the United Kingdom and United States, among other countries, have implemented public websites and apps that allow consumers to compare results and costs between different health providers. (eg https://www.nhs.uk/service-search/performance/search http://health.usnews.com/health-news/best-

PHA recommends two key regulatory changes:

(1) Improve transparency to remove impediments to everyone in the healthcare system researching best healthcare providers by increasing healthcare data collection AND removing constraints to publishing data that helps inform consumer health choice.

(2) Help reduce suspected fraudulent activity and inappropriate behaviour by permitting Australian private health insurers to share information about suspected fraud and inappropriate behaviour.

Together, these changes will begin to allow the development of information systems that will allow consumers, payers and providers to make better choices across the healthcare system.

5. Modify the second tier default benefit arrangements currently in place for non-contracted hospitals.

The second tier default benefit arrangements were designed as a safety net funding arrangement for independent, rural and remote hospitals that have attempted to negotiate a contract with private health insurers, without success. Set at 85%, however, it provides limited incentive for hospitals to negotiate contractual arrangements with funds and commits funds to relatively high reimbursement rates that may not be justified based on hospital performance. Furthermore, hospitals receiving the 85% second tier default benefit payment are free to invoice patients directly, resulting (perhaps) in their receiving, in total, more than they would if under contract with the fund. Consumers, of course are unhappy with the out-of-pocket charges.

By acting as an effective "floor price" the second tier default benefit favours providers in their negotiation with health funds. It adds to cost and detracts from the value PHI can offer consumers.

PHA believes that, ultimately, any form of distortion affecting the negotiation between providers and funds is not in the best interest of consumers, as it limits the ability to negotiate for high quality, low cost outcomes. As such, PHA recommends that the second tier default benefit should be removed from hospitals not located in rural and remote areas.

In the near-term, however, it may be necessary to retain some form of default benefit for hospitals in rural and remote areas. Limiting the applicability of the default benefit arrangements reflects the fact that metropolitan hospitals already operate within more competitive environments.

In addition, we recommend that the default benefit (85%) be complemented with a price ceiling that would limit the amount of gap payments that can be charged by a hospital claiming default benefits. We'd suggest this maximum charge be set at 100% (assuming default rate of 85%), restricting the patient gap to the 15% differential. This would enhance the value of PHI for consumers, by limiting the size of "bill shock," and also provide increased incentive for hospitals to enter into serious negotiations with health funds.

Taken together, the recommended changes to PHI offer the best opportunity to add value to the health insurance product in the near-term. Further, as will be outlined in the next section, these changes are consistent with, and, in a number of cases, prerequisites for broader healthcare sector reform.

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hospitals/articles/2015/07/21/best-hospitals-2015-16-an-overview http://www.mlive.com/business/west-michigan/index.ssf/2015/02/health_care_shopping_app_lets.html

Perspectives on additional issues

A number of additional issues have been raised in the Government's discussion paper or elsewhere in subsequent public debate. This section addresses a number of these issues. We do not believe, however, that these additional issues should shape the near-term reform agenda outlined above.

The Community Rating Principle

There has been some public discussion on the role of community rating in the Australian PHI system. In particular, the Government raised a number of potential ideas in its Consumer Survey which if adopted would result in changes to the community rating principle. In the survey, the Government has sought perspectives from consumers on whether different premiums should be charged to consumers as a result of risk factors, e.g. smoking, age, gender and other health risk factors.

PHA notes that community rating provides a fundamental underpinning to the Australian private health insurance system, by ensuring affordability for less healthy individuals, and by spreading the cost of treating these patients through the Risk Equalisation Transfer Fund. PHA believes that it is important to make PHI accessible and affordable to all Australians independent of their health status, risk and claims profile, age or any other demographic factor is a key pillar of the Australian health system.

PHA notes that even the United States administration is working with US health funds to adjust the existing "risk rated" system in favour of a model which resembles the Australian example. This is aimed at making health insurance more affordable in the US healthcare system.
While risk-weighting, particularly for behavioural choices such as smoking may provide some incentive for consumers to change their behaviour, it may quickly become a slippery slope. PHI should be available to all independent of age, race or gender and changing the community rating principle may make PHI insurance less affordable for already disadvantaged groups.

Value for Rural and Remote Consumers

It is sometimes argued that rural and remote consumers do not receive as much value as others from private health insurance, due to the lack of local private providers (hospitals). In our view, PHI offers an attractive product even if a consumer has to travel some distance to access appropriate services.

Most importantly, research studies have consistently shown that hospitals and doctors that perform greater volumes of a procedure typically deliver better outcomes, usually at lower cost, than low volume facilities. That would indicate that, although undoubtedly somewhat less convenient from a travel perspective, consumers are likely to achieve better health outcomes traveling to large facilities in regional centres or capital cities.

Thus, if take-up rates of private health insurance are lower in rural and remote communities, it is at least in part because consumers are unaware of the variation in quality amongst healthcare providers. This could be addressed, in part, by improving the transparency of the performance of providers as outlined in the near-term priorities for regulatory change.

Rebate on General Treatment Products.

There has been some discussion about whether the rebate should be removed from policies covering general treatment (ancillary cover). Largely, these arguments are underpinned by the view that the treatments covered by ancillary policies are not widely available in the public sector.

PHA strongly believes that removing the rebate on ancillary cover would, in fact, have a major impact on the attractiveness of hospital insurance and thus, the Government's total healthcare costs.

PHA notes that general treatment products provide benefits to the health system through addressing health issues which may at a later point result in a hospital treatment episode if left untreated. Clinical benefits from dental, optical, and physiotherapy services have been proven. PHA notes that general treatment services outside of these services contribute to less than 5% of total benefits paid. Removing rebates from general services may result in less 'preventative treatment' being undertaken.

Government policy seeks to reduce the public costs of providing hospital treatment, including by encouraging patients to seek treatment in the private sector (through the PHI rebate) and other initiatives, such as the National Efficient Price.

Approximately 56% of Australians take out general cover – more than take out hospital cover. This is despite the fact that there is no MLS incentive encouraging people to take out general cover. This indicates that consumers view it as an attractive product, with a reasonable "risk vs return" trade-off. Further, the product is attractive from the health funds perspective, as it attracts younger people and families into private health insurance, which can open up a conversation and dialogue to ensure they have the appropriate PHI coverage for their situation and healthcare needs.

Thus, the economics of general health insurance products is supporting the overall economics of private health insurance. If the rebate were to be removed from general policies, private health insurance would go into a cycle of decline, as follows.

Initially, the loss of the rebate would push up the out-of-pocket cost of general coverage (by 39 for those losing the full rebate). Participation rates would decline, with low claimers more likely to drop out first. For some general policy holders the increase in general prices would act as a trigger to drop out of private health insurance altogether. The contribution from ancillary products would decline sharply. There would be further trading down in both hospital and insurance coverage as consumers attempted to limit healthcare spending.

There would be a further impact to hospital coverage, as premiums would need to go up to reflect the lost contribution from ancillary. Price increases in hospital policies will trigger a further cycle of declining participation rates, again, firstly amongst low claimers. Removing relatively healthy people from the risk pool would result in the need for even more price increases, accelerating the cycle of decline. This would make it harder for those to need access to hospital treatment to access PHI.

PHA and its member funds would be happy to sit down with the Government and discuss how to model the impact of removing the rebate on ancillary products on hospital policies and the economics of private health insurance as a whole. The impact would be massive, and would result in the Government either having to increase the rebate on hospital policies or wearing substantial "blowback" into the public system as consumers depart the private hospital risk pool, increasing the demand on the public system. It is likely the industry would re-enter the downward cycle it was in during the late 1990s.

Effective Use of Government Incentives

There are three major Government incentives in place to encourage the take-up of private health insurance and reduce the burden on the public sector: the Medicare Levy Surcharge (MLS), the PHI Rebate, and the Lifetime Health Cover. Taken together, they are effective at achieving their dual objectives, although improvements are possible. Each is commented on briefly below.

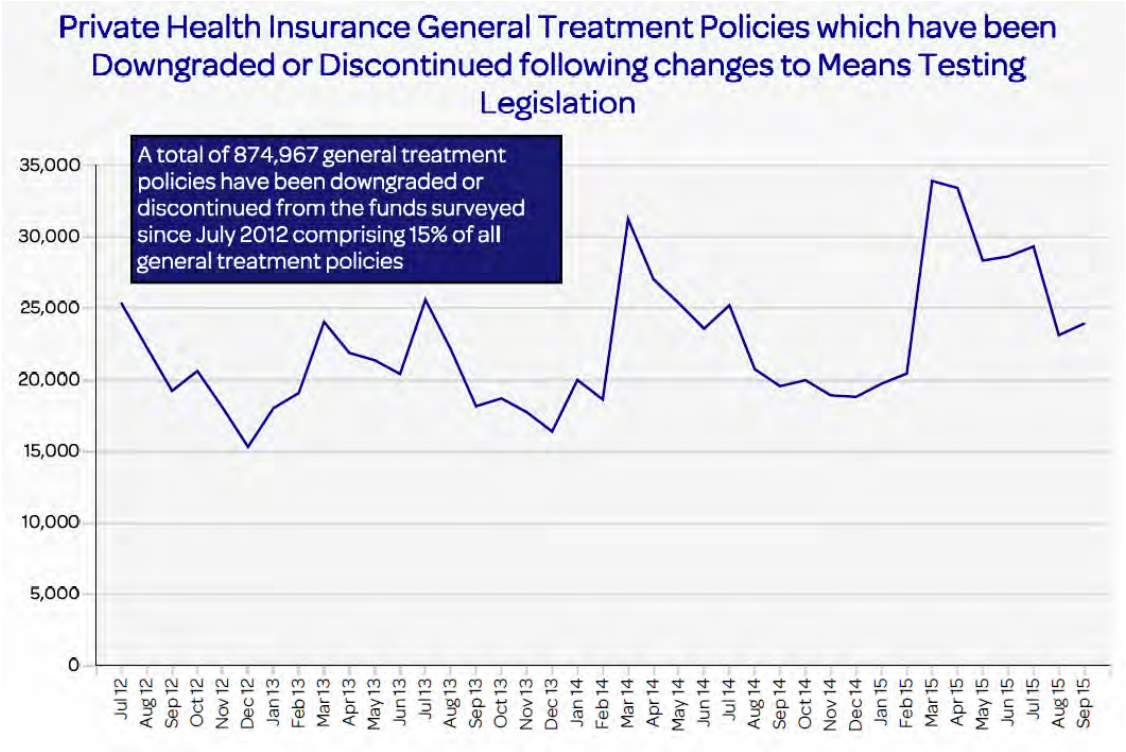
The Lifetime Health Cover is effective at bringing a younger, healthier population into private health, which increases the value of the product across the insured population. In the near-term priorities section of this submission we outlined an extension of the LHC (a "negative LHC") to apply from age 25 to further spread healthcare costs across a broader population of consumers.

The Medicare Levy Surcharge provides a "stick" for consumers with higher incomes to take out PHI cover through the levy of an additional tax on those with an income above certain thresholds but without PHI. The thresholds and tax rates are structured such that it is less costly to take out PHI than to pay the MLS.

We note that if private healthcare premiums continue to rise faster than wage levels, the relative cost of even highly restricted policies might exceed the extra tax incurred. Thus, as private health insurance becomes more costly, it may be necessary to adjust the quantum of the surcharge in order to maintain the incentive for consumers to join or remain privately insured.

The Government Rebate is an important element in encouraging consumers to purchase PHI (except for those affected by Rebate Income Testing who receive a reduced or nil rebate, depending on income level). The impact of removing the rebate on general treatment products is discussed in the section above, which highlights the impact this would have on the economics of PHI and the resultant impact on the public sector.

The introduction of Rebate Means Testing, along with the indexing of the rebate to inflation (meaning the 30% rebate will continue to be whittled down if premium increases outstrip general inflation) have resulted in large numbers of consumers "trading down" to lower value policies to maintain affordability.



This “trading down” (or, at the extreme, dropping out of PHI) reduces the value of PHI and increases the burden on the public system. Thus, the reduction in rebate payments from both means testing and indexation are “false economies” as they create a significant extra burden on public sector healthcare costs.

A blueprint for broader healthcare reform

The Government's issues paper indicates that, as well as identifying short-term reform options, it is seeking to explore long-term strategic reform options. In particular, the paper seeks views on the role of PHI in the long-term and on ways to create a sustainable private health industry that delivers value to consumers.

PHA – and many of our member organisations - has put a great deal of effort into these questions in recent times. PHA welcomes a vigorous, fact-based national conversation on the future of Australia's healthcare system.

PHA's preferred course for strategic healthcare reform is contained in a report prepared last year by Port Jackson Partners Limited on behalf of PHA. This report is attached to this submission as Attachment One. PHA has discussed the concepts in this report with many in the healthcare sector, including healthcare experts, bureaucrats, politicians and others.

At a very high level, the report reaches the following conclusions:

- Doing nothing – or tinkering at the edges - is not an option: Healthcare costs are increasing rapidly (with no definable improvement in quality), and will continue to do so, placing the imperative on Governments to find ways to meet healthcare needs without diminishing the quality of care
- We believe there is an opportunity to reduce Australia's healthcare costs by $100 billion over a ten year period, while at the same time improving healthcare outcomes
- Achieving these benefits will require a "re-mapping" of roles in the healthcare system, including the introduction of GP-led integrated care provision, supported by new funding models, better incentives and improved information to ensure better decision-making
- The private healthcare sector will be central to achieving the potential cost and quality improvements, working in close co-operation with governments and other stakeholders to redefine roles

PHA stresses that the blueprint for broader reform is very different to the often-cited "American model" in which insurers became gatekeepers for access to healthcare services. The model proposed in our report puts decisions about healthcare options, and responsibility for delivering efficient, quality outcomes, squarely on consumers and their healthcare providers – where it is best placed.

The report also indicates that the reforms proposed, though significant, are achievable. There are numerous examples of the elements of the reform program being successfully implemented in other jurisdictions. Arguably, the Australian healthcare system is beginning to be a laggard with respect to some of the changes being implemented overseas.

As with other aspects of our submission, we would be delighted to engage with you in more depth on the blueprint for reform outlined in our report, and on how these reforms mesh with other initiatives being considered. For example, the Federation Reform options currently being considered, or a variant of them, might represent one alternative for reforming the funding elements of the healthcare system.

It is imperative that Australia begin the transition necessary to slow the growth in healthcare costs and ensure we are getting value for the money spent.

Attachment One:

Health Reform: Higher Quality, Lower Costs – A Port Jackson Partners Report to Private Healthcare Australia – May 2014

HEALTH REFORM:

Higher Quality, LOWER COSTS

MAY, 2014

A Port Jackson Partners Limited Report to Private Healthcare Australia.

Foreword

BETTER HEALTHCARE AND $100 BILLION IN SAVINGS

Australia's massive budget challenges are well publicised. There are clearly difficult choices to be made across many aspects of public sector funding.

Healthcare reform must be part of meeting those challenges. Healthcare is already one of the largest and fastest growing areas of government expenditure, with rapid growth forecast to continue over the next ten years. Although our health system is among the best in the world, unwarranted variations in the quality of care persist with real consequences for health consumers.

Doing nothing – or even tinkering at the edges – is not an option. Our population is ageing, costs are increasing and Governments must find ways to meet healthcare needs more efficiently without diminishing the quality of care.

This report, prepared by Port Jackson Partners Limited on behalf of Private Healthcare Australia, identifies and quantifies the opportunity to reduce healthcare costs by more than $100 billion ($15 billion per year) over the next ten years, while at the same time improving healthcare outcomes.

Achieving these benefits will require a 're-mapping' of roles in the healthcare system. The introduction of integrated models of care provision, with GPs and other primary carers playing an enhanced role in managing patients' health is at the heart of this change. This must be supported by new funding models, better incentives, and improved information to ensure better decision-making.

The report foreshadows an increased role for the private healthcare sector, in close cooperation with governments and other stakeholders, and emphasises that reforms should focus on a system that rewards high quality care no matter who provides it.

Private Healthcare Australia looks forward to working closely with stakeholders in taking up the challenge of re-mapping our healthcare system.

Hon Dr Michael Armitage

Chief Executive Officer
Private Healthcare Australia

May, 2014

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Executive Summary:

Increased private sector involvement is pivotal to improving the quality of healthcare delivered to Australians, while reducing costs significantly.

THE CHALLENGE: *Respond to cost, consistency and quality pressures on Australia's health system*

Australia is spending more per person on healthcare every year, even allowing for changes in demography and disease burdens. This growth is outpacing that of other developed nations, from an already high base. Growth in healthcare costs is being primarily driven by:

1. An increased rate of hospital admissions per capita, even after adjusting for an ageing population and increases in the incidence of disease, and
2. Increases in real costs per case-mix adjusted hospital admission, reflecting more intensive treatment, but not necessarily better outcomes
3. Growth in non-hospital care volumes, particularly in areas where patients out-of-pocket costs are typically low or non-existent, such as GP visits and diagnostic testing

While our costs are high, there is no evidence that our rapid growth in health care expenditure is leading to corresponding levels of higher quality care, delivered more consistently. While matching improvements in life expectancy elsewhere, well-reported issues of consistency and quality of care remain. Many health consumers appear frustrated with the limited health care quality information available about health care quality, for hospitals, providers and payers. Further, care is typically fragmented, with a lack of integration in the care provided to patients from primary care, through to one or more specialists and ultimately in hospital.

THE OPPORTUNITY:

Save $15 billion in recurrent healthcare costs, or more than $100 billion over the next decade

Healthcare reform focussed on two drivers of performance could lead to improved outcomes and substantial cost savings.

THE RIGHT CARE...

Given the risks and high cost of hospital treatment, keeping people who can be treated in other ways out of hospital is the single best way to improve healthcare quality and reduce costs. Today, at least seven percent of admissions are classified as 'avoidable' and there is excessive unexplained variation in admission rates more generally.

The key to keeping people out of hospital is increased use of seamless, integrated care-models, particularly for those with the most severe chronic or acute conditions. Investing in primary care is central to achieving this, particularly through prevention programmes and by placing GPs at the centre of managing the health of patients. While boosting primary care will require investment, inefficiencies in some aspects of primary care suggest an opportunity to fund these improvements by capturing and reinvesting the potential savings back into the system.

Evidence shows that past declines in GP bulk-billing have reduced primary care demand without placing a significant additional burden on other areas of the system, including emergency wards. This suggests that some services currently provided by GPs are either of limited health benefit or could be better provided by others. Capturing this opportunity alone could represent savings in the order of $1bn per annum. Any reduction in unwarranted GP visitation rates could also have flow-on savings through reduced diagnostic testing, as well. This paper recommends that all savings available from reducing inefficient use of the primary care sector are reinvested into more productive primary care activity.

In total, ensuring that care is better matched to the needs of patients could improve the efficacy of the Australian healthcare system while saving $8.1 billion per annum.

...at an efficient cost

Throughout the Australian health system, there is no evidence that cost is related to quality. Hospital costs/charges for accommodation, prostheses, theatre, and medical services vary significantly. These variations present significant opportunities to save resources without compromising quality. Studies from the United States indicate that as much as 30 percent of healthcare costs are a result of poor process quality.

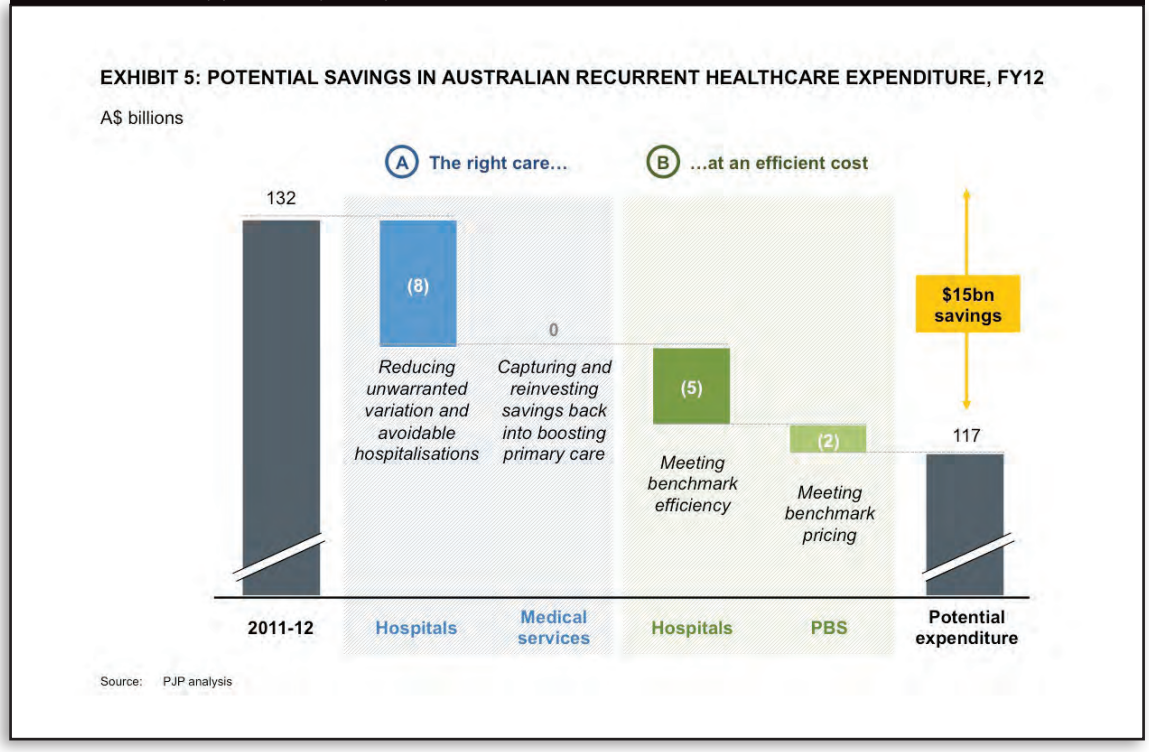
Additionally, in the Pharmaceutical Benefits Scheme there is an opportunity to reduce costs by matching the purchasing performance of other countries.

In total, ensuring care is given at an appropriate cost could save an additional $6.7 billion per annum.

The $15 billion savings potential from these two areas represents about 11% of today's total recurrent health expenditure. This estimate is conservative for a number of reasons:

- It is based on two-thirds of recurrent healthcare expenditure - hospitals, medical services and PBS
- The benchmarks used to estimate variation reductions are high-level Australian aggregates, mostly at the state-level. Much greater variations, indicating greater savings potential, exist amongst health districts and individual providers.
- International benchmarks have not been considered in the assessment of Australia's recurrent healthcare expenditure - further opportunities exist through improving Australia's overall performance towards world's best practice.

Exhibit 1: The opportunity if captured in FY12



Achieving these improvements progressively over the next decade would reduce spending over that period by more than $100 billion, and simultaneously increase the quality and consistency of healthcare in Australia. This estimate is also conservative as it is based on an expenditure projection that only includes changes in demographics and disease rates, and excludes potential increases in price and activity, which has been the largest driver of cost growth in recent years.

Importantly, at least some of these savings could be reinvested back into the health system. Specifically, the savings from reducing unwarranted GP visits could be diverted back into primary care through prevention programmes and by putting GPs at the centre of a more integrated care model.

THE SOLUTION:

'Re-map' Australia's healthcare model, increasing the role of the private sector, to capture quality and cost gains.

Capturing these benefits requires four key reforms that cannot be delivered without a 're-mapping' of the health-care system in a way that both encourages and leverages the distinctive contribution of the private sector:

- Increased use of integrated care models, including an enhanced role in primary care
- New funding models
- Improved incentives
- Disciplined use of fact-based decision-making.

Increased use of integrated care models.

Integrated care has as its aim the delivery of the appropriate mix of services across the healthcare value chain. For example, integrated care focussed on reducing hospital episodes, through enhanced primary care, can reduce costs and improve the quality of care for sufferers of chronic conditions. In the United States, Health Quality Partners has reduced hospital admissions by over 30 percent amongst patients with chronic illnesses and co-morbidities. Also in the United States, Kaiser Permanente is using registries to help nurse managers and clinical pharmacists manage post-hospitalisation services. For cardiac patients in Colorado, this approach reduced all-cause mortality by 76% .

In Australia, the private sector is experimenting in integrated care. Private health operators are experienced, for example, in fact-based health management, particularly in the area of chronic disease management. Many Australian private health funds are already operating or participating in such programmes.

Embracing integrated care means removing restrictions on involvement in primary care. This means, for example, allowing private health funds to facilitate primary care – not only GP's and specialists, but also nurses and other healthcare providers – on behalf of their members. Most other health systems have removed artificial distinctions between elements of the healthcare value chain.

[1] *The work of Health Quality Partners and others active in integrated care, including for sufferers of chronic disease, is discussed in more detail on page 34 of this report*

New funding models.

The healthcare system should continue to introduce new funding models that best help achieve the gains described above. Although a step forward, activity-based funding (ABF) is not sufficient to drive reform. ABF systems can help make gains through lower costs per procedure, but can do little to ensure a more appropriate volume of activity. Capitated payment models, for GPs , other providers, and funders are likely to play a much greater role, and should be trialled as part of developing a re-mapped healthcare model.

Other health systems have recognised that more sophisticated funding models provide the best possible incentives and create room for new ways of delivering healthcare. Sweden, Denmark, Norway, and some jurisdictions in the US, for example, have all begun to explore whether capitated payment models can help improve the quality of primary care.

In Australia, the private sector is well-positioned to help deliver the benefits of superior funding approaches. Private sector players are expert in a range of funding models. They have already moved beyond fee-for-service to case-mix funding (in many instances), and in Australia and overseas private sector participants are caring for patients under condition-based and capitated payments covering the full cycle of care.

Improved incentives for all involved.

Incentives for all health sector participants, often but not always embedded in the funding model, should clearly signal and drive behavioural change.

The private sector is familiar with and responsive to incentive-based arrangements to an extent rarely observed in the public sector. In the US, for example, a number of hospitals that once sought higher patient volumes to earn greater revenue are now part of 'accountable care organisations'. These hospitals now have an incentive to manage the health of their patient population and keep patients out of hospital. These incentives encourage new preventative activities not typically delivered by hospitals - including calling recovering cardiac patients during winter storms, to remind them not to shovel snow.

Disciplined use of fact-based support for decision-making.

Fact-based decision-making should underpin every aspect of healthcare reform. Strengthening the use of cost and quality data underpins the measurement of outcomes, which is critical to well-functioning incentives. Sweden, for example, has created 100 heath registries to identify and implement best clinical practice across the provider base. The National Swedish Cataract Register, for example, has identified risk factors which determine optimal prophylactic regimes for cataract surgery. This has led to a decrease in the number of post-operative infections of around 80%.

Undoubtedly, all parties in the healthcare arena must do a much better job in providing increased support for decision-making. Governments will need better data to help set condition-based payment levels and expected quality and outcome targets.

The private sector, which already has a great deal of data, will need to better apply it to help inform patients in making trade-offs between cost and quality. All parties must be prepared to be much more transparent about the quality and cost data they already collect, and in their approach to making this information available in a way that is helpful to patients, payers and providers alike.

The vision is achievable in practice

There is strong evidence in Australia and elsewhere that these quality and cost opportunities can be captured, and that the private sector can play a central role in doing so. Worldwide, governments are accepting the challenge of finding the appropriate balance between private and public sector participation in the healthcare sector. For example:

- In the UK, the NHS is asking the private sector to help manage selected cancer patients and 'end-of-life care'
- In the Netherlands, both the provision of a universal service obligation and provision of a supplementary insurance product has been outsourced to a range of private providers

- In the United States, Arkansas has begun to reshape the roles of the public and private sectors in an already blended system. These changes are intended, among other improvements, to increase focus on integrated care

These efforts seek the right combination of skills and business models to focus on the right care at the right cost. They also illustrate that systemic reforms must be well tuned to local requirements and circumstances.

Next steps in the evolution of Australian healthcare

The next steps in the evolution of the healthcare model will require determination from all involved. Significant changes to the roles of various participants will be necessary.

For governments, the two key roles are:

- Set, monitor and enforce standards for healthcare delivery
- Remove artificial barriers ('red tape') to help consumers become more active participants in their own healthcare, and reward purchasers and providers that deliver better quality outcomes on a consistent basis

Consistent with these changes, the Government should also consider how best to begin to increase the involvement of the private sector in health. Potential first steps could include:

- The contracting out of a 'Universal Service Obligation' to private sector participants
- Broadening the scope of private health insurance to include care outside the hospital
- Allowing the private sector to compete for the right to manage the health of patients with specific chronic diseases, or even the total healthcare, for a subset of the population.

Although beyond the scope of this paper, identifying the most prospective areas of reform, both in terms of the size of the prize, and the ease of implementation, is a crucial next step. As a discussion starter, Chapter 5 provides a number of tangible actions the government could use to begin reform. While the initiatives are in no way a complete list of the changes required, they are amongst a number of important steps central to re-mapping Australia's health sector toward achieving a step change in quality and cost efficiency.

Any reform agenda that helps deliver higher quality, lower cost care will create increased opportunities and benefits for high quality providers of care, and their patients. These benefits include:

- Healthcare consumers will be able to take a more active role in making informed decisions about their own clinical treatment, including their choice of provider, provided they are armed with more facts with which to make those choices
- The private sector will become much more actively involved in the health of their members and customers, right from primary care through to post-hospital rehabilitation, increasing the focus on prevention to everyone's benefit
- Providers will have the incentive to develop and use tools that facilitate their provision of 'value for money' healthcare, consistently

Moving to a higher quality, more efficient system will mean substantial change in the way in which resources are allocated, treatment decisions are made, and in the roles of practitioners and others.

The bottom line

Although our healthcare system is perceived well today, there is a significant 'prize' - in terms of both quality and cost – to be gained from further sectoral reform, and particularly from the increased participation of the private health sector. Even assuming a progressive ramp-up, the country's healthcare expenditure could be reduced from current projections by over $100bn over the next ten years, with the quality of healthcare being enhanced at the same time.

In our view these gains are not possible within the current healthcare framework – they demand more significant structural reforms, and the introduction of competition, such as has been driven in most other sectors of the Australian economy. There is evidence that these reforms will work, and the sooner they are implemented, the sooner the benefits will flow to patients, providers, funders and governments.

1. The Challenge:

Respond to cost, consistency and quality pressures on Australia's health system.

On a number of dimensions, Australia's current healthcare model is very well regarded, both within Australia and by overseas observers. Australia has made significant reforms concerning the contribution of the private sector, funding arrangements and new bodies to oversee quality and safety. Our universal coverage is seen as a strong point, and with our life expectancies near the top of the OECD countries, clearly we are doing many things right.

This growth, combined with already high levels of health spending per capita, is a conundrum for Australia. Our ratio of total health expenditure to GDP appears mid-range among the OECD, at 9.1%. Yet our combination of high per capita expenditure and high growth is distinctive (Exhibit 1). Countries with higher growth than Australia all have significantly lower absolute health expenditure per capita.

Unaddressed, our level of spending will soon be among the OECD's highest.

Some of this growth is driven by population growth and ageing. However, most growth in healthcare costs is caused by:

- Increasing rates of hospital admissions per capita, after adjusting for demographic changes.
- Increases in real costs per case-mix adjusted hospital admission, reflecting more intensive treatment, but not necessarily better outcomes
- Growth in out-of-hospital care volumes, particularly in areas where patients' out-of-pocket costs are typically low or non-existent, such as GP visits and diagnostic testing.

Exhibit 1: Healthcare expenditure by OECD countries

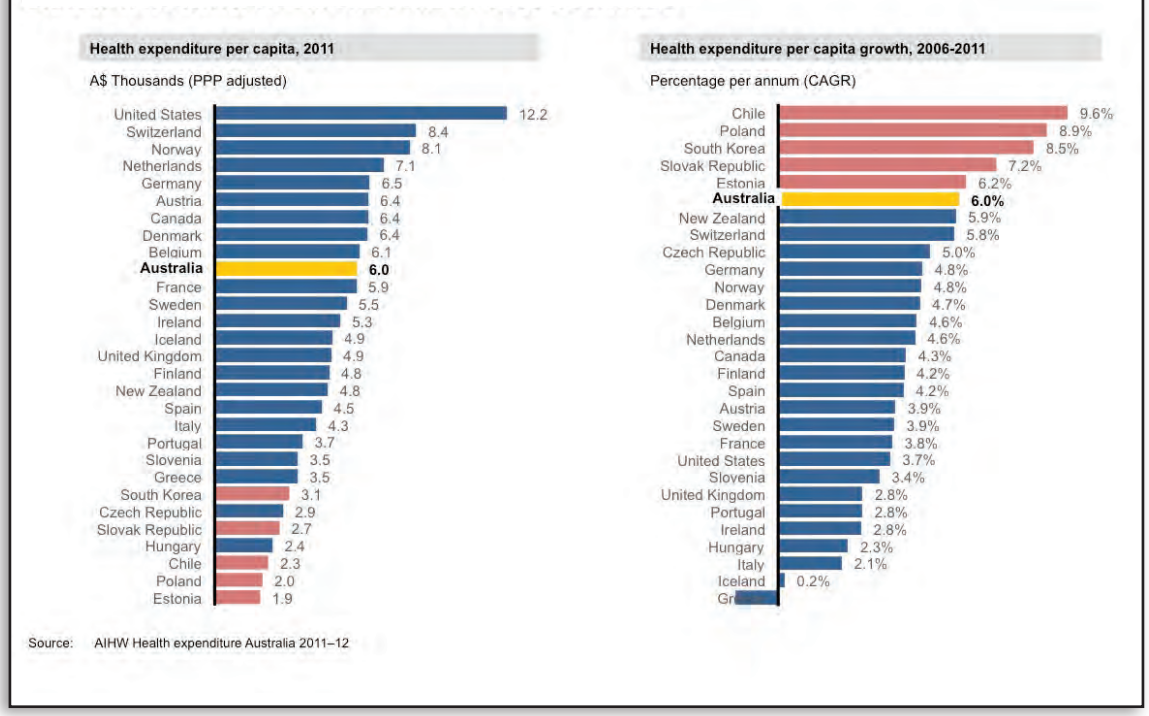
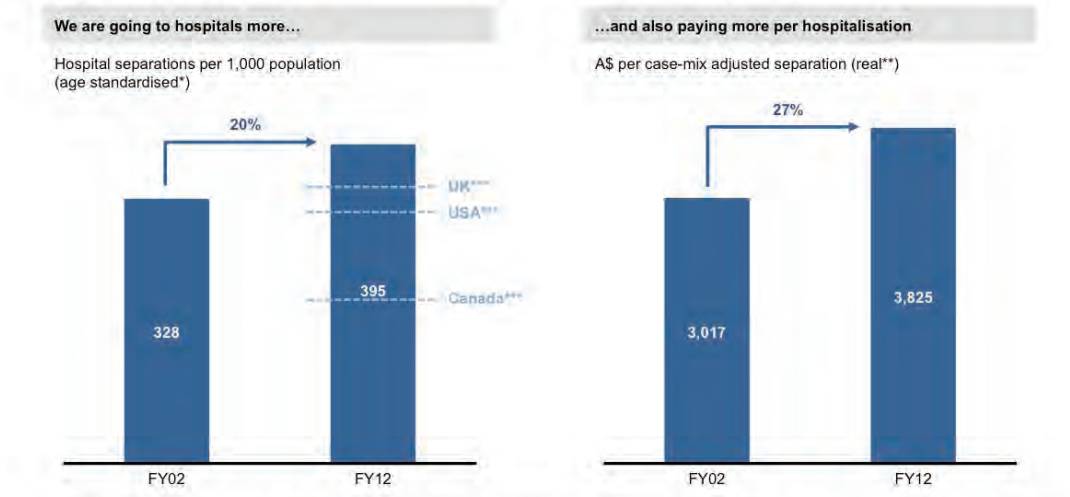


Exhibit 2: Intensity of care – Australian public and private hospitals, FY99-FY12



* Standardised for ageing based on AIHW estimates; figures does not include small impact from changes in disease or prevalence rates, which have been slowly declining (weighted average)
** Deflated using AIHW's GFCE hospitals and nursing homes price index
*** Estimated based on relative comparisons to OECD benchmark 'Discharge rates by diagnostic categories, All Causes'; Australia is 93% above Canada, 27% above USA and 16% above UK.

Source: AIHW Hospital Statistics Reports; Projection of health care expenditure by disease: a case study from Australia (Vos, Goss, Begg, Mann, 2007); OECD (2013); PJP analysis

The first two of these drivers are described in Exhibit 2. After adjusting for ageing and changes in disease rates, Australians went to hospitals 20% more often in FY12 than in FY02, and also paid 27% more for each like-for-like visit.

There is no evidence that this growth in health care expenditure is leading to higher quality care, delivered more consistently.

While important broad health metrics, including life expectancy, have improved, there is no evidence that this rapid growth in health care expenditure is leading to corresponding levels of higher quality care, particularly through more consistent and efficient delivery.

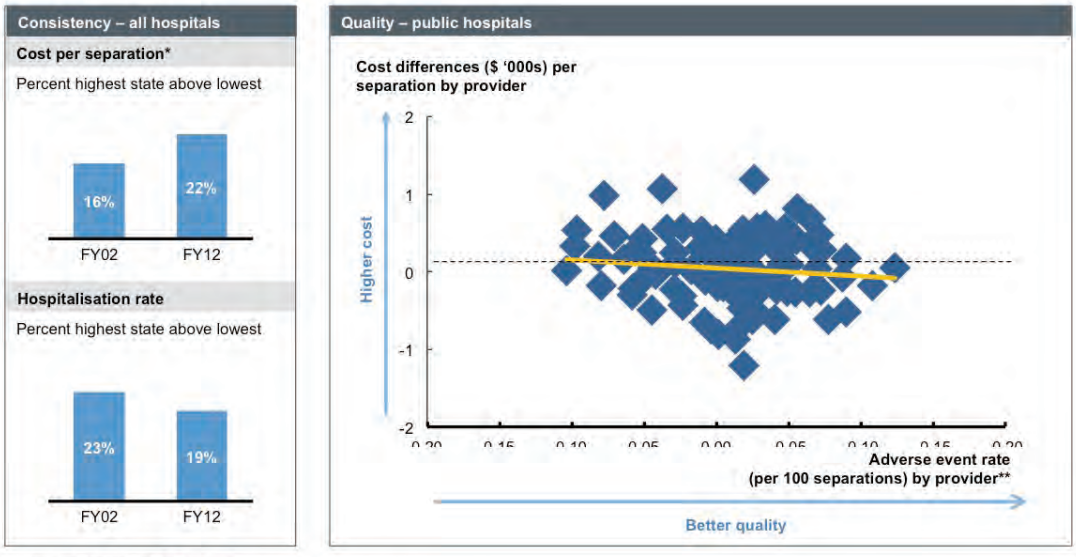
There are well-reported issues of consistency and quality of care across the health system (Exhibit 3). The limited, asymmetric information available about healthcare quality also frustrates many health consumers, providers and payers. Fragmented payment and reimbursement mechanisms often do not provide incentives for managing healthcare quality and cost. Too frequently, the demand for healthcare services is driven by the supply of providers, rather than clinical best practice.

It is not surprising, therefore, that scrutiny of Australia's health spending is increasing.

Increasingly, governments, consumers and healthcare providers are focussed on the extent to which our healthcare system delivers high quality outcomes. For example, the growth in the chronic disease burden is calling into question our traditional approaches to care, many of which were designed around the management of acute conditions. These concerns extend to GP and medical specialist services, and the PBS.

Patterns of spending in dental and non-PBS medications and supplements are growing just as quickly, but are of somewhat less concern. This spending represents the choices of individuals in reasonably well-functioning competitive markets. Even in these areas, however, increased transparency as to cost and clinical outcomes would lead to better decision-making by healthcare consumers.

Exhibit 3: Consistency and quality of care in Australian public and private hospitals



* Case-mix adjusted cost per separation
** DRG adjusted and compared to Australian average; two outliers excluded
Source: Grattan Institute: Controlling costly care (2014); AIHW Hospital Statistics Reports

2. The Opportunity:

Save $15 billion in recurrent healthcare costs, or more than $100 billion over the next decade.

In response to the sustained increases in Australia's healthcare spending, many aspects of the healthcare system have been examined for opportunities to reduce cost and improve quality.

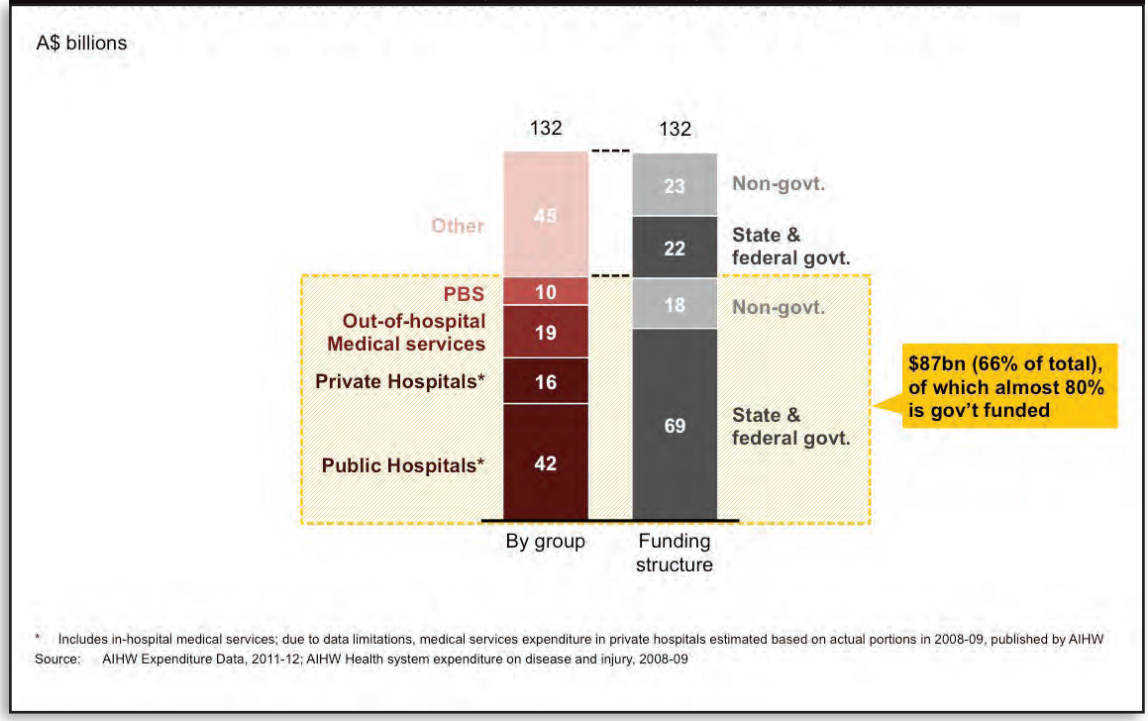
This report provides a comprehensive overview of these opportunities in the key cost categories of public and private hospitals, medical services provided both outside of and within hospitals, and pharmaceuticals provided under the PBS. Together, these items comprise two thirds of total healthcare costs. These areas also account for over 75% of all federal and state government expenditure on healthcare (Exhibit 4).

There are four key improvements, which fall under two themes:

- The right care: there is an opportunity to address high and increasing rates of hospitalisations, and primary care (GP) visits. Growth in demand for these services is not driving higher quality health outcomes.
- at an efficient cost: treatment costs per episode are high and increasing. This report focuses on costs in hospitals and for PBS pharmaceuticals, although there may be additional opportunities in specialist services, as well.

Addressing these two themes could realise up to $15 billion of potential savings in recurrent healthcare expenditure, equivalent to almost 11% of today's total healthcare costs. [2]

Exhibit 4: FY12 Recurrent healthcare expenditure and scope of the report



* Includes in-hospital medical services; due to data limitations, medical services expenditure in private hospitals estimated based on actual portions in 2008-09, published by AIHW
Source: AIHW Expenditure Data, 2011-12; AIHW Health system expenditure on disease and injury, 2008-09

[2] *The savings potential is approximately 17% of the cost components that are the focus of the reforms, which represent approximately 2/3 of all healthcare costs.*

This estimate is conservative for a number of reasons:

- It is based on two-thirds of recurrent healthcare expenditure - hospitals, medical services and PBS
- The benchmarks used to estimate variation reductions are high-level Australian aggregates, mostly at the state-level – much greater variations exist amongst health districts and individual providers
- International benchmarks have not been considered in the assessment of Australia's recurrent healthcare expenditure – further opportunities exist through improving Australia's overall performance towards world's best practice.

Exhibit 5 summarises the estimated savings. Ensuring appropriate hospital care, and that care is given at the appropriate cost, contribute $8.2 billion (or 14% reduction) and $4.9 billion (or 8.5%) respectively. The projected savings also include $1.8 billion (or 18% reduction) through improved sourcing of PBS pharmaceuticals, and a reinvestment of the savings from reducing inefficiencies in out-of-hospital medical services, such as reducing unwarranted GP visits, back into boosting primary care's focus on prevention and managing the overall health of patients.

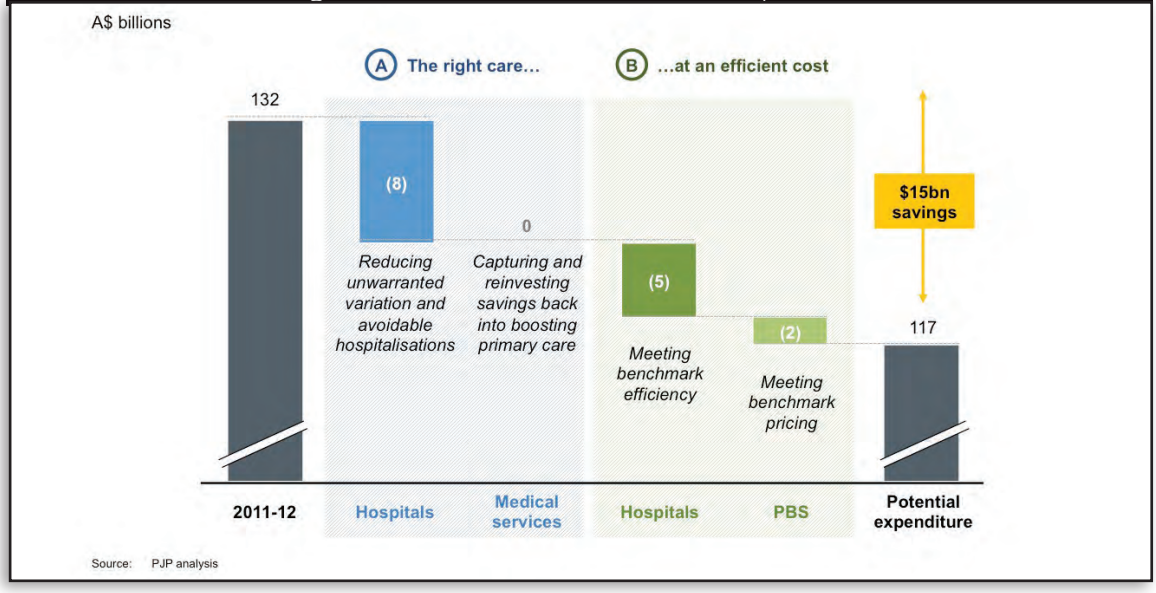
If these benefits were targeted now, but captured progressively over a ten year period, the cumulative benefit could be more than $100 billion over the decade. Around two-thirds of this saving would accrue to governments, the remainder to Australian healthcare consumers directly.

The size of this cumulative benefit is also conservative. The estimate is based on an expenditure projection that only includes changes in demographics and disease rates, and excludes potential increases in price and activity, which have been the largest drivers of cost growth in recent years.

Most of these cost benefits results from improving consistency and quality of health care, or eliminating unwarranted care (e.g. by 'disinvesting' in activities that are not clinically justifiable). Benefits are associated with absolute reductions in activity – for example, reducing unnecessary surgery or eliminating avoidable days in hospital caused by rework. They are also associated with transferring effort from one part of the health care system to another, to better align the service provided with the care needed. In the case of primary care, for example, savings from reducing unwarranted GP visits could be diverted back into primary care through prevention programmes and by putting GPs at the centre of a more integrated care model. Costs of purchased items (i.e. pharmaceuticals, prosthetics) would also be reduced, but, again, in ways that maintain or enhance healthcare quality.

Overall, capturing these cost savings would lead to a health system with uniformly high quality care.

Exhibit 5: Potential savings in Australian recurrent healthcare expenditure



2.1 Deliver the right care by addressing unnecessarily high and increasing hospitalisation rates

Although close to the average among OECD peers, Australia's hospitalisation rate is significantly higher than many countries, including the United States, Canada, the United Kingdom, New Zealand and Japan. These differences suggest large numbers of unnecessary hospital visits in the Australian health system.

Many Australian hospitalisations could be avoided by improved treatment outside hospital, and by improved decision-making regarding treatment in hospital.

These issues are not yet being successfully addressed.

Hospitalisation rates are outpacing demographic and disease burden changes. In FY12, Australians were hospitalised 20% more (per capita) than in FY02. Even after adjusting for ageing, the trend still represents an annual per capita increase of 1.9%. Given incidence and prevalence rates have declined for most diseases over the past decade, there is little doubt that opportunities for improvement in hospitalisation rates are growing.

Effectively addressing these opportunities could deliver benefits of $8.2 billion per annum, or 6.2% of total costs.

2.1.1. Improved treatment outside hospital could reduce hospital admissions by up to 7%

The remainder of this chapter will discuss each of the four major improvement opportunities in more detail, including the assumptions behind the financial estimates summarised above.

The National Health Performance Authority (NHPA) found that 7% of all Australian admissions in 2011-12, or around 635,000 admissions, were potentially avoidable (Exhibit 6) by pro-active management prior to admission. These admissions account for around 2.5 million hospital bed days annually. All major Australian states had similar performance with respect to avoidable admissions; Tasmania and the ACT had fewer avoidable admissions and the Northern Territory many more.

These admissions, which accounted for 2.5 million hospital bed days, could have been avoided by timely and effective provision of non-hospital or primary health care, including preventative strategies . The admissions are spread across 21 chronic, acute and vaccine-preventable conditions.

The initial target would be to reduce avoidable admissions by 50%, which would equate to eliminating 3.5% of total hospitalisations per annum. Clearly, the ultimate objective is to eliminate avoidable admissions.

3. National Health Performance Authority 2013, Healthy Communities: Selected potentially avoidable hospitalisations in 2011-12

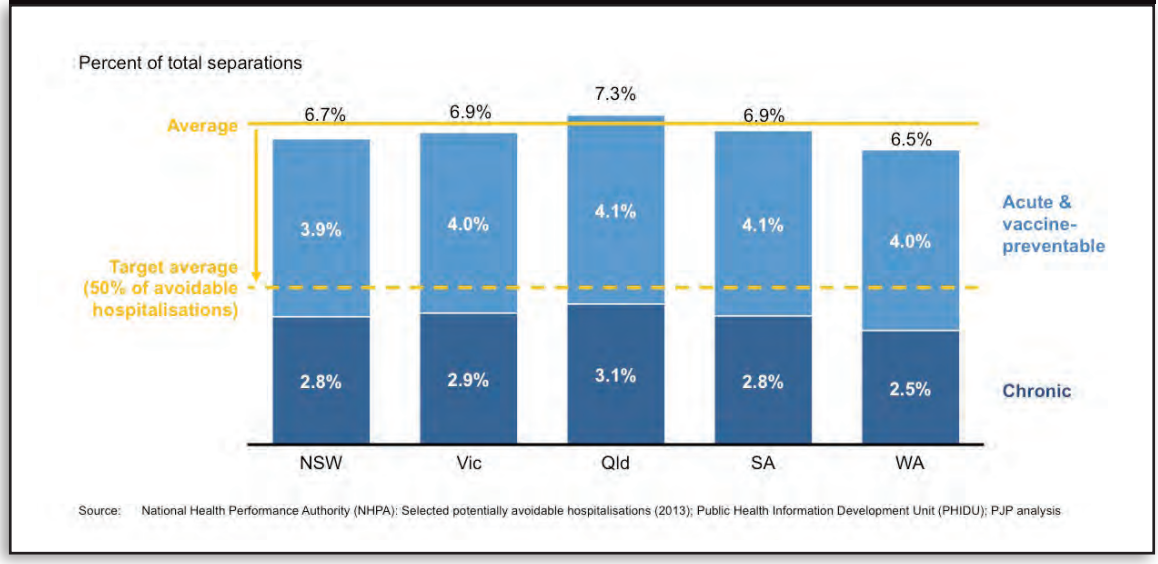
4. But excluding those resulting from diseases preventable through longer-term population-based health promotion strategies (e.g. alcohol-related conditions and most cases of lung cancer); or hospitalisations potentially avoidable through injury prevention strategies (e.g. road traffic accidents)

Chronic conditions should be the focus of efforts to reduce avoidable admissions. They represent most of the admissions identified above, and in total, around 70% of Australia's recurrent healthcare expenditure (Box 1). Avoidable admissions from chronic diseases could be targeted through a combination of patient education, pharmaceuticals (including, for example, programs that ensure medications are being taken as prescribed) and lifestyle choices. This approach to care is often provided by private health insurers that have the means and incentive to reduce cost across the cycle of care, while also improving quality.

In 2010-11, Australia had the third lowest rate of spending on preventative healthcare in the OECD.

Given the risks and high costs of hospital treatment, keeping people who can be treated in other ways out of hospital is the single best way to improve healthcare quality and reduce costs. The nature of the task is underscored by the fact that a very small number of patients consume a disproportionate share of hospital costs. Although exact figures are difficult to confirm, evidence in both Australia and overseas indicates that as few as 5-10% of patients consume as much as 50% of total hospital expenditure.

Exhibit 6: Avoidable Hospitalisations by state– public and private hospitals, FY12



Source: National Health Performance Authority (NHPA): Selected potentially avoidable hospitalisations (2013); Public Health Information Development Unit (PHIDU); PJP analysis

[5] *In the United States, analysis by NIHCM Foundation found 5% of 'civilian non-institutionalised population' to account for 47.5% of total healthcare spending in 2008. A similar trend can be observed in Australia.*

Box 1.

THE BURDEN OF CHRONIC DISEASE IN AUSTRALIA.

Chronic diseases represent the single largest drain on the Australian health care system; in 2000-01 they accounted for nearly 70% of total disease allocated expenditure[6].

Chronic diseases are defined as those illnesses which are persistent and long lasting in their effects (usually greater than three months), do not often resolve spontaneously and for which complete cures are rare. They are typically complex diseases, which place a significant burden on the population through contributions to both premature death and disability. In 2010, chronic diseases were the leading causes of death in Australia.

The major chronic conditions and illness in Australia are:

Condition	Prevalence (2007-08)	Change since 2001
Cancer	2.0%	+0.4%
Diabetes	2.9%	+1.1%
Asthma	10%	-2.0%
Long-term mental or behavioural conditions	11%	+1.0%
Arthritis	15%	+1.0%
Conditions of the circulatory system	16%	-1.0%

A small number of common risk factors contribute towards the prevalence of chronic disease in a population. While some of these are impossible to modify, such as biomedical and genetic factors, others, such as smoking, excess weight, physical inactivity and poor diet can be modified to reduce future incidence of the diseases.

[6] *Australian Institute of Health and Welfare, 2006, Chronic disease and associated risk factors in Australia*

2.1.2. Controlling variation in hospitalisations could reduce hospital admissions by over 10%

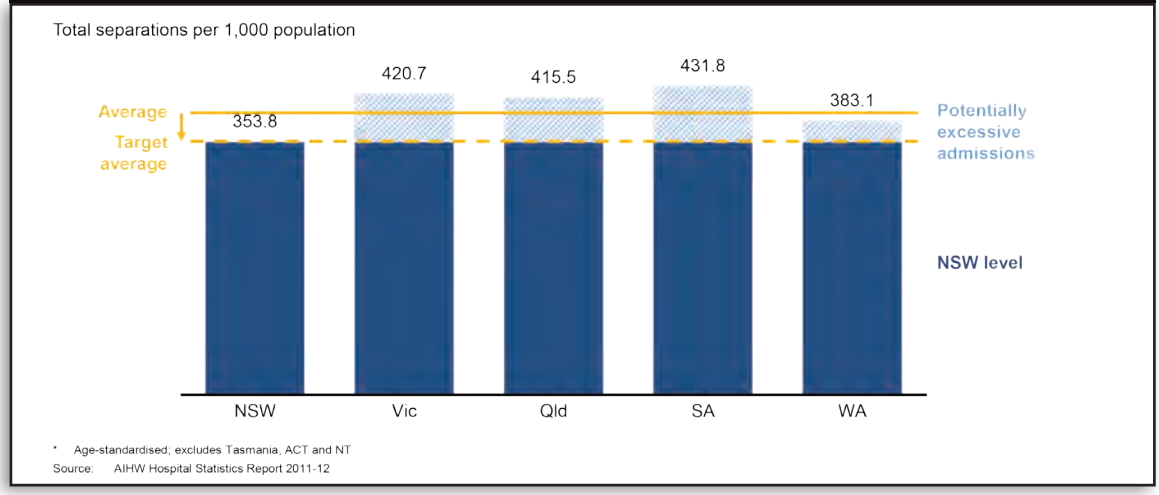
Substantial variations in hospitalisation rates exist among Australian states and territories (Exhibit 7). In particular, New South Wales has 14-18% fewer hospitalisations per capita than Victoria, Queensland and Western Australia, despite having more beds available per capita.

This indicates some states can provide health care with less reliance on hospitalisation, and with no differences in outcomes or quality.
As avoidable hospitalisations are consistent across these states, this is not a driver of differing hospitalisation rates. For these reasons, New South Wales serves as a sensible Australian benchmark for the rate of hospitalisations. If all other states and territories shifted their hospitalisation rate down to that of New South Wales', the total number of hospital admissions would reduce by over 10%.

Analysis at a Disease-Related Group (DRG) level shows even greater like-for-like variations in hospitalisation rates (Exhibit 8). Across the 20 most commonly treated DRGs, NSW has a 31% lower hospitalisation rate than South Australia. Using hip replacements and retinal procedures as examples, the lowest state has 55% and 68% fewer hospitalisations than the highest state, respectively[7].

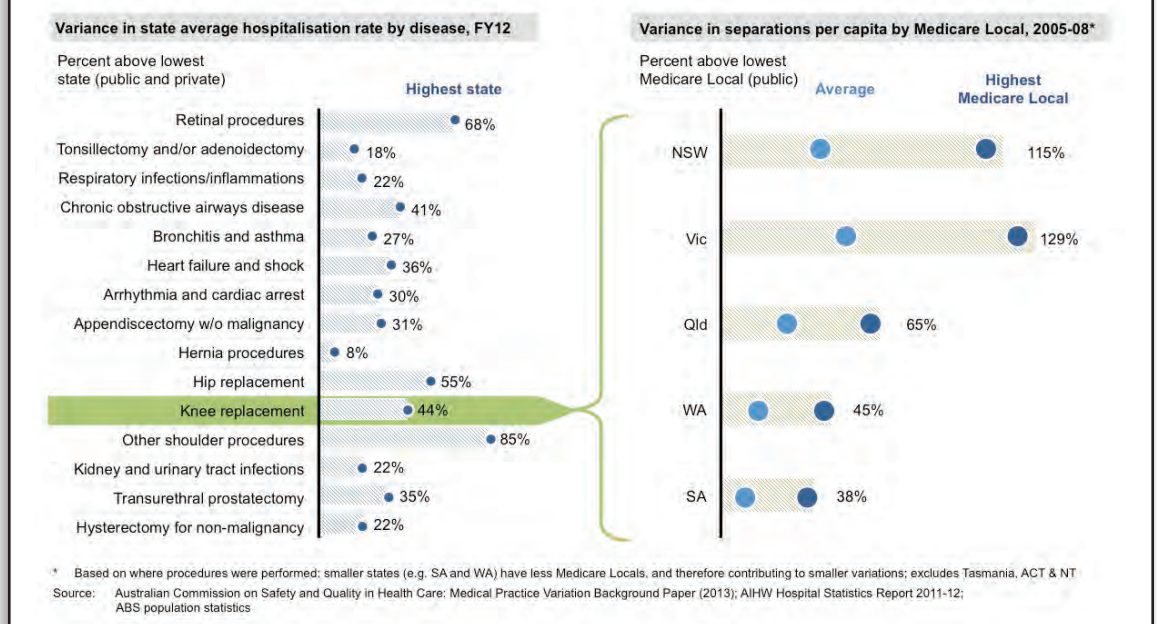
Variations also exist in the catchment areas of different Medicare Locals within the same state or territory. For example, despite notable variations in the incidence of hospitalisations for knee arthroscopies among the four most populated states (New South Wales, Victoria, Queensland and South Australia), the bottom quartile of Medicare Locals by hospital rate is represented by Medicare Locals in three out of the four states (except South Australia, which has no Medicare Local in the lowest quartile). The Medicare Local in NSW with the lowest incidence had less than half the knee replacements of the highest Medicare local, and similar trends can be observed in Victoria and Queensland. Even in South Australia, where knee arthroscopy rates are substantially higher, the lowest Medicare Local had rates about a third lower than the highest Medicare Local.

Exhibit 7: Hospitalisation rate by state – public and private hospitals, FY12



[7] *South Australia had 55% more hip replacements per capita than Queensland. Western Australia had 68% more retinal procedures than South Australia.*

Exhibit 8: Hospitalisation rate by disease, state and region



Analysis at a Disease-Related Group (DRG) level shows even greater like-for-like variations in hospitalisation rates (Exhibit 8). Across the 20 most commonly treated DRGs, NSW has a 31% lower hospitalisation rate than South Australia. Using hip replacements and retinal procedures as examples, the lowest state has 55% and 68% fewer hospitalisations than the highest state, respectively[8].

Overall, this data suggests widespread and unexplained differences in how decisions to hospitalise patients are made. It may be that more detailed evidence-based reviews of specific procedures, and when they are or are not warranted, could suggest that some jurisdictions are doing more of a particular procedure, not less. Even allowing for this, given that we have only considered state hospitalisation averages, rather than the lowest incidence of specific procedures, we believe the estimates of potential savings will prove to be conservative.

Increased levels of admissions for low-value or inappropriate treatments contribute to these differences. A recent study found over 150 non-pharmaceutical, MBS-listed health care services that were flagged as potentially unsafe, ineffective or otherwise inappropriately applied.

Some of the most notable practices from the study include arthroscopic surgery for knee osteoarthritis, radiotherapy for patients with metastatic spinal cord disease and surgery for obstructive sleep apnoea. Importantly, identifying and reducing the absolute number of inappropriate treatments across the hospital system would no doubt open up an additional opportunity to realise savings. This has not been fully factored into our estimate of the opportunity.

[8] *A. Elshaug, A. Watt, L. Mundy, C. Willis, Over 150 potentially low-value health care practices: an Australian study, MJA 2012; 197: 556-560*

2.1.3. Ensuring patients receive appropriate episodes of hospital care, and only when needed, could save $8.2 billion per annum

Reducing unwarranted hospitalisations could deliver benefits of $8.2 billion per annum, or 6.2% of total healthcare system costs. These savings are unambiguously associated with superior health care: ensuring patients are using hospital services appropriately, and only when needed.

Halving the number of avoidable hospitalisations - a reduction from 7% of total hospitalisations down to 3.5% - could save $2 billion per annum. Over time, of course, the goal should be to reduce this number to zero.

Reducing unwarranted variability in hospitalisation rates could save $6.1 billion per annum[9], assuming hospitalisation rates are brought in line with those of New South Wales. This would deliver a 10% reduction in total hospitalisations.

As described earlier, these reductions reflect the results of addressing state-by-state variations, and do not include additional benefits from more granular benchmarking (for example, at a Medicare Local or disease/condition level).

There is no 'double-counting' between these potential savings and those due to reducing avoidable admissions. Given that the rate of avoidable hospitalisations is relatively constant across major states, it is reasonable to assume that avoidable hospitalisations are not the driver of variability in overall hospitalisation rates.

[9] *Excludes benefits from Tasmania, Australian Capital Territory, and Northern Territory due to insufficient data*

2.2. Deliver the right care by focusing primary care towards prevention and managing the health of patients

Effectiveness of primary care is the key to overall healthcare cost and quality. Of the $19 billion spent on medical services outside hospitals in FY12, about a third was spent on primary care through general practitioners (GPs). The effectiveness of the primary care system has direct flow-on effects to the broader healthcare system, including the level of care provided by specialists (the majority of the remaining costs in medical services), the prescription of pharmaceuticals and diagnostic tests, and the rate of hospitalisations.

An appropriately resourced and incentivised primary care system plays a critical role in ensuring patients receive the right care, including keeping them out of hospital where appropriate. Australia's healthcare system will benefit from a greater focus on prevention through primary care and placing GPs at the centre of managing the health of their patients. In FY11, Australia had the third lowest rate of spending on preventative healthcare amongst OECD countries, with just 1.7% of total healthcare spending on prevention.

While placing greater emphasis on these areas will require investment, inefficiencies in other parts of the primary care system suggest an opportunity to fund these improvements by capturing and reinvesting the savings back into the system.

For example, in the context of the current broad debate on how best to manage unwarranted primary care visits, there is evidence that past falls in GP bulk-billing, equivalent to co-payment increases, have significantly reduced primary care demand. In addition, historic patterns of admissions show these reductions have placed little additional burden on other areas of the system, including emergency wards. Any reduction in GP visitation rates could also have flow-on savings to reduced diagnostic testing.

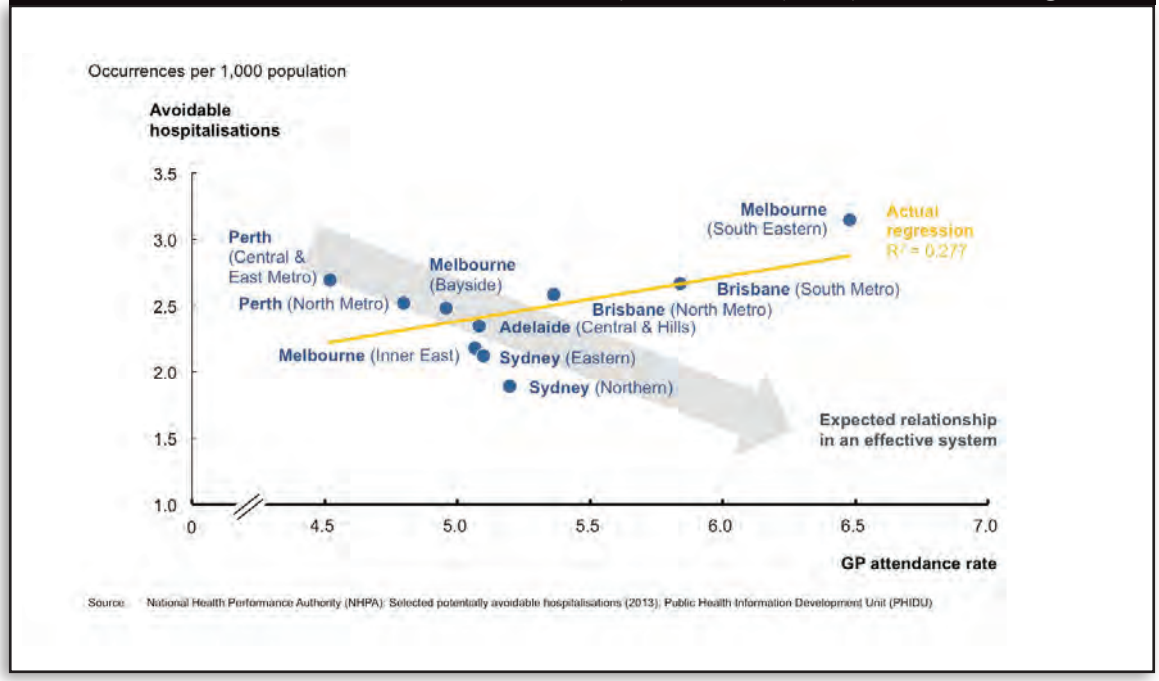
Savings should be reinvested in enhanced preventative and integrated care models, particularly for those with severe chronic and acute conditions. Encouraging more consistent health practices amongst general practitioners and reducing unwarranted visits could create a benefit in the order of $1 billion per annum, or about half of Australia's current total investment in disease prevention. Reinvesting savings of this magnitude would no doubt make a meaningful impact on overall healthcare cost and quality.

2.2.1. Evidence of unwarranted GP visits and variability in health practices.

Among other opportunities within Australia's $19 billion recurrent spending on out-of-hospital medical services, there is potential to reduce unwarranted GP visits, while improving the overall effectiveness of primary care. There is evidence that a significant number of GP visits contribute little to health outcomes.

- Australia demonstrates a relatively high use of primary and hospital care, when compared to OECD peers[10], including the United Kingdom, New Zealand and the United States. Australia's rate of doctor consultations is as high as the Netherlands, which has a hospitalisation rate that is 25% lower than Australia's.
- Currently, increased GP attendance is not linked to lower avoidable hospitalisations (Exhibit 9). Australian metropolitan regions with higher relative GP attendance rates have shown no correlation to lower avoidable hospitalisations, which should be addressable through primary care treatment.
- Over the past three decades, fluctuations in GP attendance rates have been very closely correlated with changes in the proportion of GPs charging the MBS fee, highlighting the fact that GP attendance rates are sensitive to price (Exhibit 10). In recent years (FY04-FY12), a 0.62 increase in the number of GP services per capita (or an increase of 19% in visitations) saw a negligible proportional decline in semi/non-urgent emergency department visitations. This suggests these 'extra' GP services were of little additional benefit to health outcomes.

Exhibit 9: GP attendance rate versus avoidable hospitalisations by comparable metro regions



[10] OCED Health Statistics 2013 – Frequently Requested Data (November 2013)

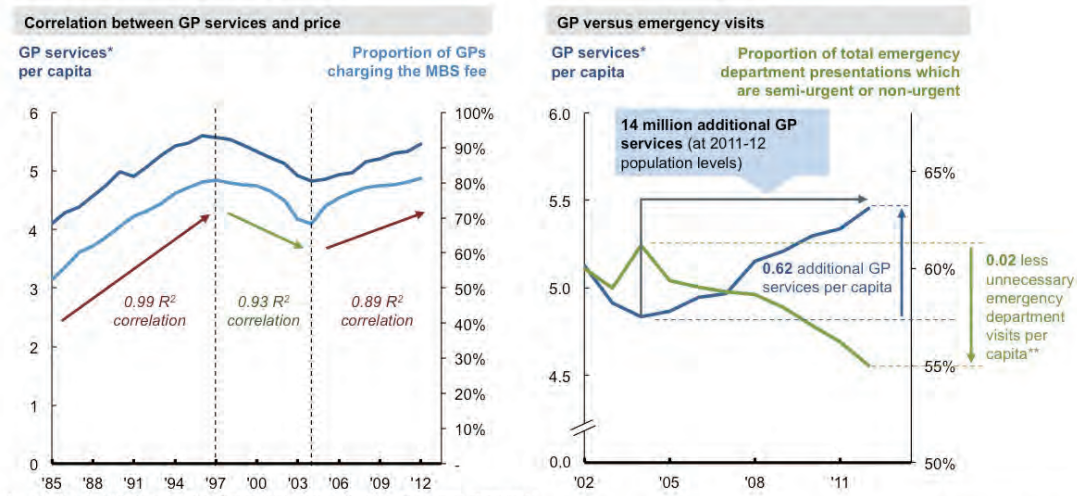
2.2.2. Reinvesting savings from reducing medical service inefficiencies to boosting primary care's focus on prevention and patient health management.

To illustrate the potential scale of savings opportunities within out-of-hospital medical services, reducing GP attendance rates to FY04 levels, the last historic low in co-payments, would alone deliver a benefit of over $1 billion per annum, a reduction of almost 20%. This benefit does not include further government savings - additional funds for reinvestment - from introducing a GP co-payment to induce a reduction in attendance rates.

As noted earlier, capturing savings in the order of $1 billion per annum would allow a material reinvestment in primary care as the amount would be equivalent to around half of Australia's prevention-related spending across the entire healthcare system.

In practice, the potential savings available for reinvestment could be much greater. Non-GP medical services outside hospitals, such as specialist consultations and pathology testing, represent the remaining two thirds of the $19 billion spent on medical services in FY12. If the same percentage reduction from GP attendance rates were applied to these services, over $2 billion of additional savings would be realised. While capturing gains in this area could be more difficult, it is certainly true that enhanced use of agreed clinical pathways could reduce the incidence of unnecessary referrals for diagnostic and specialist services.

Exhibit 10: GP attendance rate versus avoidable hospitalisations by comparable metro regions



* Includes GP, VRGP, enhanced primary care and other. Excludes practice nurse attendances.
** Based on the difference between actual visits per capita in FY12 and the implied visits per capita if the share of non-urgent/ semi-urgent presentations was maintained at FY04 levels; actual total visits per capita over the past decade have been steadily increasing, largely driven by increases in emergency, urgent and semi-urgent presentations (based on triage category)

Source: Department of Health and Ageing; Medicare statistics; AIHW Hospital Statistics Report

2.3. Deliver care at an efficient cost by addressing high and increasing costs per hospitalisation.

Large differences in hospitalisation costs are present throughout the system. In addition, there is a general trend towards increasing costs per hospitalisation in real terms, by 2.4% per annum from FY02 to FY12.

Higher hospital costs are not matched by higher quality care. A study by the Grattan Institute in 2014[11], found no relationship between adverse events (the only measure of quality currently recorded in all hospitals and for all patients) and differences in costs per hospitalisation among hospitals.

In addition, observed cost variations are not due to scale effects. For example, a study by the New South Wales Auditor-General in 2013[12] found some of the largest local health networks to be amongst the highest cost providers for certain surgical procedures, such as knee and hip replacements.

There is potential, therefore, for many hospitals to operate more efficiently without impacting patient outcomes. Addressing current inefficiencies could deliver $4.9 billion per annum in savings.

[11] *Duckett, S.J., Breadon, P., Weidmann, B. and Nicola, I., 2014, Controlling costly care: a billion-dollar hospital opportunity, Grattan Institute, Melbourne*

[12] *New South Wales Auditor-General, 2013, Managing operating theatre efficiency for elective surgery, Audit Office of New South Wales*

2.3.1. Cost in Australian hospitals vary widely.

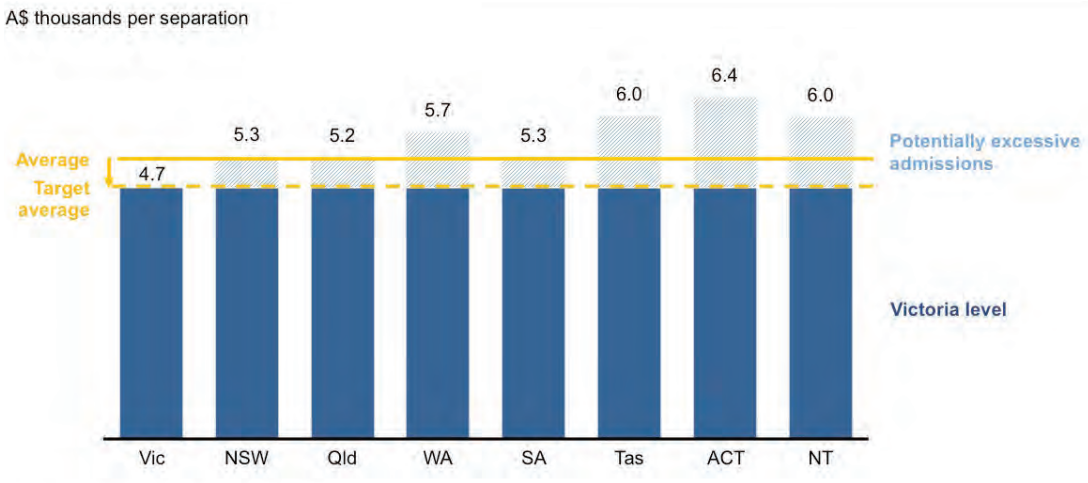
Cost variations occur throughout the Australian hospital system - between states, across different conditions, between local health districts, and within individual hospitals. At a state level, case-mix adjusted hospitalisation costs in Victorian public and private hospitals are 11% lower than their counterparts in New South Wales (Exhibit 11).

However, state level figures hide other sources of variations in cost, and thus other potential sources of savings. For example:

- Variations within states are even larger. (Exhibit 12). For example, the lowest local hospital network has 18% (or ~$850/separation) lower hospitalisation costs than the highest local hospital network. Among providers in New South Wales, variations increase threefold.
- Variations in costs to treat specific conditions appear larger again (Exhibit 13). For example, a New South Wales Auditor-General's Report in 2013 found some health districts performed surgical hospitalisations at less than half the cost of the highest-cost health district for the most common conditions. A recent Grattan Institute study also found examples of large variations amongst hospitals. For example, they found that the costs for laparoscopic cholecystectomies at some hospitals were nearly three times the cost measured at other facilities.

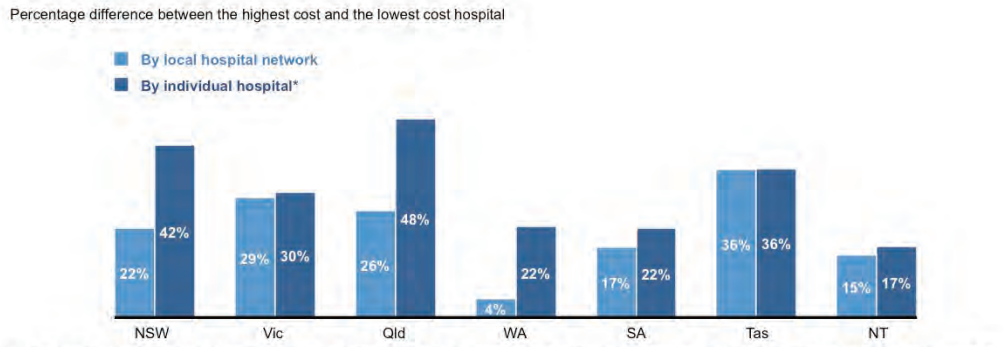
Thus, setting Victoria as a benchmark for casemix-adjusted hospitalisation costs is conservative.

Exhibit 11: Variation in costs for hospitalisations – public and private hospitals, FY12



* Age-standardised; excludes Tasmania, ACT and NT
Source: AIHW Hospital Statistics Report 2011-12

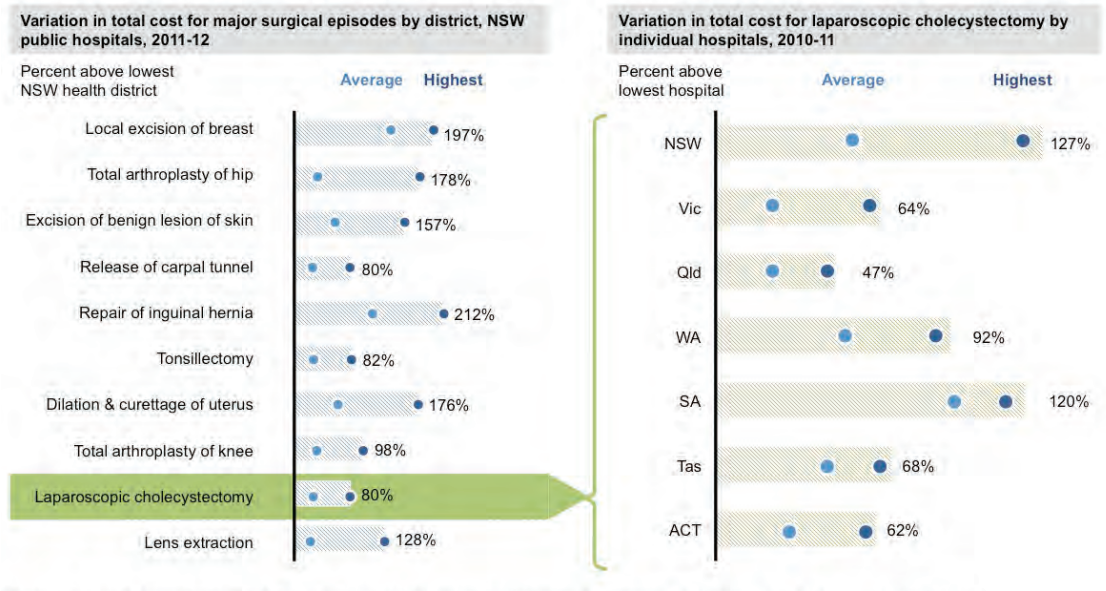
Exhibit 12: Variations in hospital costs amongst public local hospital networks and hospitals, FY11



* The estimated range is conservative; greater variations are expected to exist as the estimates are calculated based on applying the differential between the highest and lowest hospital in each state to a base cost that is equal to the respective lowest cost local hospital network; absolute costs of individual hospitals are unknown, only differentials are available

Source: Grattan Institute: Controlling costly care: a billion-dollar hospital opportunity (2014); PJP analysis

Exhibit 13: Variation in costs for like-for-like hospitalisations among public providers



Source: New South Wales Auditor-General's Report: Managing operating theatre efficiency for elective surgery (2013); Grattan Institute: Controlling costly care: a billion-dollar hospital opportunity (2014)

2.3.2. No single cause suggests potential savings in every area

There is scope to remove variation in each of the key costs of a hospital admission: medical services, accommodation, prosthesis, and theatre charges. The contribution of each of these costs and charges in private hospitals, for example, is shown in Box 2..[13]

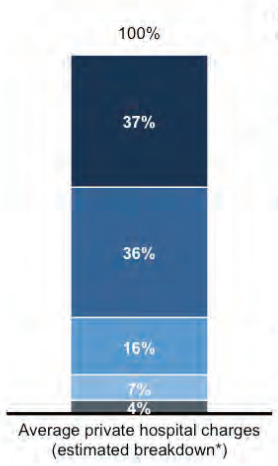
Medical Charges

In private hospitals, doctors' charges are the main driver of variation in medical charges. For example, for hip replacement procedures, the average charge across the lowest-quartile of doctors' charges is 50% lower than the highest-quartile.

This variation occurs in all procedures (Exhibit 14). Without a clear linkage between cost and quality generally, it is difficult to conclude superior outcomes are driving these differences[14].

Variations in medical costs and charges should be lower in public hospitals with most medical staff on salary. However, available data suggests that large variations can still exist between states' public hospital systems. For example, average salaries of medical officers in Victoria and Western Australia were 13% and 45% higher than their counterparts in New South Wales, respectively.

Box 2: Key components and drivers of charges per hospitalisation – private hospitals



Charge	Description	Key drivers
Accommodation	Hospital charge per night	Daily rate, length of stay
Medical	Charges for procedures and treatments performed by doctors, usually aligned to a Medicare schedule item	Price charged by doctor, number of procedures
Prostheses	Charges for prostheses used during a procedure	Unit price, number of items
Theatre	Charges associated with operating room time	Rate per minute, length of procedure
Other		

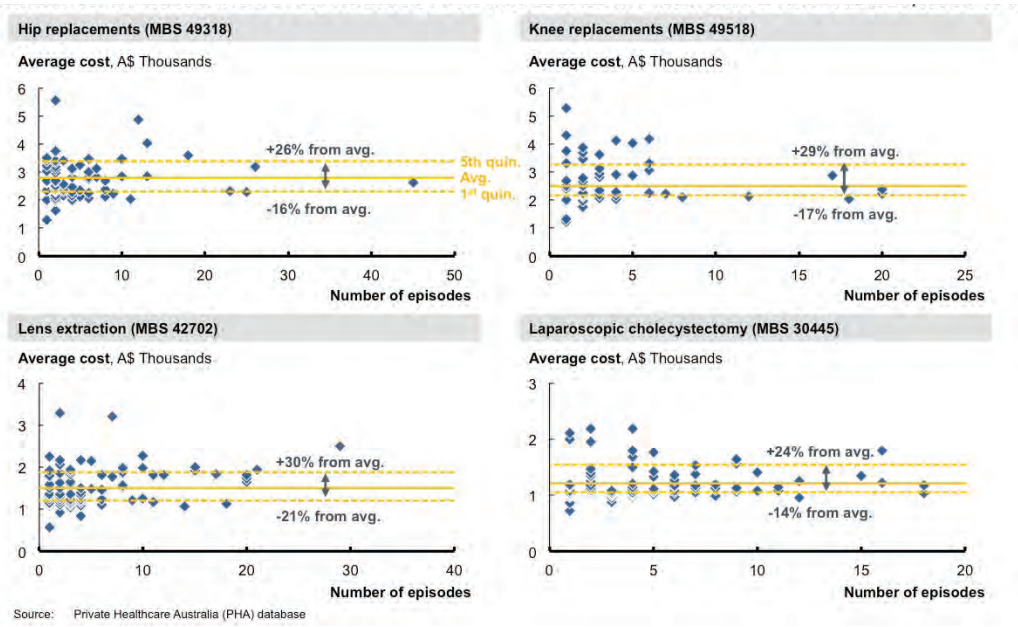
* Estimated breakdown based on share of cost categories to total private hospital expenditure after excluding bundled costs

Source: Department of Health and Ageing – Hospital Casemix Protocol data set

[13] *Much of the data in this section relates to costs for private hospital admissions. This is because, at present, it is not possible to access even completely anonymised data on public hospital costs in a timely way, and without incurring unmanageable burdens on the way in which that data can be used and then published. There is no reason to suspect, however, that there are not opportunities to improve costs in all hospitals. A review by the Productivity Commission in 2009 would support the view that the potential gains in the public sector are at least as large as those in the private sector.*

[14] *This statement cannot, however, be conclusively proven using available data. There is little or no data on doctor or hospital outcomes.*

Exhibit 14: Variation in doctor charges for select procedures in private hospitals: males, ages 45-54



Source: Private Healthcare Australia (PHA) database

Unwarranted and duplicative procedures within a single hospital admission also contribute to variations in medical costs. For example, a study by the Commonwealth Fund in 2008 found Australia conducts more duplicative medical tests than many countries, including Canada, New Zealand, the United Kingdom and the Netherlands. The study found 12% of patients surveyed considered the medical tests ordered by their doctors were unnecessary because the test had been done before (in the last two years).

Accommodation

Although there has been an overall decline in bed days per admission over recent years, wide variations in bed days for like-for-like hospitalisations still exist amongst hospitals.

This variation in clinical practice results in some patients being in hospital longer than necessary.

A 2013 study by NHPA reviewed hospitalisations associated with 16 conditions, including delivery, cellulitis, and chronic obstructive pulmonary diseases (COPD). The report found large differences in bed days for each condition, including for large hospitals in comparable areas - in other words, hospitals with similar volumes of activity (Exhibit 15). As an example, for chronic obstructive pulmonary disease, average bed days was 80% longer at some hospitals in major metropolitan areas than others (ranging from 3.5 days to 6.3 days).

[15] *The Commonwealth Fund (2005 and 2008) International Health Policy Survey of Sicker Adults*

[16] *There will always be some appropriate variation in bed days for any disease or condition, as different patients respond to treatment differently, and every facility/procedure has 'outliers'.*

[17] *National Health Performance Authority 2013, Hospital Performance: Length of stay in public hospitals in 2011-12*

Recently, a number of hospitals have begun to more pro-actively manage the discharge process in an effort to ensure patients do not spend unnecessary days in hospital due to administrative delays, while still being responsive to individual patient circumstances.

Prostheses

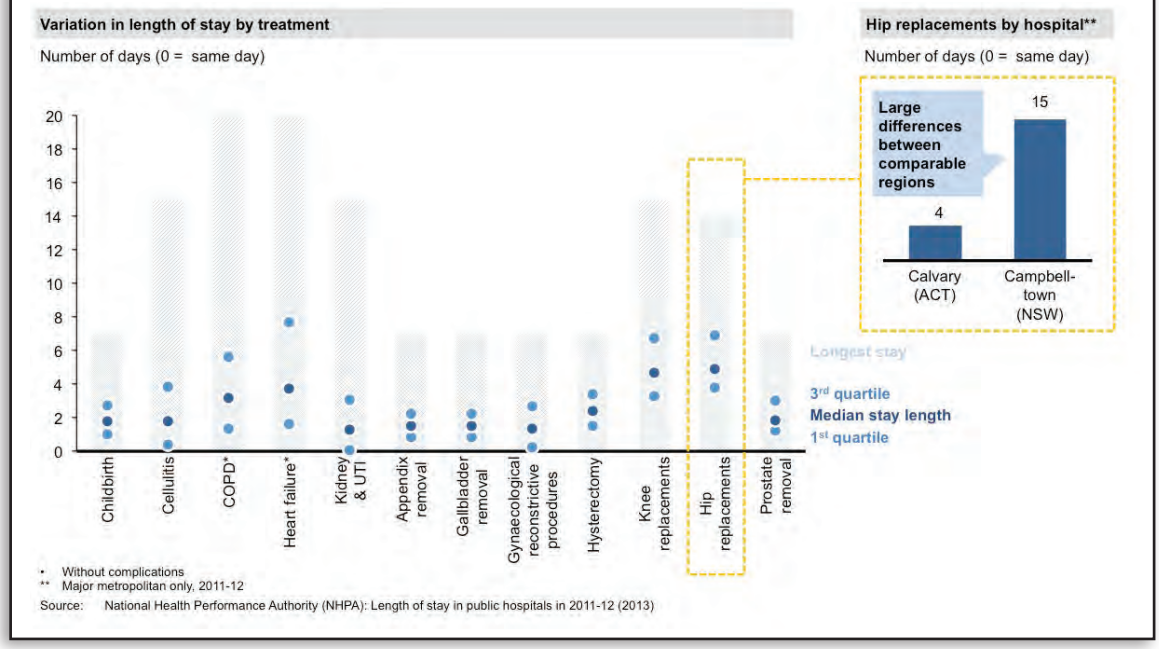
For many hospitalisations, prostheses are a large cost item. In the case of hip replacements for example, prosthetic costs represent about 50% of the total procedure.

Average prices for prostheses are much higher in Australia than elsewhere. For example, Australian health insurers estimate that they paid 56% more for like-for-like cardiac and hip prostheses than their French counterparts in FY12. In addition, Australia allows a very wide range of devices to be purchased and used, resulting not only in higher costs, but in more variable surgical outcomes.

Even within Australia, many hospitals pay more for prostheses than necessary. A 2010 IPART[18] case study of five NSW public hospitals found the least effective purchaser paid 27% more for entire hip replacement prostheses packages than the least effective (Exhibit 16). 'Best of breed' purchasing of each component (i.e. sourcing each component at the rate achieved by the best performing hospital) would have result in a total saving of 34%.

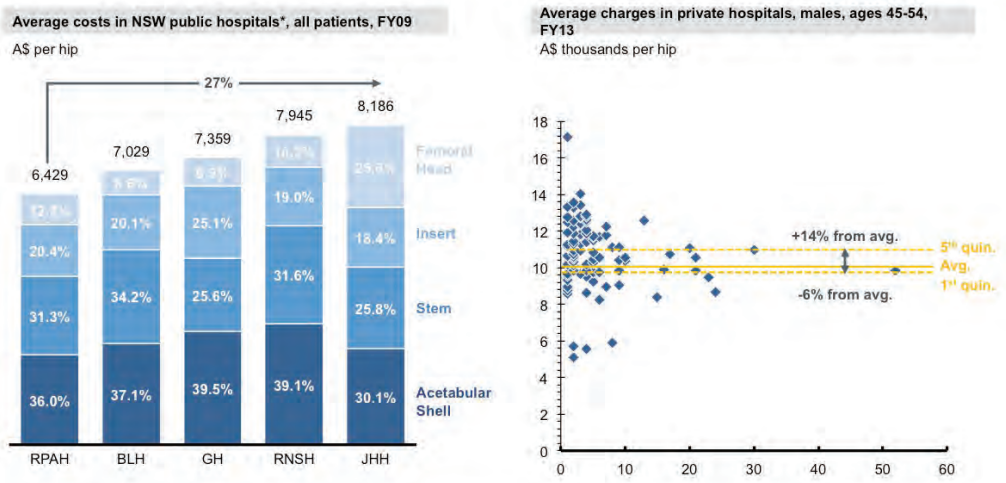
The IPART study highlights the value of organised purchasing or broader supply agreements for prostheses, particularly for smaller hospitals, which lack bargaining power. It also highlights the benefit of appropriate incentives. In the private sector, doctors select and hospitals purchase prosthetic devices and then charge them to patients' insurers. This approach provides few incentives to reduce costs or to adhere to consistent best practice in choice of devices.

Exhibit 15: Variation in bed days for certain treatments – public hospitals, FY12



[18] *Case study 1 – Hip joint replacement: Hospital costs and outcomes study for NSW Health, IPART, July 2010*

Exhibit 16: Variation in prosthesis costs/charges for hip replacements – public and private hospitals



* Royal Prince Alfred Hospital (RPAH); Bankstown-Lidcombe Hospital (BLH); Gosford Hospital (GH); Royal North Shore Hospital (RNSH); John Hunter Hospital (JHH)
Source: IPART Hip joint replacement case study (2010); Private Healthcare Australia (PHA) database

Theatre

Many hospitals could improve their management of operating theatre costs and capacity. Variation in theatre utilisation, for example, is an important driver of cost variation. A 2013 report by the NSW Auditor-General found key performance targets for theatres are not being met in public hospitals, with significant variations in performance. For example, in terms of theatre utilisation, the lowest performing NSW local health district has an utilisation rate that is 26% lower than its best performing counterpart (Exhibit 17). Importantly, the underutilisation has not been driven by insufficient demand, given the well-known presence of lengthy waiting lists across the public system. The degree of variance in utilisation rates is even more pronounced among individual hospitals. Poor theatre efficiency is particularly damaging in public hospitals with salaried, rather than fee for-service, medical staff.

2.3.3. Ensuring each episode of hospital care is given to patients at the highest quality and lowest cost could save $4.9 billion per annum.

Bringing national costs per case-mix-adjusted hospitalisation down to benchmark levels, those of Victoria, would decrease average hospital costs by 9.8%. Net of previously identified savings from lower hospitalisation volumes, this would represent an additional saving of $4.9 billion, or 3.7% of total healthcare recurrent costs.

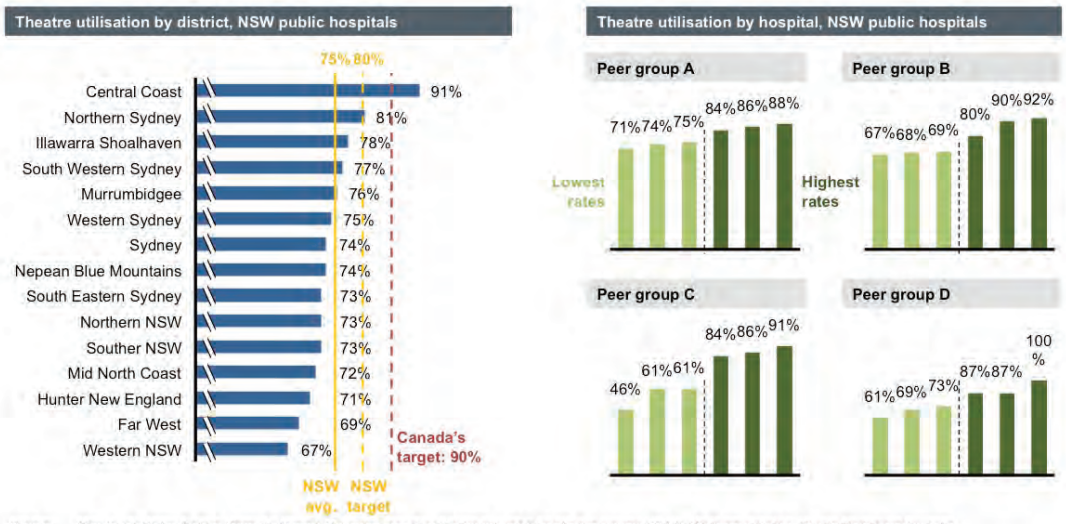
Comparing costs at more granular levels within the health care system suggests further benefits could be achieved. As outlined earlier, variations among local health districts within each state are large, and further variations exist amongst hospitals, particularly for individual disease related groups. Thus, moving all hospitals to costs equivalent to the single lowest cost hospital would entail much larger improvements than state-level benchmarking.

However, estimating savings of this type is difficult without access to improved data on hospital performance.

This estimated saving is also likely lower than that suggested by assuming 'best of breed' performance in each of the four key drivers of hospital cost:

- For medical charges, taking the average of four common disease-related groups (hip replacements, knee replacements, lens procedures and laparoscopic cholecystectomies) as a reference point, moving all doctor charges in private hospitals down to the bottom quintile would reduce total medical charges by 18%. Realising this will require governments and consumers to drive greater transparency in quality and cost of individual doctors. This will also help prevent unwarranted increases in average medical charges in the future.

Exhibit 17: Theatre utilisation in NSW public hospitals, FY12



Source: New South Wales Auditor-General's Report: Managing operating theatre efficiency for elective surgery (2013); Medicare statistics; Private Healthcare Australia (PHA) database

- For accommodation charges, taking the average public and private hospital trends of 16 common conditions (including childbirth, heart failure, and joint replacements) as a reference point, moving the top four quintiles of number of bed days down to the bottom quintile would reduce total accommodation costs by 33%. To the extent hospitals are funded on a DRG basis, some may already be incentivised to minimise unwarranted bed days.
- For prosthesis charges, taking IPART's study on hip replacements as a reference point, sourcing all prostheses components at the bottom quintile of costs would reduce total prostheses charges by 11%. Given this example is based on only a sample of five public hospitals in NSW, the potential opportunity is likely to be significantly greater. For example, private health insurers in Australia paid over 400% more for a common hip prosthesis item compared to their French counterparts.
- For theatre charges, taking surgical efficiency measures in New South Wales' public hospitals as a reference point, moving all theatre utilisation rates to a NSW health target of 80% would allow over 6% more surgeries to be performed at little or no incremental cost. If the rates were improved further to 91% (observed in the NSW's Central Coast) the opportunity would be to increase surgeries by 20%. This is not an unreasonable goal given Canada has a 90% minimum theatre utilisation target.

Although this savings estimate is much larger than Grattan Institute's (2014) $1 billion estimate for public hospital savings, the two are not necessarily inconsistent. Grattan's analysis only covered $26 billion of the $58 billion in total public and private hospital expenditure (FY12). In addition, to be conservative, Grattan's estimate was derived by applying a conservative buffer of almost $5 billion (from a total of $6 billion in 'unexplained variation' in hospital costs), taking into account a number of uncertainties such as data quality. Finally, the research did not take into account the appropriateness of the absolute rate of hospitalisations - as outlined earlier, unwarranted hospitalisations based on avoidable hospitals alone is significant, accounting for about 7% of total hospitalisations in Australia.

2.4. Deliver care at an efficient cost by addressing the high cost of pharmaceuticals

In 2011-12, $19 billion was spent on medications in Australia, with just over half of that total ($10 billion) being funded through the Pharmaceuticals Benefit Scheme (PBS). Expenditure per capita on PBS grew strongly at over 7% per annum in real terms between 1999 and 2004, but has since slowed dramatically to just 0.7% per annum.

Although lower growth than elsewhere in the healthcare system, there is still ample opportunity to reduce our absolute expenditure on the PBS, particularly by negotiating better purchase prices and opting for more generic substitutes.

In 2013, the Grattan Institute[19] estimated this opportunity to be worth at least $1.8 billion per annum based on FY12 expenditure. The study did not cover volume-related opportunities, which could represent further savings.

[19] *Duckett, S.J. with Breadon, P., Ginnivan, L. and Venkataraman, P., 2013, Australia's bad drug deal: high pharmaceutical prices, Grattan Institute, Melbourne*

2.4.1. Australia is over-paying for PBS pharmaceuticals by at least 18%

The Grattan Institute found Australia to be paying significantly more for PBS drugs than other countries. Purchase prices also varied significant among regions and provider groups.

For the top 10 drugs on the PBS by total cost, Australia paid on average over 12 times the price that New Zealand paid in FY12. For individual drugs, the premium paid was even greater; for one particular drug, Olanzapine, the PBS price was 64 times higher than in Western Australian public hospitals (Exhibit 18).

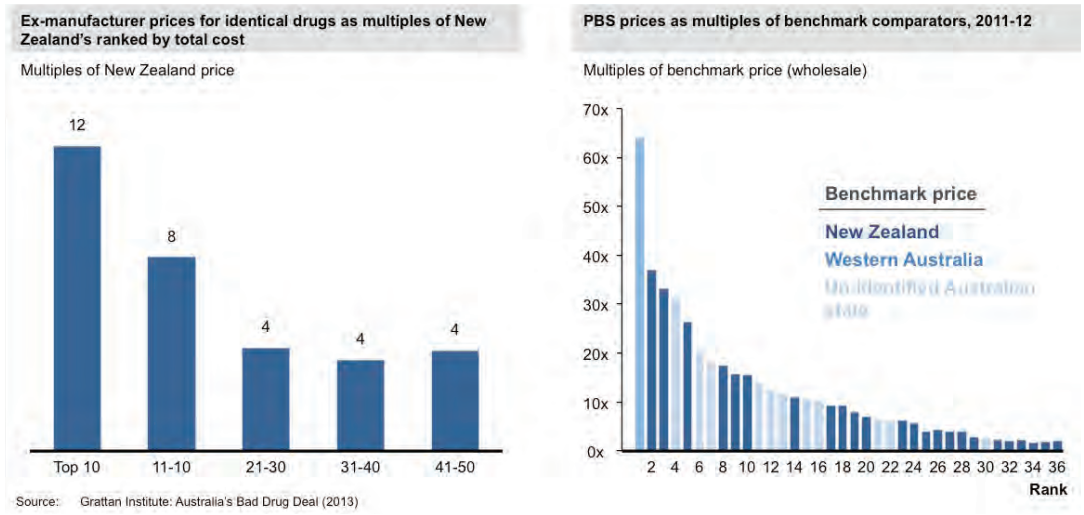
Grattan's explanation for Australia's poor drug purchasing performance was twofold:

1. For many drugs, Australia is less effective at negotiating prices with manufacturers of pharmaceuticals
2. Australia has limited use of generic brands as alternatives to the ex-patent brands.

For example, Australia's PBS still purchases the out-of-patent Atorvastatin, for $51.59 for a box of 30. By purchasing the generic equivalent, Zarator, New Zealand pays $5.80 for a box of 90.

The Grattan Institute report suggests that New Zealand has created better incentives regarding pharmaceutical purchasing. New Zealand places a cap on the pharmaceuticals budget, and has established an independent panel of experts who negotiate prices with drug companies on behalf of the government. The budgetary measures create the incentive for the independent panel to find cheaper alternative generic drugs wherever possible. This approach, for example, could be adopted by the Australian Government as a means to lower pharmaceutical costs without compromising quality.

Exhibit 18: Indicators of over-pricing and price variations among regions and provider groups



Source: Grattan Institute: Australia's Bad Drug Deal (2013)

2.4.2. Ensuring that PBS pharmaceuticals are sourced at the lowest prices could save $1.8 billion per annum

The Grattan Institute estimates PBS costs could fall by approximately $1.8 billion, or 18%. This reduction would represent a 1.4% reduction of total healthcare costs.

The study calculated these gains by comparing prices for the top 73 medications on the PBS with what either New Zealand or Australian state public hospitals paid for identical or substitute drugs. They found that Australia could save $1.3 billion through implementing best pricing for identical drugs and a further $570 million for drugs where no identical match existed, but a substitute was available.

The report made clear these estimates are conservative as:

- Savings have only been applied to 73 pharmaceuticals, accounting for less than half of PBS expenditure
- Prices have been benchmarked against three purchases - lower prices would be identified if more countries and states were included in the analysis
- PBS pack sizes, mark-ups and dispensing fees are assumed to be unchanged, even though changes to these elements would yield further savings, as evident in New Zealand
- Conservative assumptions have been used in the substitution of different doses and drugs.

2.5. Realising this opportunity gradually could deliver more than $100 billion over the next decade

Detailed projections by the Australian Institute of Health and Welfare (AIHW) suggest that Australia's recurrent healthcare expenditure is expected to increase by 4% per annum in real terms, reaching $205 billion in FY24 (based on FY12 dollars). This means that the potential annual savings identified in this report will increase in dollar value over time.

Capturing the opportunities described above progressively over ten years (starting from FY15) would deliver $103 billion in savings over that decade (Exhibit 19). Given the inevitably complex and time consuming nature of health reform, this benefit is calculated based on assuming a gradual increase in Australia's ability to capture recurrent savings, with 10% of the cost benefits achieved in FY15, growing until 100% are captured in FY24. The continued growth of healthcare expenditure will also see higher annual savings potential in FY24 - almost $20 billion – compared to $15 billion in FY12 if all the reforms were implemented immediately on the current cost base.

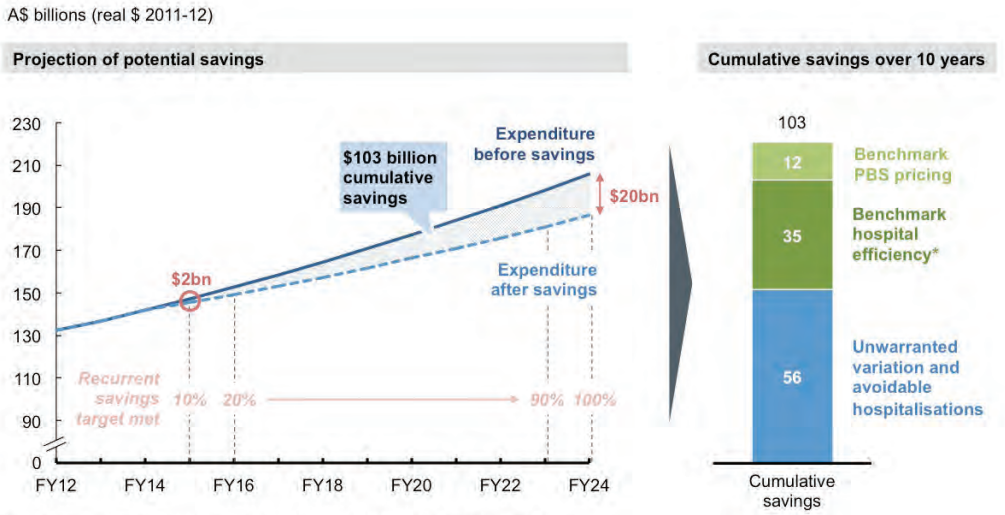
Again, the identified opportunities contribute to the $103 billion of cumulative benefits targeted over the next ten years (Exhibit 21): $56 billion by ensuring appropriate hospital care; $35 billion from ensuring that care is given at the appropriate cost; and $12 billion through improved sourcing of PBS pharmaceuticals. This net benefit is after the reinvestment of potential savings captured from reducing inefficiencies within out-of-hospital medical services, which could be worth more than $7 billion.

There are two key reasons to suggest that this estimate is conservative (Exhibit 20):

- The AIHW's projection implies a significantly lower growth rate than history would suggest – 5.5% p.a. historic growth versus 4% p.a. forecast growth. If expenditure continued to grow at its historic trajectory, recurrent healthcare expenditure in FY24 would be almost $250 billion, increasing the size of the prize from reform.

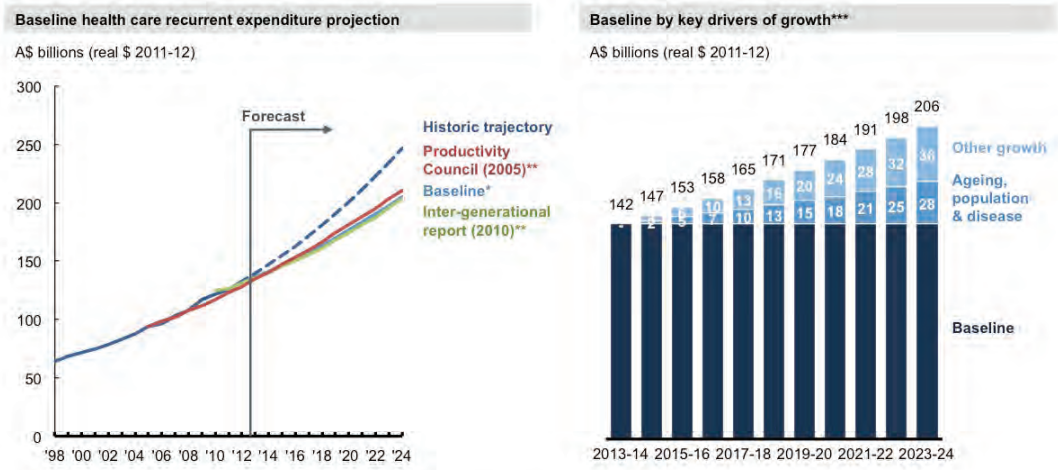
- Potential savings are assumed to apply only to the expenditure growth related to changes in population, age distribution and disease rates. These drivers represent only around half of the annual growth forecasted by AIHW. The remaining growth is driven by ongoing increases in service intensity, including from new services. In practice, implementing the reforms needed to capturing the identified savings would also constrain this type of growth as well.

Exhibit 19: Size of the opportunity for Australia's recurrent health expenditure over 10 years



* Includes all hospital-related charges/costs such as accommodation, doctor medical charges and prostheses.
Source: PJP analysis

Exhibit 20: Projections of Australian recurrent healthcare expenditure



* AIHW projection (2007) – John Goss
** Assumes federal government spending growth is representative of total expenditure growth
*** FY24 breakdown estimated based on AIHW projection (2007); proportion is maintained across years
Source: AIHW Expenditure Data; Australian Intergenerational Report 2010; National Health and Hospitals Reform Commission Final Report (2009); Projection of Australian health care expenditure by disease, 2003 to 2033 (Goss, 2007)

'Re-map' Australia's healthcare model, increasing the role of the private sector, to capture quality and cost gains.

Capturing these benefits requires four key reforms that cannot be delivered without a 're-mapping' of the health-care system in a way that both encourages and leverages the distinctive contribution of the private sector:

- Increased use of integrated care models
- New funding models
- Improved incentives
- Disciplined use of fact-based decision-making

These four reforms reflect important healthcare innovations. As in other industries, it is important that there is sufficient competition to identify and trial new approaches ways of delivering care, paying for that care, creating improved incentives and improving decision-making. Much remains to be discovered, and even 'great ideas' from elsewhere will need tailoring to work best in the Australian context.

Diversity is crucial to bring innovative ideas to the Australian context. Australian private health funds and hospitals bring experience from different countries, with different partnerships and alliances, and with very different bases of expertise. Diversity of capability, combined with competition, will drive innovation.

The remainder of this chapter will discuss each of the four reforms in more detail.

3.1. Increased use of integrated care models.

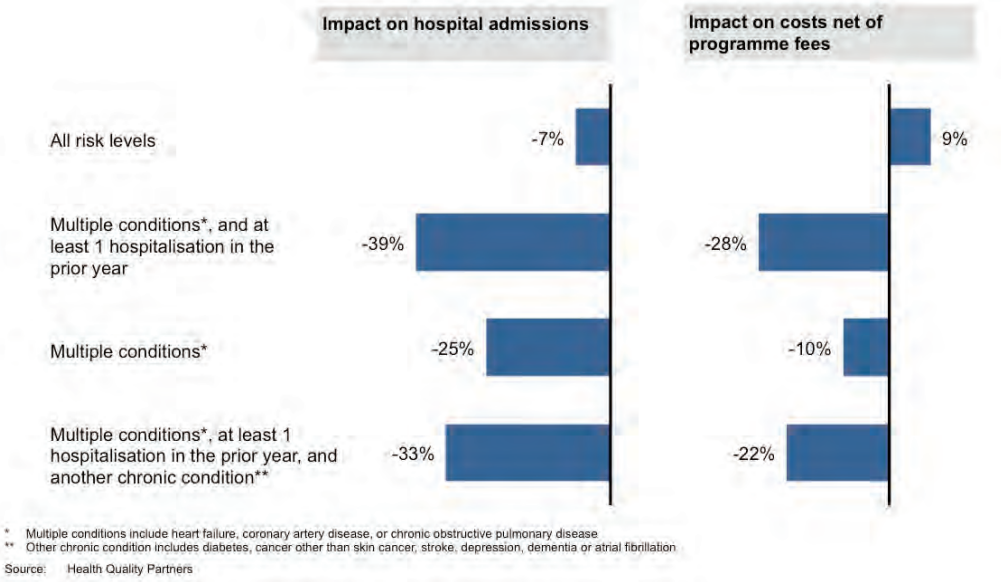
Integrated care transcends existing healthcare boundaries[20] and is more patient-focussed than the current Australian healthcare delivery approach. It emphasises bringing together the right team to address a patient's needs, rather than shifting a patient from one provider to another, based on functional expertise. Integrated care has as its aim the delivery of the appropriate mix of services across the healthcare value chain.

For example, integrated care that focusses on reducing hospital episodes, through additional primary care, is reducing costs and enhancing the quality of care for sufferers of chronic conditions. For example:

- Through frequent, coordinated home visits by nursing staff, Health Quality Partners (a non-profit, healthcare quality research and development organisation in the US) has cut hospital admissions for high risk groups of chronic disease sufferers by more than 30%. This has delivered a net cost saving (after program fees) of up to 28% (Exhibit 21).
- In Louisiana, the Care Transitions Program is providing health coaching on and after hospitalisation. This programme has reduced the rate of unnecessary hospitalisations from almost 19% to approximately 4%.
- In Pennsylvania, UPMC St. Margaret Hospital in Pittsburgh used 'lean' principals to organise a hospital-wide effort to reduce readmissions. Changes identified and now systematised have reduced readmission rates in its chronic obstructive pulmonary disease (COPD) patients by 48%.

[20] *For example, those between primary care, specialist care, hospital care, and post-hospital care/rehabilitation*

Exhibit 21: Summary outcomes of Health Quality Partners chronic disease management program



* Multiple conditions include heart failure, coronary artery disease, or chronic obstructive pulmonary disease
** Other chronic condition includes diabetes, cancer other than skin cancer, stroke, depression, dementia or atrial fibrillation

Source: Health Quality Partners

- In 2006, University of Wisconsin-Madison developed CHESS (Comprehensive Health Enhancement Support System) to help patients with self-management of chronic diseases such as HIV infection, breast cancer, and heart disease. For HIV patients, this system has increased quality of life and reduced hospitalisations, lowering hospitalisation costs by $728 per month.

In Australia, the private sector is experimenting with integrated care. The private sector is experienced, for example, in fact-based health management, particularly in the area of chronic disease management. Many Australian private health funds are already operating or participating in such programmes. The private sector also has a history of identifying and then applying, with suitable modifications, experience from overseas.

For example, in recent years, one heart disease and diabetes disease management programme undertaken by an Australian health fund delivered notable positive outcomes over 18 months - admissions rate declined by over 7%, readmissions rate declined by 20-26%, and average length of stay declined by 3-13%.

Embracing integrated care means removing restrictions on involvement in primary care. This means, for example, allowing private health funds to facilitate primary care – not only GPs and specialists, but also nurses and other healthcare providers - on behalf of their members. There are few health systems around the world that have artificial distinctions between elements of the healthcare value chain - it is certainly not the case in the Netherlands, Germany, Canada and USA.

3.2. New funding models

Recent Australian health system reforms focussed on 'activity based funding' (ABF). Some hospital funding is to be provided in proportion to the level of activity, and (over time) at a national efficient price for each activity. A range of new bodies have been established to support setting of prices, performance and quality standards[21].

Although a step forward, activity-based funding is not sufficient to drive reform. ABF systems can help make gains through lower costs per procedure, but can do little to ensure a more appropriate volume of activity.

To help achieve the gains described above, Australia should continue to introduce new funding models. Other models, such as blended payments or capitation, are superior when quality and cost outcomes depend as much on decisions about what to do as on how much each activity costs. This includes integrated care models, or conditions with lengthy treatment episodes.

Other countries have recognised that more sophisticated funding models provide the best possible incentives and create room for new models in healthcare delivery. Sweden, Denmark and Norway, for example, have all begun to explore whether capitated payment models can help improve the quality of primary care.

Capitated payment models for GPs, other providers, and funders are likely to play a much greater role, and should be trialled as part of developing a re-mapped healthcare model.

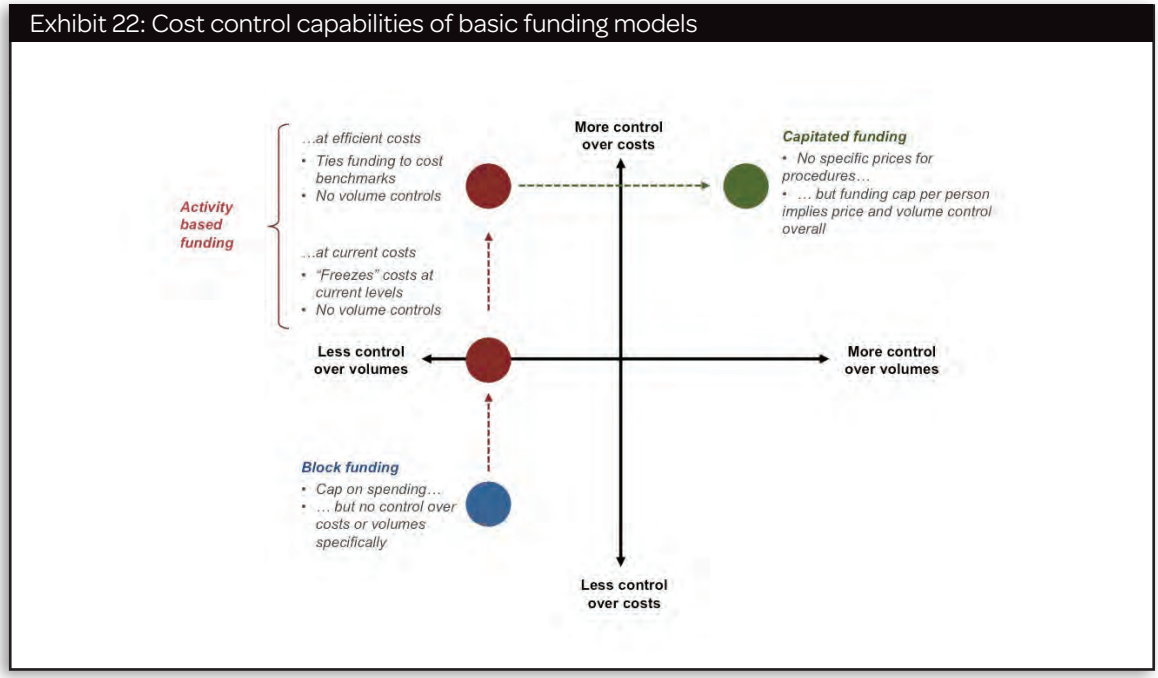
In Australia, the private sector is well-positioned to help deliver the benefits of superior funding approaches. Private sector players are expert in a range of funding models. They have already moved beyond fee-for-service to case-mix funding (in many instances), and in Australia and overseas private sector participants are caring for patients under condition-based and capitated payments covering the full cycle of care.

21 Principally, the National Health Performance Authority, the Independent Hospital Funding Authority, and the Australian Commission on Safety and Quality in Health Care

3.2.1. Activity-based funding is not sufficient to drive reform

ABF, by design, cannot control both the price and volume of health expenditure (Exhibit 24). The principal motivation for activity based funding - that payment should follow patients and the activity associated with them - is not designed to control volume. Indeed, the UK's Payment by Results system was explicitly designed to create "the incentive for providers to increase activity where their prices (paid by the Government) exceed their marginal costs of production"[22].

Exhibit 22: Cost control capabilities of basic funding models



Many OECD countries, including the UK, Germany and France have made ABF an important part of health system reforms. Yet a comparison of trends in healthcare expenditure per capita suggests ABF has had little distinctive effect. Indeed, a long history of reforms of the NHS since inception suggests ABF may be no more effective than a range of other enhancements in health system funding[23].

[22] *Principally, the National Health Performance Authority, the Independent Hospital Funding Authority, and the Australian Commission on Safety and Quality in Health Care*

[23] *A. Elshaug, J. Hiller, J. Moss, 2008, Exploring policy-makers' perspectives on disinvestment from ineffective healthcare practices, International Journal of Technology Assessment in Healthcare, 24 (1):1-9*

3.2.2. New funding models can help achieve gains in cost and quality

The limitations of activity based funding suggest improved outcomes can be generated by incorporation of alternative options, including capitation and/or blended payments, and perhaps co-payments.

These other models are most appropriate in areas where continuity of care is important, and hospitalisation is a large driver of costs and patient outcomes. In broad terms, these systems (either disease-based or at a population level) are best suited when there is expected to be a large potential to lower costs and improve quality through better end-to-end management of care.

Funding models of this type are already at the heart of Australian efforts to manage chronic diseases. Private health funds frequently contract with other providers using capitated payments. These arrangements are designed to encourage long-term care, and also to provide sufficient upside to providers who use innovative methods to deliver cost-effective, high quality care.

Outside hospitals, there is ongoing discussion of the role of modest co-payments in managing unwarranted activity. Recent attention has been focussed on GP services, which represent a sizable part of overall health care expenditure. They have also been identified as an area where 'over-servicing' beyond efficient levels occurs. As discussed above, there is evidence co-payments have a role to play here.

Under any combination of funding models, the way in which quality and safety standards are incorporated must be improved. ABF mechanisms, for example, should not reward 'never events' or rework caused by poor performance in initial procedures.[24] The challenge to adjust payments for less serious but nonetheless important quality variations also remains. For hospitals, for example, the emphasis should be on introducing financial disincentives for missing a range of quality goals.[25]

3.3. Improved incentives

Incentives for all health sector participants, often but not always embedded in the funding model, should clearly signal and drive behavioural change. All complex enterprises, even those with strong internal cultures, see incentive design as an important mechanism to create high performance.[26]

Incentives are particularly important in health care to augment other methods to ensure coordinated action. Many important decisions are made by clinical professionals that, quite appropriately, act on their own best judgements. Yet a consequence of this is that system-wide reforms, even those of enormous value, cannot be made by 'managerial edict'.

A number of examples illustrate the value of appropriate incentives.

- In the United States, the 'Choosing Wisely' programme asks doctors to identify low-value procedures that should no longer occur

[24] *This seemingly minimum standard is not met by Australia's current ABF implementation*

[25] *There are a range of options to design these systems, including how best to define quality. These options include payment systems that target avoidance of 'never events' and rework due to adverse events, but also adherence to defined clinical pathways and patients' own assessments of care quality*

[26] *Explicit incentives also replace other 'implicit' or 'unofficial' incentives that might be present. These are rarely tied to an enterprise's most important shared goals, or to aspects of performance that will most affect quality of outcomes.*

Programmes like this are important first steps, and represent a reform Australian should embrace. However, a recent review found nominations varied markedly in terms of their impact on care and spending, and that doctors nominated activities mostly outside their own specialities. The review highlighted the failure of orthopaedic surgeons to nominate a single surgery that was of low value, despite well-documented concerns about some knee procedures.

- Also in the United States, researchers at the Beth Israel Deaconess Medical Centre found low value practices for back and neck pain treatment were increasing. These practices included prescribing narcotics and imaging tests without evidence of benefit[29]. Uninformed patient expectations on the value of tests, the ease of ordering imaging tests, and financial incentives were cited as reasons for this behaviour.
- Australian policymakers recognise that muddled incentives make decisions about appropriate levels of care difficult for all involved. A recent survey of medical policy opinion leaders included a representative quote from one:

"Reality is, and putting it really bluntly I don't think there's any incentive in the system whatsoever for a surgeon, who's particularly in a lucrative practice, to [disinvest from ineffective or inappropriately applied practices]. Because they're operating in a business paradigm. They might be operating in a care paradigm but the business paradigm, I think, works much harder than the care paradigm when it looks to reducing costs"[30]

Each of these examples show that without well designed incentives to modify their own behaviour, even highly trained healthcare professionals can find it difficult to act in a way that improves the performance of the health system as a whole.

The private sector is familiar with and responsive to incentive-based arrangements to an extent rarely observed in the public sector. In the US, for example, a number of hospitals that once sought higher patient volumes to earn greater revenue are now part of 'accountable care organisations'.

These hospitals now have an incentive to manage the health of their patient population and keep patients out of hospital. These incentives encourage new preventative activities not typically delivered by hospitals - including calling recovering cardiac patients during winter storms, to remind them not to shovel snow.

In our experience, public sector organisations respond best to incentives when private sector participants exist as performance benchmarks. In other sectors, such as energy, the performance of private sector participants has provided the impetus for public sector organisations to reform bureaucratic processes and overcome cultural inertia. Typically, it is this inertia that reduces the speed at which incentive mechanisms find their way to the front-line staff who can do most to change outcomes.

Finally, incentives cannot be seen as an end in themselves. They can be at their most effective when coupled with other changes designed to encourage the behaviours they seek to reward.

[27] *This project is described in more detail in the next section*

[28] *Morden, Colla, Sequist, Rosenthal, 2014, Choosing Wisely – the Politics and Economics of Labeling Low-Value Services, New England Journal of Medicine*

[29] *John N. Mafi, Ellen P. McCarthy, Roger B. Davis, Bruce E. Landon, 2013, Worsening Trends in the Management and Treatment of Back Pain; JAMA Intern Med.,173(17):1573-1581.*

[30] *Elshaug, Hiller, Moss, 2008, Exploring policy-makers' perspectives on disinvestment from ineffective healthcare practices; International Journal of Technology Assessment in Health Care, 24:1*

[31] *An example of this is Chicago's Advocate Health Care, which owns a number of hospitals, and healthcare facilities and clinics.*

3.4. Disciplined use of fact-based decision-making

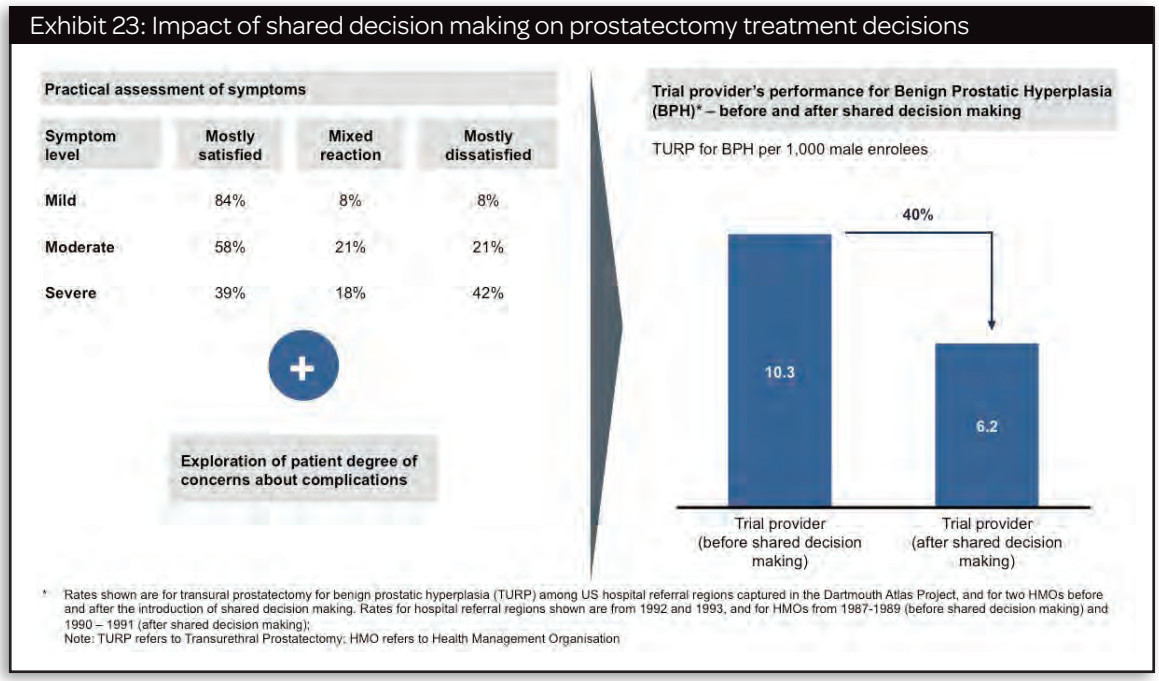
Fact based decision-making should underpin every aspect of healthcare reform. Judgements of medical practitioners, from nurses through to GPs and specialists, should be informed by the best possible evidence, as well as the most relevant information about patient circumstances. These factors are key to delivering consistent, quality care.

Changes in the rate of prostatectomies illustrate the benefit of improved fact-based decision-making (Exhibit 23). In a commonly-referenced US trial, complementing clinician judgement with a well-structured exploration of patient perception of symptoms, and concerns about side-effects, led to a sharp decrease in the number of prostatectomies. In retrospect, this helped eliminate a large number of unwarranted procedures.

Many subsequent studies over the past decade[32] have also found patient decision aids – tools to assist patients with shared decision-making – to help patients determine the right care and correct for significant overuse or underuse of certain treatments. For example, the Cochrane Systematic review[33] of decision aids contained 11 trials that involved elective surgery decisions and found that patients using the aids were 20% less likely to choose surgery.

Improved decision-making relies on strengthening the use of cost and quality data, beginning with the

Exhibit 23: Impact of shared decision making on prostatectomy treatment decisions



[32] *Karen R. Sepucha, Shared Decision-Making and Patient Decision Aids – Is it time?; Circulation: Cardiovascular Quality and Outcomes. 2012; 5: 247-248*

[33] *Stacey D, Bennett CL, Barry MJ, Col NF, Eden KB, Holmes-Rovner M, Llewellyn-Thomas H, Lyddiatt A, Légaré F, Thomson R; Decision aids for people facing health treatment or screening decisions; Cochrane Database Syst Rev. 2011; 10:CD001431*

data that is already collected but not productively used. This underpins the measurement of outcomes, which is critical to well-functioning incentives. Sweden, for example, has created 100 health registries to identify and implement best clinical practice across the provider base. The National Swedish Cataract Register, for example, has identified risk factors which determine optimal prophylactic regimes for cataract surgery. This has led to a decrease in the number of post-operative infections of around 80%.

Undoubtedly, all parties in the healthcare arena must do a much better job in providing increased support for decision-making. Governments will need better data to help set condition-based payment levels and expected quality and outcome targets. Governments will also need to make legislative and regulatory changes to ensure increased data availability does not compromise privacy.

The private sector, which already has a great deal of data, will need to continue applying this data to help inform patients in making trade-offs between cost and quality. All parties must be prepared to be much more transparent about the quality and cost data they already collect, and in their approach to making this information helpful to patients, payers and providers alike.

3.4.1. Opportunities for fact-based decisions to improve health system performance are widespread

Well-supported, fact-based decision-making can improve health system performance in at least three important ways.

The first is by improving choices about the type of treatment that is most appropriate for a patient's circumstances. Patients and their families can have difficulty finding the best possible information on the value of different treatment options.

Many health systems are developing tools to support this type of decision. Organisations such as NICE in the UK have begun to develop and freely publish best practice clinical pathways. Another example is the recent evolution of specialist programmes aimed at actively deterring unnecessary treatments, including 'Choosing Wisely' (discussed above) and 'Do Not Do' in the United Kingdom. (Box 3 provides a closer look at the 'Choosing Wisely' programme.)

The second is by informing the choice of specialist. Patients and GPs can call on very few facts to guide their choice of a specialist. It is not possible, for example, to systematically assess differences in specialists' quality of outcomes

There is also no easy way to compare the experience level of specialists (i.e. the number of procedures completed to date), let alone their charges.

Improved use of information will need to be led by payers and providers. Work by the Australian Commission on Safety and Quality in Health Care suggests only 40% of adults possess the health literacy needed to make informed decisions about their health care. This figure is lower for older people.

The final way is by supporting the decisions of health system managers. At present, health system managers have access to much more data than patients and GPs. Their primary need, therefore, is for tools and resources to support key decisions.

Box 3: 'Choosing Wisely'

CHOOSING WISELY

The 'Choosing Wisely' programme aims to promote conversations with medical professionals and patients around the most appropriate care, and so achieve more effective use of health care resources, as well as improved patient welfare. The project was conceived by the National Physicians Alliance in the United States, and is now run through the American Board of Internal Medicine Foundation.

'Choosing Wisely' focusses on promoting care that is:

- *Supported by evidence*
- *Not duplicative of other tests or procedures already received*
- *Free from harm*
- *Truly necessary*

To date, this has been achieved by the development of lists of 'Five Things Physicians and Patients Should Question'. These lists are developed in cooperation with medical colleges.

Although in practice these lists prioritise concise and actionable findings, Choosing Wisely has recognised that they do not provide all of the information patients require to have informed conversations with physicians.

To this end, Choosing Wisely is working with Consumer Reports to prepare more patient-friendly materials.

The need for these tools is illustrated by a recent study of how UK health system managers are responding to data from the NHS Atlas. Similar to the Dartmouth Atlas in the United States (Box 4), the NHS Atlas is intended to help identify opportunities to reduce unexplained variation in expenditure, activity and health outcomes

However, driving change using Atlas data is proving challenging for many Primary Care Trusts. Of 53 surveyed PCTs, just under half reported not using the Atlas to support decisions, in many cases because they lacked the ability to understand the implications of the data. The range of PCT responses is illustrated in Exhibit 24, with responses linked to difficulties in turning data into decisions highlighted in blue. For leaders within the Australian health care system, improving decision support tools, particularly those aimed at assisting patients, should be a priority. The private health insurance sector would be well placed to lead such initiatives, which would involve the health care system as a whole.

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Box 4: Dartmouth Atlas

DARTMOUTH ATLAS

The Dartmouth Atlas of Health Care (the Atlas) was established around twenty years ago by the Dartmouth Institute for Health Policy & Clinical Practice in New Hampshire, USA to document and report on variations in healthcare utilisation, cost, quality and patient experience in the US Medicare system. The Atlas uses Medicare data (over 65s) to illustrate variations across different geographic areas, with some analysis possible at the level of individual hospitals and their affiliated physicians.

Central to the Dartmouth methodology is its concept of "unwarranted variation", which is defined as differences in health care provision that cannot be explained by patient illness or patient preference. Unwarranted variation is the variation that is only explained by differences in the performance of the health system. The concept is broken down into three streams:

1. *Effective Care – care for which there is an established evidence-based to demonstrate a best practice model of care.*
2. *Preference Sensitive Care – Care for which there are treatment options that carry significant trade-offs in terms of risks and benefits for the patient, for example treatment of prostate cancer. The choice of care should be driven by the patient's own preferences as they weight the outcomes associated with each option.*
3. *Supply Sensitive Care – Care that is strongly correlated with healthcare system resource capacity in a geographic region, after controlling for population health status.*

The Atlas has increased dramatically in prominence since being identified by US Congressional Budget Office director Peter Orszag as a key influencer in the development of the Obamacare suite of policies. Orszag claimed that the US could save $700 billion per year in healthcare costs without any decline in the quality of care by utilising Dartmouth data to benchmark spending across regions and reduce outlays in areas where 'waste' occurs. The Atlas has also been cited as a source of the claim that as much as 30% of US healthcare spending is unnecessary and produces no health benefits.

[34] *L. Schang, A. Morton, P. DaSilva, G. Bevan, 2014, From data to decisions? Exploring how healthcare payers respond to the NHS Atlas of Variation in Healthcare in England, Health Policy, 114(1):79-87.*

Exhibit 24: Qualitative responses to the NHS Atlas

Theme	Sub-theme	Example/illustration
Awareness of the data	Distraction due to organisational reforms	"The development of CCGs [Clinical Commissioning Groups] left little room for anything else, such as improving services... we were mainly concerned with getting the new structures going"
Acceptance of the data	Local management processes seen as too difference	"If you look at geographic differences in spending patterns, there may be distortions, in the ways costs are allocated... for example PCT spending on cancer may differ depending on the ways hospice costs are taken into account"
	Preference to work with local data	"I prefer to work with raw and more detailed data, for many reasons... the data in the Atlas has been transformed and aggregated, which makes it sometimes difficult to understand what is in, and what is out"
Perceived applicability of the data	Single indicators versus pathways of care	"The Atlas is rather narrow in its focus on single indicators... what does this mean for the entire pathway, from community, primary to hospital care... is this variation in a single indicator actually meaningful, what does it mean for the pathway?"
	Other criteria besides magnitude of variation	"What I want to know is: where do we have the largest potential for efficiency savings, that don't harm patients... the Atlas alone can't tell me that"
Ability to use the data	No staff capacity to use NHS Atlas	"We had already agreed priorities for action when the Atlas was published, and had no further resources and analysts to tackle new issues"
Mode of use	Strategic problem framing	"Surely the Atlas alone is not enough but we use it to triangulate with other evidence. This helps us to see where we have most potential to improve, mainly financially"
	Problem communication	"The maps often confirmed our existing local suspicions. But they helped a lot to I llustrate to GPs where we stand compared to other PCTs"
Challenges in use	Unclear basis for evaluating "unwarranted" variation	"There is not always a clear-cut definition what variation is bad...usually we take NICE guidance as a basis, if it is available for this area"
	Role of the national average as an implicit reference point	"We were in the middle for most indicators... so nothing alarming really"
Enabling factors for coordinating further analysis and action	(Internal) responsibility for action: management structures and clinical involvement	"We have regular performance management meetings together with local clinicians to agree service objectives, and who does what... and then we monitor progress towards these objectives. The Atlas fit in naturally into our existing structures"
	Leadership and high-level support	"The PCT Board gave great support in using the Atlas... they discussed the Atlas at one of the Board meetings, and appointed a person to champion work into variations"

Source: L. Schang, A. Morton, P. DaSilva, G. Bevan, 2014, *From data to decisions? Exploring how healthcare payers respond to the NHS Atlas of Variation in Healthcare in England,* Health Policy.,114(1):79-87.

3.4.2. Strengthening the availability and use of cost and quality data begins with that already collected

The Australian health system already generates large amounts of valuable data. Despite the challenges caused by the collection of this information, data held at a number of important agencies now covers much of the health care system.

Access to high quality data is routinely identified as key to increasing health care system performance. It is directly linked to the other reforms described above:

- High quality data enables and builds confidence in funding models of all kinds. For example, capitated funding models depend on high quality data regarding the expected costs of servicing various categories of patients.
- Data helps create appropriate incentives, not just those embedded in funding systems. For the many medical professionals not exclusively or even mostly motivated by financial outcomes, these broader incentives are important. For example, data enables providers to compare their performance with others in their fields. Data that enables patients to easily compare providers brings additional pressure to bear on the system to improve.
- Data is needed to support decision-making throughout the health system. For patients, valuable data includes that on costs and outcomes associated with particular hospitals and clinicians treating particular episodes, and potentially more interpretative data about whether a particular clinician's approach to chronic care would fit their preferences.

For providers, data can inform choices between treatment options. This includes not only the Australian experience of outcomes of particular acute care procedures, but also easy access to the type of data that underpins the 'do not do' lists describes above. Data is also needed to support the development of decision support tools needed to ensure individual decisions prioritise high value health care.

Given the high value of data, and Australia's existing data collection and storage capabilities, it is unfortunate that outmoded approaches to data access are holding back its widespread use. This problem was identified as long ago as 2009 by the Productivity Commission which proposed a range of reforms to improve appropriate access without compromising privacy or safety concerns[34].

Subsequently, improving transparency of health information was identified as a priority in the National Health Services Reform agreement.

Despite this, data access remains a problem. Efforts to secure data to write this report, for example, were hampered by long lead times and the need for data providers, notably state agencies, to approve not only the data that was released to us but also the use to which that data would be put. The recent Grattan report on waste in the public hospital sector used data from the NHCDC, and described this data as never before been available outside government. Particularly for de-identified data, this is a problem, not a feature, of the way Australia uses its health system data.

Efforts in Australia to enhance data availability are welcome, but fall well short of what is needed. The Government's myHospitals website, for example, includes quality data on only two aspects of safety and quality: Staphylococcus aureus bloodstream infections and hand hygiene, but no information on whether surgical procedures at that hospital have good or bad outcomes, nor any information that contributes to choice of clinician.

Other jurisdictions have accepted the challenge of making data available in a transparent, timely way. Accelerating Australia's efforts in this regard would be an important spur to improved health system performance.

[35] *Productivity Commission 2009, 'Public and Private Hospitals', Research Report, Canberra*

4. The vision is achievable in practice

There is strong evidence in Australia and elsewhere that these quality and cost opportunities can be captured in practice, and that the private sector can play a central role in doing so. Worldwide, governments are accepting the challenge of finding the appropriate balance between private and public sector participation in the healthcare sector.

To illustrate these developments, this section will briefly outline three case studies:

- NHS, UK: Private sector managing selected cancer patients and 'end-of-life care'
- Netherlands: Outsourcing of USO and supplementary insurance provision to private sector
- Arkansas, USA: Reshaping the roles of public/private sectors in an already blended system

These models of care seek to bring the right combination of skills and business models to bear. They seek to harness the power of focussing on the right care at the right cost. Each of these targets the four key reforms outlined above. They also recognise systemic reforms must take a highly localised approach.

4.1. NHS, UK: private sector managing selected cancer patients and 'end-of-life care'

In the UK, the NHS is currently undertaking its largest ever outsourcing of services by inviting the private sector to compete for £1.2 billion in contracts to deliver cancer treatment in district hospitals and provide end-of-life care. Initially, services will be offered in Staffordshire and Stoke-on-Trent, with a population of about one million, however it is expected that the plan will be rolled out nationally if it is proven to be successful. The contracts will cover diagnoses and treatments across radiology, breast screening, chemotherapy, nursing and surgery for patients both in and out of hospitals.

The services will be run on a 'prime provider' basis, whereby a single operator undertakes a 10 year contract to provide care, and is responsible for subcontracting where necessary. In addition to providing a more competitive market, ensuring a single care giver is responsible for the entire range of services from diagnosis to treatment and rehabilitation or palliative care is likely to deliver better outcomes for patients.

This pioneer project has been met with some criticism from opposition political parties and other public figures. Opponents claim that private providers of cancer care will be incentivised to target high volume but low complexity work, leaving those suffering more complex or rare forms of the disease with sub-optimal care. While this argument may have merit under some payment structures, a proper episode and outcome based payment system can easily overcome such challenges. With correct pricing for complexity, rare forms of cancer are economically attractive to treat, and dedicated treatment centres will compete for business on the quality of care they can offer.

4.2. Netherlands: outsourcing of USO and supplementary insurance provision to private sector

The Netherlands introduced a system of mandatory private health insurance in 2006, whereby competing providers are obligated to offer universal coverage to any resident, irrespective of their age or health. Contributions from taxpayers to a risk equalisation fund are distributed to insurers based on the relative health of their members. Insurers charge a uniform premium directly to all members, at a rate of their choice, allowing consumers to shop between alternatives on price and perceived quality.

As a result of the reform, competing insurers are increasingly becoming prudent buyers of care as regulations on the provision of care are being eased. Insurers are now able to freely negotiate with providers for a variety of health care services, which in 2009 accounted for approximately 50% of hospital revenue. Insurers are also beginning to integrate with or participate directly in the provision of health care services. In the case of an insurer-owned medical clinic, incentives can be provided to GPs through bonuses or risk sharing to take on a more pro-active role in the long-term care of patients. Other incentives may be used to promote the use of generic drugs over brand name drugs when issuing prescriptions.

While health care reform in the Netherlands is still largely a 'work-in-progress', it has so far been successful in combining the competitive nature of the U.S. health system with the benefits of a government-determined universal service obligation in which all residents are guaranteed an acceptable level of cover. In time, with continued regulatory refinement, integrated care delivery systems, and mixed public/private funding are expected to become more common place as the quality and cost benefits of doing become more evident.

4.3. Arkansas, USA: reshaping the roles of public and private sectors in an already blended system

In 2012, Arkansas in the United States proposed a 'State Innovation Plan'[36], aimed at creating a sustainable patient-centred health system that embraces three goals:

- Improving the health of the population
- Enhancing the patient experience of care, including quality, access, and reliability
- Reducing, or at least controlling the growth of, the cost of health care

To realise these goals, the plan seeks to transform the state's care delivery system to coordinated, patient-centred and cost-effective care, organised around consumers' comprehensive health needs across a team of providers. A large majority of these providers are independent physicians and private institutions, such as hospitals and medical homes.

If successful, Arkansas' Department of Human Services expects the plan to significantly improve quality of care and the general health of the state's population, while saving the system $1.1 billion over the first three years (or $8.9 billion through to 2020).

The proposed model seeks to integrate two complementary strategies for promoting clinical innovation on a multi-payer basis across the entire state:

[36] *Arkansas Department of Human Services, 'State Innovation Plan', Submission to CMS and CMMI, September 2012*

- Population-based delivery: Medical homes will provide patients with primary access to the healthcare system, with a specific focus on the prevention and management of chronic diseases, through a population-based health model.
- Episode-based care delivery: All acute and complex chronic conditions will be managed by a principal accountable provider (PAP), whose compensation will be contingent on the quality of care and outcomes delivered for an entire episode of care.

Arkansas recognised that the effective implementation of this integrated model will require changes in incentives to providers, as well as the attitudes, behaviours and skills among our healthcare workforce. As such, this transformation is supported by four core enabling initiatives:

- **Payment innovation:**
  Payment systems will be transitioned from ones that reward volume to ones that reward outcomes.
- **Healthcare workforce development:**
  The health workforce will attract new talent by increasing the attractiveness of the profession through increased team-based care and novel patient care models.
- **Consumer engagement and personal responsibility:**
  A mix of education, incentives, technology and regulation will encourage health care consumers to take greater responsibility for decisions regarding their health.
- **Health information technology adoption:**
  Technology will be leveraged to increase administrative efficiency, transparency and knowledge sharing.

The examples above are but three of many jurisdictions that are seeking to reform themselves by re-mapping their healthcare sectors. Each is employing various aspects of the reform elements outlined in the previous section of this paper, with the common objective of bringing an enhanced level of competition, innovation and transparency to their healthcare system. Importantly, all these jurisdictions are heavily leveraging the private sector to drive their reforms.

5. Next steps in the evolution of Australian healthcare

The next steps in the evolution of the healthcare model will require determination from all involved. Significant changes to the roles of governments and healthcare stakeholders will be necessary.

For governments, capturing these benefits will require coordinated implementation of a small number of policy changes. In total, these changes will allow governments to refocus on setting and measuring standards for health care delivery, as they (probably) become less involved in direct service provision. Increasingly, governments will contract with other participants who are able to deliver services with better outcomes and at lower cost. Consistent with these changes, the Government should also consider how best to begin to increase the involvement of the private sector in health.

For non-government healthcare participants, a reform agenda that helps deliver higher quality, lower cost care will create increased opportunities and benefits for high quality funders and providers of care, as well as for their respective patients.

Moving to a higher quality, more efficient system will mean substantial change in the way in which resources are allocated, treatment decisions are made, and in the roles of practitioners and others. Reforms should move beyond the traditional "battlegrounds" of "who pays", public versus private provision, and levels and structure of governance. Implementing these reforms will require changes to be driven by the leadership of the healthcare sector.

The required changes and associated benefits for governments and healthcare stakeholders are discussed in more detail below.

5.1. Governments will focus on their roles in the healthcare process and improve outcomes and lower costs.

In many ways, governments (States and Commonwealth) are the primary beneficiaries of the type of healthcare reform suggested in this paper. To date, governments have had to fund an ever increasing burden of healthcare expenditures with limited understanding of the quality of the healthcare services they were buying, or the variation in their cost.

Historically, Governments have leveraged two main weapons for limiting healthcare costs:

- Rationing supply through budget constraints.
- Cost-shifting expenditures from one level of government to another, and from government to the private sector.

Neither of governments' key weapons for limiting their costs involves managing for high quality service at efficient costs.

Introduction of the types of reforms outlined in this paper would shift the role of governments towards two key areas:

- Set, monitor and enforce standards for healthcare delivery.
- Remove artificial barriers ('red tape') to help consumers become more active participants in their own healthcare, and reward purchasers and providers that deliver better quality outcomes on a consistent basis.

Through this process, the Government should consider how to take first steps in increasing the involvement of the private sector in Australian healthcare, such as:

- The contracting out of a 'Universal Service Obligation' to private sector participants (Box 5).
- Broadening the scope of private health insurance to include primary care and specialist care outside the hospital gate.
- Allowing the private sector to compete for the right to manage the health of patients with specific chronic diseases, or even the total healthcare, for a subset of the population. There may be particular benefit, for example, in beginning with the 5% of hospital patients whose hospital treatment costs represent around half of the total.

Choosing from amongst these or other options would require the Government and the private health sector to evaluate where the initial gains from reconfiguring the health delivery model might deliver the biggest 'bang for the buck' in the near term. Although beyond the scope of this paper, identifying the most prospective areas of reform, both in terms of the size of the prize, and ease of implementation, is a key next step.

Exhibit 25 outlines a number of initiatives to illustrate how the government could start translating the four reform themes outlined in this report into tangible actions. While the initiatives are in no way a complete list of the changes required, they are amongst a number of important steps central to re-mapping Australia's health sector toward achieving a step change in quality and cost efficiency.

As noted above, monitoring and reporting on performance will be a vital role for government in a reformed healthcare sector. Consumer protection will also be an essential government role, as will prudential oversight of (for example) funders, to ensure they are able to meet the needs of those to whom they have promised services. In summary, then, governments' roles in a reformed healthcare sector would be very different to their roles today. The emphasis shifts from managing costs through rationing supply and cost-shifting to one of overseeing the design, implementation and monitoring of a system with many more, and different, participants.

Box 5.

BOX 5: DEFINING AND IMPLEMENTING A UNIVERSAL SERVICE OBLIGATION

A key aspect of the Government's role in a re-mapped healthcare system would be the design of the minimum requirements for compulsory health cover. These minimum requirements would represent a 'Universal Service Obligation' or USO, an entitlement of every Australian to a specific standard of care across the healthcare spectrum.

The minimum requirements for health cover could include:

- *General practice services*
- *Specialist services*
- *Pharmaceuticals*
- *Hospital services, including emergency services*
- *Basic dental services*

Ultimately, the decision on which services are included in the Universal Service Obligation, and the standard of service (e.g. choice of provider, wait time standards, clinical pathways, etc.) would be the responsibility of the Government(s) funding the obligation. Of course, Government would have the option of means-testing any aspect of the USO, or imposing co-payments on specific services.

The Government would fund the USO for every Australian, who would be entitled to a risk-adjusted funding level with which they must purchase the USO (the USO funding would not be able to be 'cashed in'). The USO for each individual would be risk-adjusted based on age, gender, lifestyle, medical risk factors and the like, in order to make all individuals attractive to USO providers. Setting the appropriate price for various risk categories is critical.

Even the cost of centrally purchased items, such as PBS pharmaceuticals, could be reduced through the implementation of a USO. With a portion of the capitated USO payment representing pharmaceutical costs, USO providers would have an incentive to utilise generic drugs, if available, to lower the cost of providing the USO. This incentive does not exist today.

It is anticipated that individuals 'shopping' for an insurer or provider to deliver the USO would consider the relevant track record of competing providers. An individual with a specific chronic illness, for example, would seek out providers who have a good track record of managing that particular condition. Others might seek out a USO provider with the strongest offering in a particular geography.

Of course, individuals would also be able to contract for additional health services above and beyond the USO through supplementary insurance products. These products could offer access to ancillary services, treatment at a select group of providers, enhanced management of chronic diseases, or access to a broader range of pharmaceuticals.

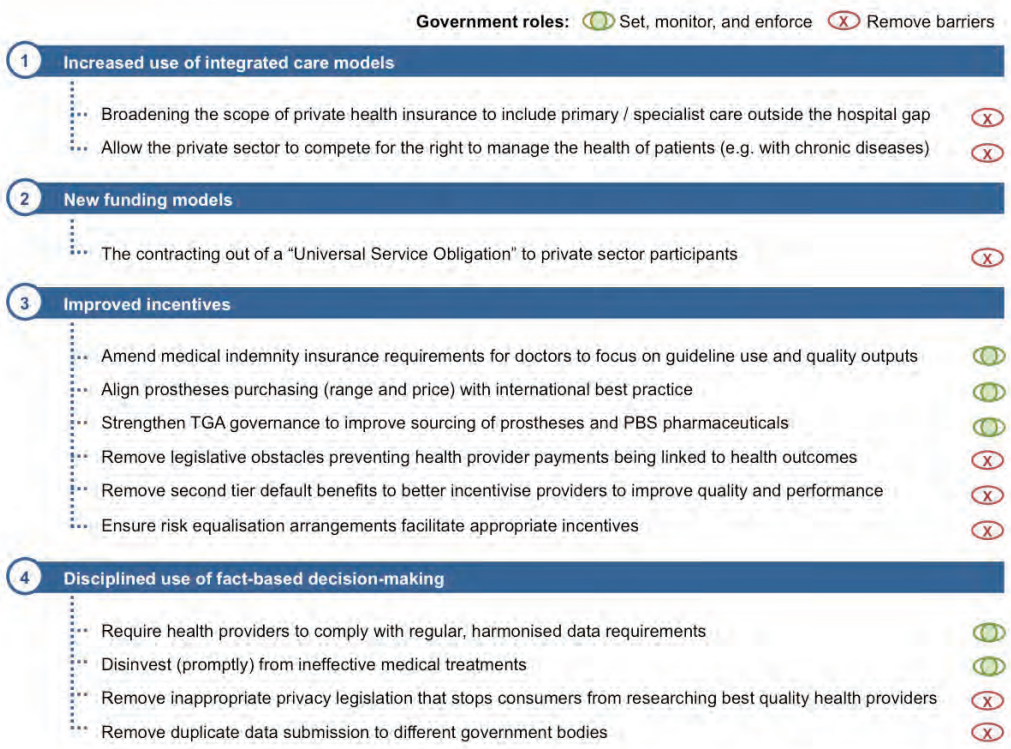
As a funder of the USO, the Government would need to commit to financing the USO sustainably into the future. Insurers accepting capitated payments in exchange for taking on the health risks of a range of patients will want some degree of certainty that the funding for patients they have 'invested in' will be ongoing. On the other hand, Governments will want some flexibility to scale back healthcare costs, and to capture the cost gains achieved by USO providers. That is, if private providers are able to deliver the USO's mandated quality at lower cost, Government will want to share in the cost benefit.

As in other industries, we suggest that gain-sharing arrangements will need to be struck that reach a happy medium between:

- providing sufficient incentives for private providers of the USO to make efficiency and quality gains, and...
- ensuring that the ultimate funder (Government) captures a reasonable share of the gains in the medium- to long-run.

Designing these arrangements is an important aspect of defining and implementing the USO.

Exhibit 28: Translating reform directions into initiatives – example priorities



5.2. Patients will be able to make more informed decisions and receive better care

Consumers' ability to play an active role in their own healthcare (or in the healthcare of their family members) has typically been quite limited. There is little or no data on the quality of alternative healthcare providers, for example, and even the costs of alternative providers are often opaque. There is little publicly available data on the efficacy of alternative treatments, for example, and most patients are almost totally reliant on the recommendations of their healthcare provider.

As in other arenas, however, there are increasing numbers of consumers who want to be more active in the healthcare decision-making process. They want to be able to have input into the decision-making process, based on the benefits, costs and risks of various options. They expect to be able to access the information necessary to help make these judgments.

There is increasing pressure for consumers to be increasingly active, rather than passive, participants in the healthcare process.

Thus, consumers will directly benefit from the innovation, best practice procedures and value-based competition that emerge from the reforms suggested by this paper.

Of course, even consumers who are less interested or less able to take a more active role in managing their own healthcare needs will benefit from the forces driving funders and providers to deliver high quality care at efficient costs. Thus, even if consumers as a whole are relatively slow to change their behaviours as purchasers, they will capture the benefits of reform. Experience elsewhere, however, indicates that informed consumers make better and frequently lower-cost decisions on treatment options.

5.3. High performing funders and providers will prosper

A reform agenda that helps deliver higher quality, lower cost care will also provide opportunities and benefits to funders and providers:

- The private sector will become much more actively involved in the health of their members and customers, right from primary care through to post-hospital rehabilitation, increasing the focus on prevention to everyone's benefit
- Providers will have the incentive to develop and use tools that facilitate their provision of 'value for money' healthcare, consistently

These benefits and opportunities are discussed in more detail below.

5.3.1. The private sector will become much more actively involved in the health of its members

Depending upon the shape of the reform package adopted to capture the gains outlined in this report, the private sector will have increased scope to play a greater role in the health of their members and customers. Australian healthcare insurance providers are already offering chronic disease management programs and other non-hospital based services for their members, but the reforms necessary to capture the gains mooted here will increase the scope to do more.

Healthcare insurers will have an enhanced incentive to keep their members healthy, and the successful funding agencies will prosper by being innovative and targeted in the programs they offer. For example, one or more insurers might focus on providing care to diabetes patients with co-morbidities, while another might focus on patients with coronary artery disease. Others might develop products focussed on offering a broad healthcare offering in a targeted geographic area. It may be the case that new competitors (e.g. healthcare providers, overseas funding agencies) would emerge to challenge existing health insurers and governments as funding agencies, particularly once the funding associated with delivering the Universal Service Obligation is portable.

Contracting mechanisms will be another way in which insurers will differentiate themselves to create a competitive edge with consumers. With a tailored blend of population-based payments, fee-for-service and episodic payments, funders will be seeking to deliver the highest quality care possible at an efficient cost.

As in other competitive industry sectors, insurers that are able to identify market segments in which they can deliver 'value for money' will build a strong market position, and those who cannot will lose market share, creating pressure to innovate and improve their offerings.

5.3.2. Providers will have the incentive to deliver better 'value for money' healthcare, consistently

The net effect of the reforms described in this paper will be to focus health care system activity on the provider groups, and individual providers, able to deliver the quality standards set by the leaders in their fields. With increased transparency for quality measures, consumers and funders (payers) will be drawn towards those providers able to deliver superior outcomes at a competitive price.

Conversely, of course, providers unable to demonstrate superior quality performance, or 'value for money' will have competitive pressure to 'lift their game' or risk being unable to secure funding from payers or support from consumers. Thus, as in any competitive arena, providers unable to deliver a quality service at a competitive cost would risk being unable to stay in business.

More importantly, however, hospitals (and specialist doctors operating in hospitals) able to demonstrate high quality outcomes at reasonable costs, would be attractive to both consumers and healthcare funders. They would likely gain market share, which could further add to their experience base and quality, as well as further lowering their cost base.

General Practitioners have a great deal to gain from the types of reforms outlined in this report. For example, a system that delivered a Universal Service Obligation through a capitated payment will inevitably require the GP's current role as 'gatekeeper' to be enhanced and become more valued. GPs might transition from the current fee for service payment model to models in which they are rewarded for looking after the health of a basket of patients in their area, with rewards based on the ability to deliver quality healthcare at a competitive cost. GPs will be at the centre of the home-based Chronic Disease Management Programs, aimed at keeping people with chronic conditions out of hospital, and will be measured and rewarded on their success in doing so.

Inevitably, some GPs will be concerned that medical decisions will be taken out of their hands. In our view, reforms such as the ones outlined in this paper are more aimed at putting the GP back at the centre of healthcare delivery. Clearer clinical guidelines may be necessary to ensure GPs can play their role as effectively as possible, but this is no more reducing the importance of the role of the GP than does having a standard pre-flight checklist lessen the importance of the skills of an A380 captain.

This paper demonstrates that despite how well our healthcare system is perceived today, there is a significant 'prize' - in terms of both quality and cost - to be gained from further sectoral reform, and particularly from the increased participation of the private health sector. Even assuming a progressive ramp-up, the country's healthcare expenditure could be reduced from current projections by over $100 billionn over the next ten years, with the quality of healthcare being enhanced at the same time.

In our view these gains are not possible within the current healthcare framework - they demand more significant structural reforms, and the introduction of competition, such as has been driven in most other sectors of the Australian economy. There is evidence that these reforms will work, and the sooner they are implemented, the sooner the benefits will flow to patients, providers, funders and governments.

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Attachment Two:

'Costing an Arm and a Leg' – Making healthcare more affordable and accessible for Australians – October 2015

Costing an arm and a leg

Making healthcare more affordable and accessible for Australians

Private Healthcare Australia
Better Cover. Better Access. Better Care.

October 2015

Contents

Executive summary

Australians depend on their health system to deliver effective and accessible care, but the affordability of this system is becoming increasingly challenging for consumers and the government. Healthcare spending has outpaced economic growth for years, increasing from 8.3 percent of GDP in 2003 to 9.4 percent in 2013. Private health insurance is an essential component to alleviate the burden on the public system, but is under financial strain: annual premium revenue growth has ranged from 7 to 9 percent in 2013-15[1], while participation has flat-lined at 47 percent of the population[2]. New measures are needed to keep healthcare within the means of all Australians.

Reforming the prostheses reimbursement model is a promising opportunity to contribute to the sustainability of healthcare in Australia. Prostheses represent a significant amount of expenditure, comprising over 10 percent of total reimbursements by private insurers[3]; and current pricing governance mechanisms for prostheses have led to benefit levels that are often twice as high as prices in comparable systems, both domestically and abroad.

As will be shown, by addressing the area of prostheses reimbursement, the Australian health system could save $800 million in annual expenditure while preserving quality of care. This could translate into a premium reduction of 4.5 percent, or a savings of over $150 per policy. Furthermore, lower premiums are estimated to enable a migration of 300,000 Australians towards private health insurance, creating up to $276 million in additional value for government and significantly reducing the burden on the public health system.

In order to improve the system, Australia's private health insurers developed a set of 11 potential reforms based on international case studies, a review of the literature, and expert interviews. These were evaluated in terms of both impact (i.e., ability to reduce value flowing out of the system while improving or preserving outcomes) and feasibility (i.e., magnitude of reform required and potential downside risks). Appendix A provides further detail on this evaluation.

Two options emerged as the most promising avenues for reform, diverging significantly in scope of impact and change required. The first avenue is reference pricing, which would enhance the current model with a stronger fact base of domestic and international benchmarks. Reference pricing may be relatively straightforward to accomplish, as it requires little reform, has widespread usage, and could lower benefits to benchmark levels (i.e., by 45 percent) within two or three years.

The second, and longer-term, opportunity is to integrate prostheses costs into an episode-based payment. Agreeing on a predetermined reimbursement per procedure (e.g., per MBS item) would create stronger incentives for manufacturers to compete on price and improve the sustainability of the overall health system.

For these or any potential improvements to the reimbursement of prostheses, three criteria should be carefully considered:

- **Improve or maintain clinical outcomes** – quality of care is the paramount objective of the entire prosthesis field, and any reforms undertaken should not compromise patient welfare.
- **Make healthcare more affordable and accessible for Australians** –by eliminating excess expenditure, reform can reduce private insurance premiums and alleviate the burden on the health system.
- **Align incentives towards financial sustainability** – the government can increase transparency into true costs and value to promote competition and set a sustainable course for prostheses expenditure in the future.

This report is divided into three sections: first, the case for change analyses the root causes and impact of current inefficiencies. Next, the proposed alternative – reference pricing – is presented. Finally, a perspective is offered on what longer-term evolutions to the value chain and complementary reforms should be considered as part of a holistic approach.

The case for change

The case for change is built on four key points:

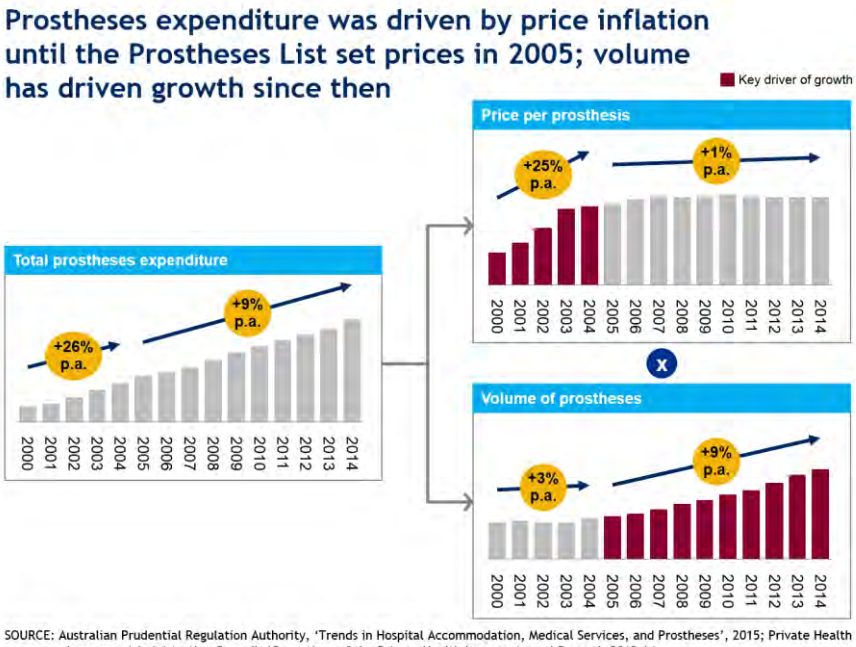
- Historical regulatory conditions have driven and then entrenched highly inflated prices in Australia's private prostheses market, and the current governance model in place to regulate these prices is flawed.
- International and domestic price benchmarks suggest that, on average, the Australian private health system is paying nearly twice the efficient benefit level for prostheses.
- There is an imbalance between who benefits and who pays in the current system, with the value tilted heavily towards the multinational shareholders of manufacturers and providers at the expense of Australian consumers and taxpayers.
- There is a lack of transparency into the true cost of prostheses in the health system and the extent of value disbursed through rebates or other incentives.

CHARTING THE HISTORICAL COURSE OF PROSTHESES EXPENDITURE

The regulation of prostheses in Australia has undergone a number of changes over the past two decades, which have driven and then entrenched heavily inflated prices.

Between 1985 and 2001, The Department of Health set the amount that health insurers were required to reimburse for medical prostheses in Australia. In 2001, the industry was partially deregulated, allowing insurers to negotiate benefit levels with providers and suppliers, but with the restriction that no gaps be charged to consumers. In this new environment, the market power of large, multinational medical device suppliers and clinician brand loyalty contributed to rapid benefit inflation that saw average prosthesis benefits skyrocket by approximately 150 percent in a four year period[4], driving up premium growth to 7-9 percent per annum[5]. During this same period, growth in the volume of prostheses was slow (see Figure 1).

FIGURE 1



SOURCE: Australian Prudential Regulation Authority, 'Trends in Hospital Accommodation, Medical Services, and Prostheses', 2015; Private Health Insurance Administration Council, 'Operations of the Private Health Insurers Annual Report', 2013-14.

In reaction to this price spiral, the government intervened in 2005 to set benefits using the Prostheses List, transitioning to a new model in a mostly cost-neutral way, thereby locking in reimbursements at inflated levels. A maximum reimbursement level was also set for each item, re-opening the possibility for providers to charge payment gaps, but was removed in 2010 as in practice it was not used. Currently, the Prostheses List continues to mandate a single minimum reimbursement benefit for each item on the list, benchmarked to groups of comparable items and set relative to the price of the year before. As a result, today's Prostheses List is winning the battle but losing the war: price inflation is under control, but reimbursement levels remain significantly higher than other comparable health systems – and each year, hundreds of millions of dollars of excess value are flowing to the shareholders of manufacturers and providers, at the expense of insurers, consumers, and government.

Regulating the Prostheses List

Today, the Prostheses List Advisory Committee (PLAC) deals with over 1,200 product submissions a year[6], mostly from medical device manufacturers applying to introduce a new or upgraded product into the market. While there is a focus on assessing and pricing new entries, many entries remain unchanged: close to half of all items on the Prostheses List retained the same benefit level from 2011 – 2015[7]. In order to add or update an item on the List, a 'sponsor' (the medical device company who owns the new technology) must submit an application, which is assessed by the PLAC's associated Clinical Advisory Groups (CAGs) to determine suitability of the device for inclusion on the list. Once the initial assessment has been passed, the PLAC will negotiate amongst themselves to arrive at a set benefit level to charge, based mostly on reimbursement levels of equivalent products already on the Prostheses List. The sponsor then has the right to appeal the set benefit level, triggering a review by external consultants with a clinical background to determine whether the case warrants reopening[8].

Despite the structured nature of the approvals process, the methodology used to review and assign benefit levels to Prostheses List items is limited in four key ways:

- PLAC does not systematically collect price point data from manufacturers, public hospitals or international benchmarking services. As a result, domestic or international benchmarks are rarely considered, leading to pricing 'in a vacuum'.
- New entrants have no incentive to compete on price, for two reasons. First, hospitals have no sensitivity to invoice price, so competitors gain no competitive advantage from a lower minimum reimbursement. Second, the minimum reimbursement level is set at the price offered by manufacturers comprising 25 percent of the market, so a new product cannot drive down prices until it gains significant share.[i,9]. The impact can be seen, for example, when patents expire: while competitors are quick to list 'me-too' products, they typically do so at the existing minimum reimbursement level, not at the expected 'generic' discount seen in pharmaceuticals and other systems. Rebates are not included, motivating providers and manufacturers to 'price shield' in contracts (i.e., agree to maintain a high invoice price and negotiate on opaque rebates.
- Manufacturers regularly do not provide all the data required by PLAC to build a robust view of cost base vs. clinical effectiveness, citing the information as 'commercial in confidence'.
- Comparative effectiveness is typically calculated using average outcomes, regardless of individual patient needs.

[i] Refers to private providers' current incentive to select Prostheses List items with the highest possible benefit level if benefits differ, to maximise rebates received given the cost will be passed on to insurers regardless. Therefore, a manufacturer looking to sell at a lower price (with a corresponding lower margin and less ability to provide rebates to providers) has few prospective customers, and cannot break into the market.

Hence, the 'average' superior product may be favoured even where an alternative would be more suitable.

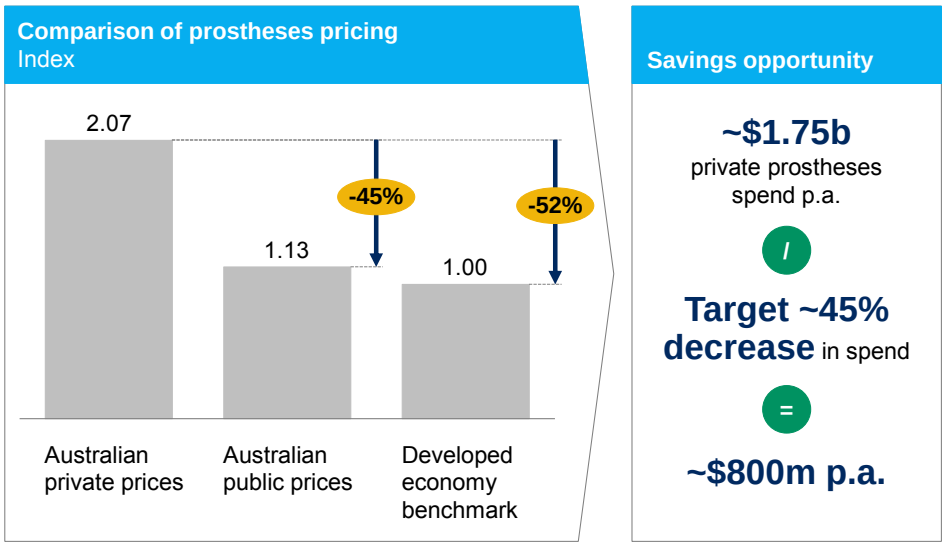
In summary, regulatory changes over the past two decades have first created, and then locked in highly inflated prostheses benefit levels in Australia's private health market. Furthermore, the current governance model that has been put in place to regulate the system is flawed, and unable to leverage the right price signals to bring costs down.

THE PRICE IS WRONG: SIZING THE MAGNITUDE OF CURRENT INEFFICIENCIES

Both international and domestic weighted price benchmarks suggest that the Australian private health system is paying twice as much as it should on average for prostheses, which would equate to approximately $800 million per annum in potential value caught up in the system (see Figure 2). Appendix B provides further detail on benchmarking sources.

FIGURE 2

Prices paid by Australian insurers are double those of domestic and international benchmarks



SOURCE: Australian Prostheses List 2015; WA Health pricing schedule; PHA Report 2014; International Federation of Health Plans Comparative Price Report, 2012; PwC Medibank Medical Devices Review, 2010

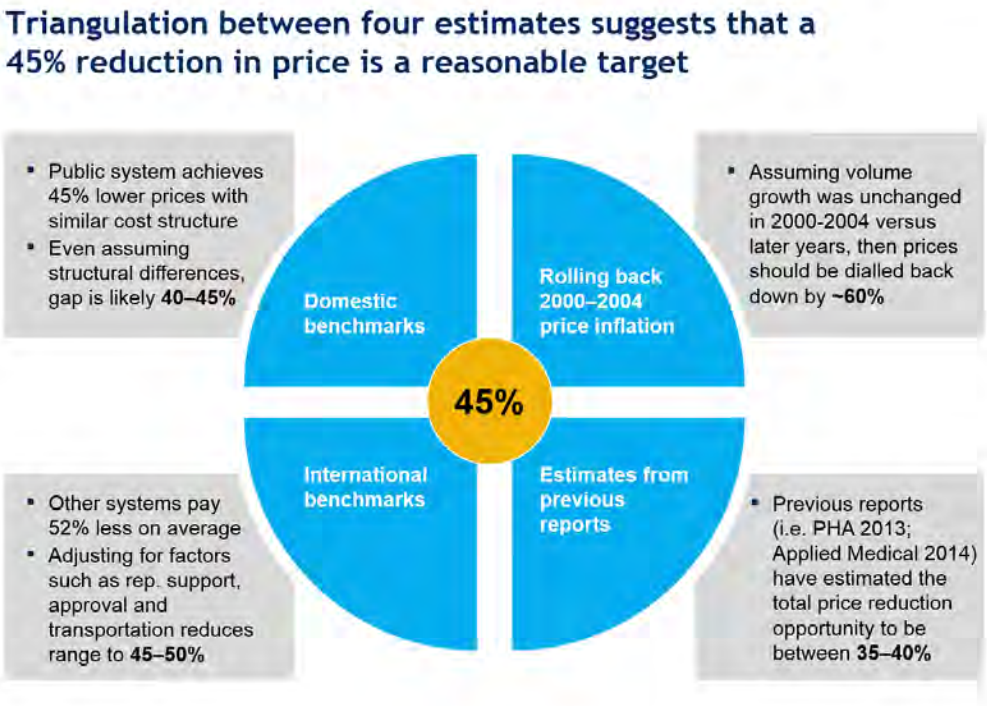
This sizing of the cost of current inefficiencies was determined by comparing four different estimates (see Figure 3):

- **Domestic benchmarking** of prostheses prices published by Western Australia Health for the cardiac, ophthalmic and orthopaedic categories shows that on average, public sector prices are approximately 45 percent below those set by the Prostheses List. To illustrate this gap, an uncemented Zimmer Trilogy cup costs Western Australia Health just under $1,000 less than the listed benefit on the Australian Prostheses List, at $1,939 and $2,900 respectively[10]. This closely matches the hospital-level benchmarking conducted by the Productivity Commission, which found

that public prices were 48 percent below those of the private sector[ii][11].

- **International benchmarking** using data from comparable economies such as France, Japan, New Zealand, the United States, Italy, and Spain lends weight to the domestic findings, with prices found to be roughly 50 percent below Prostheses List benefit levels. In France, for example, a Consulta CRT-P model C3TR01 triple-chamber pacemaker costs €4000 (approximately $5,840), compared with a cost of $13,520 on the Australian Prostheses List[12]. These benchmarks come from a range of sources, with France, Japan and Italy publishing public price lists (in a similar way to Australia), and other country comparisons made possible by price point data from suppliers and hospitals.
- These benchmarks triangulate with the **effects of the price inflation from 2000- 2004** discussed earlier in the chapter, as 2004 reimbursement levels would need to decrease by approximately 60 percent to reach 2000 levels.
- **Previous estimates** have also reached comparable conclusions; Deloitte Access Economics' 2014 report for Applied Medical quantified $592 million waste in the system (implying the potential for a 35 percent price decrease), and a 2013 submission to the National Commission Audit by the PHA estimated a total price reduction opportunity of $700 million (40 percent decrease)[13].

FIGURE 3

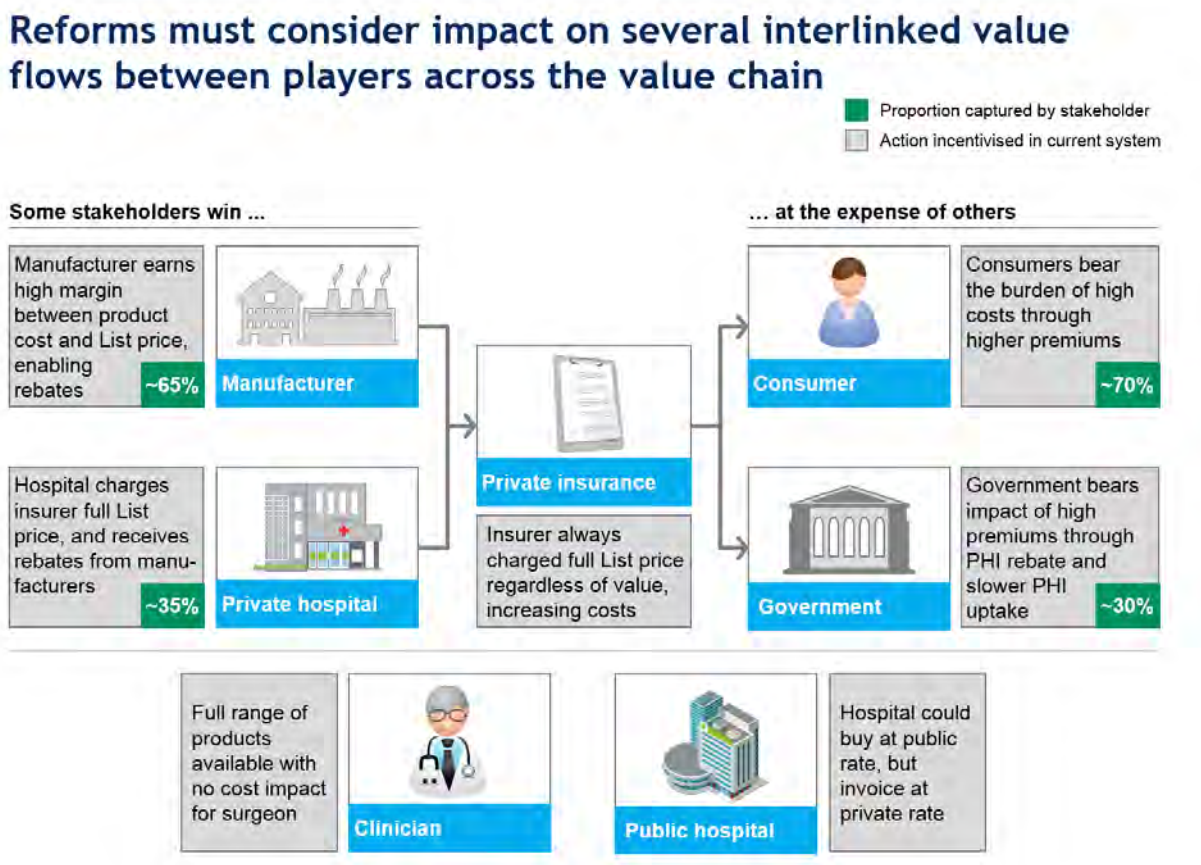


[ii] Refers to differential found between public and private hospitals for prostheses cost per casemix-adjusted separation, using only DRGs with an average prostheses cost over $30 per separation to account for potential differences in procedure mix.

WHO BENEFITS?

When assessing the efficacy of the current system, it is important to consider who wins and who loses under this model. In order to make such an assessment in a fact-based way, it is useful to think about the system in terms of the value flowing from product creation, through to final benefit settlement (see Figure 4).

FIGURE 4



As illustrated above, the prostheses value chain can be broken into a number of stakeholders, each of whom adds value, and captures value, to varying degrees. They include:

- **Manufacturers** add significant value via R&D, device production and logistics. However, they are disproportionately profiting by capturing an estimated 65 percent of the markup above benchmark.
- **Private hospitals** add limited value to the supply chain, primarily sourcing and managing inventory. They, too, are capturing inappropriate rents equaling approximately 35 percent of the markup above benchmark.
- **Insurers** add value by covering the benefit of the item via risk pooling and administering funding arrangements. Their profits are negligible, since device costs are

passed on to consumers through regulated premium increases.

- **Consumers** bear the bulk of the cost – approximately 70 percent – through insurance premiums, but are largely insensitive to the excess payments as they are blended into a single premium payment.
- **The Australian Government** subsidises roughly 30 percent of prostheses costs, regulates the system, and covers the healthcare costs of consumers who drop out of private health insurance because of unaffordable premiums.
- **Other stakeholders** also influence this flow. For example, clinicians often drive product choice, and public hospitals invoice insurers for private patients.

Value is and should be distributed along the chain; however, the system currently tilts that value too heavily towards manufacturers, at the expense of consumers and the Australian Government.

Medical device manufacturer margins are extremely high. In FY15, the top five multinational manufacturers supplying Australian hospitals earned an average gross margin of ~70 percent on their products internationally[14], implying that they are earning a substantial markup even on already lucrative international benchmark prostheses prices. In Australia, manufacturers are also capturing at least part of the additional markup from international benchmark prices to Prostheses List reimbursement levels (with the other portion going to private hospitals in the form of rebates), making it likely that they are earning even higher margins on private procedures in Australia.

Private hospital margins are also high – for instance, a large Australian listed private hospital operator recorded EBITDA margins of 25 percent.[15] By comparison, the average operating margin for American hospitals has ranged between 3.1 and 3.4 percent for the last three years[16] .

One contributing factor to those margins is the sharing of the excess value created between international benchmark prices and Prostheses List benefits through the practice of rebates for providers in exchange for spend volume. While insurers are in theory able to request information on any direct rebates given for particular prostheses and subsequently claim back the value, there are myriad ways of accounting for rebates within a provider/supplier contract that are less overtly tied to particular items, and therefore highly unlikely to be picked up and claimed in practice.

The magnitude of the markup split cannot therefore be quantified exactly, however expert and field interviews have led to an approximation of ~35 percent going to providers (accounting for the wide variability in prevalence of rebates across different categories of prostheses spend), leaving ~65 percent for manufacturers. Private hospitals therefore have an incentive to always charge the List price to insurers and negotiate rebates connected with spend in other ways, and then to drive increased use of those products that attract the greatest rebate.

Some evidence suggests that **Public hospitals** also receive a marginal benefit under the current system, when they invoice private patient insurers for the full List amount, but only pay manufacturers public prices. However, this benefit is estimated to be relatively small, as manufacturers typically charge the full Prostheses List price for privately insured patients in public hospitals.

WHO PAYS?

The ultimate burden of a system that drives inflated prostheses spend is borne by consumers and taxpayers.

Consumers bear most of the excessive costs driven by the current system through higher premiums. Given private healthcare insurance premiums are a function of total benefit spend, an excess value of $800 million flowing out of the system equates to approximately 4.5 percent in premiums for the 11 million Australians who currently hold private health insurance, or $150 a year per insurance policy[17]. Effectively, this means that Australian private healthcare consumers are currently subsidising the corporate shareholders of multinational manufacturers and private hospitals.

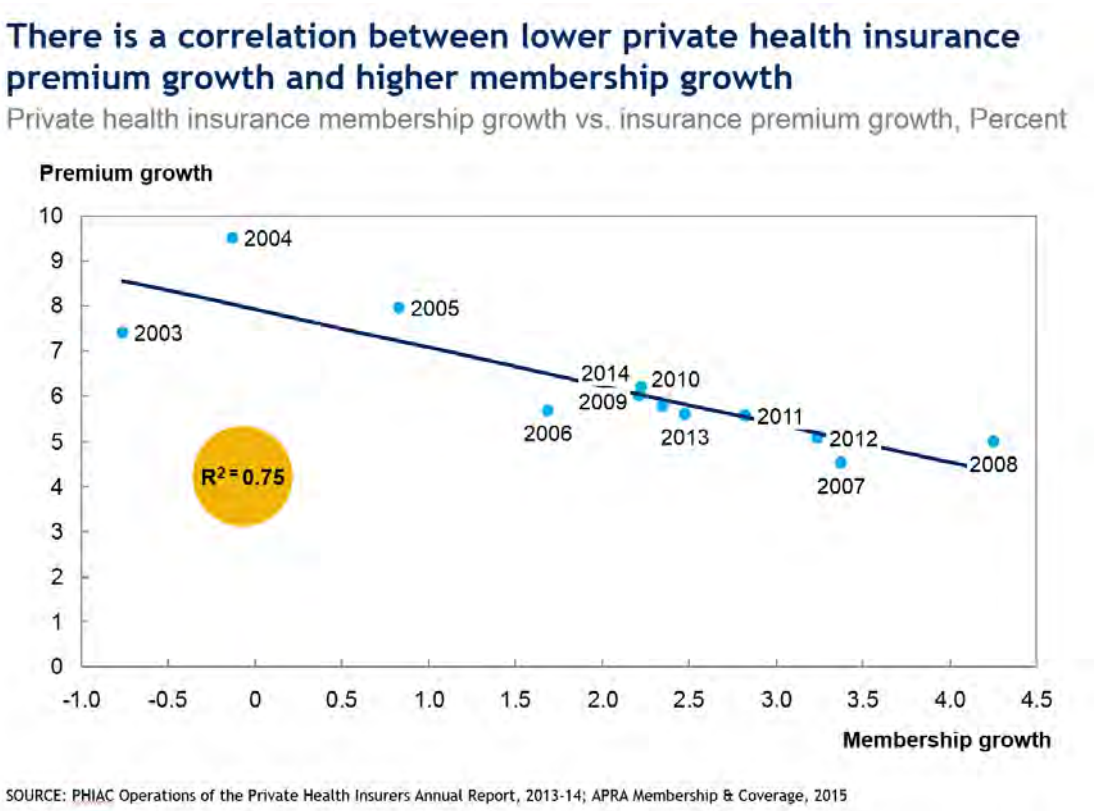
The **Federal Government** has also historically paid a heavy price for the inefficiencies of the current system. Since 1999, the Australian Government has offered a rebate of approximately 30 percent to all Australians with private health insurance, to encourage a shift from public to private healthcare. This means that nearly one third of the excess private healthcare spend that has been passed through to consumers in the form of higher premiums has in fact accrued to public purses. Over time, this additional spend has amounted to a considerable loss to the system – over the past decade, excess government spend on private health insurance rebates due to inflated prostheses costs alone equals $1.7 billion of taxpayer money.[18]

Premiums and PHI participation

Consumers are increasingly hard-pressed to bear these excess costs in Australia's constrained economic climate. For the first time in fifty years, personal disposable income has fallen for four quarters in a row. Debt-to-income ratios have tripled to 152 percent since the 1990s, and nominal wages and real disposable income have flattened, forcing many to tap into personal savings to maintain living standards.

In this environment, consumers are very sensitive to changes in the affordability of high-cost items such as private health insurance, and tend to vote with their feet. Comparative analysis of PHI premium and membership growth over the past decade indicates that a strong negative correlation ($R^2 = 0.75$) exists between premium growth rates and membership growth rates (see Figure 5). This reflects the experience of introducing the Government Rebate, where the 30 percent benefit introduced in 1999 was followed by 15 percent membership growth in just two years.[19] These two data points suggest that for a 4.5 percent decrease in premium growth, ~300,000 additional Australians will take up private health insurance.

FIGURE 5



This correlation highlights another cost borne by taxpayers under the current regime – namely, the cost of providing public healthcare benefits to Australians who would otherwise have taken up private health insurance, or upgraded their insurance to more comprehensive coverage, if premiums were lower. Saving 45 percent of prostheses spend would lower overall private health expenditure by approximately 4.5 percent, encouraging 300,000 additional Australians to take up private health insurance.

Such a shift would deliver two broad benefits to the Australian Government and taxpayers: reduced strain on the public health system, and greater healthcare choice for more Australians. This reduced strain would manifest in improved access to services. To take a simplified example[iii], 300,000 less Australians in the public system could lead to a decrease of over 13% in median wait times for elective surgery (from 36 to 31 days)[iv][20]. It follows that lower premiums would also prompt many existing private health insurance members to upgrade to more comprehensive policies: broader private coverage would further reduce the burden on the public system.

Increased participation in private health insurance could also create up to $276M in net value for government in Australia, via three changes: the avoided cost of treating 300,000 patients in the public system, less the cost of additional private health insurance rebates, and the revenue lost on the Medicare Levy Surcharge.

Assuming an average saving of $3,980 per hospital separation performed in the private system versus the public system[v] and an average of 410 separations per 1,000 Australians[21], 300,000 people shifting to the private health system equates to an additional $493M in avoided public costs. $135M in additional government expenditure due to the ~30% government rebate[22] and $82M in government revenue lost from Medicare Levy Surcharge on non-privately insured Australians (depending on income tier)[23] would then need to be subtracted, to arrive at the net value of $276M. It would then be the task of government to decide how the $493M in value created in the public system would be used: it could manifest as cost savings, or be reinvested to reduce burden on capacity.

In summary, a system that offers rents in excess of international benchmarks to certain stakeholders must necessarily be imposing an undue burden on other stakeholders, and under the current prostheses pricing and regulatory model, it is consumers and taxpayers who lose. Every year, Australians are paying $800 million in excess margins to profit the shareholders of largely multinational manufacturers and providers, and the Australian Government is bearing the burden of an additional 300,000 people relying on public health insurance who otherwise may have switched to private coverage if premiums were lower, estimated at up to $276M a year. It is time to re-evaluate the incentives and value flows in the system to ensure a more equitable distribution for all stakeholders.

[iii] Assumes that migration of patients from the public to private system manifests as a linear, one-off reduction in demand. In reality, the relationship between demand reduction and waiting times is non-linear, and conducting a full flow analysis would likely result in even bigger decreases in waiting times

[iv] Calculation based on 30 people per 1,000 population requiring elective surgery in any given year and approximately 700,000 elective surgeries being performed in the public system each year

[v] Based on AIHW $4,900 cost per separation, taking into account MBS coverage of 75% medical costs across both systems

Reference pricing: bringing benefits in line with domestic and international peers

OVERVIEW OF PROPOSAL

In this section, a reference pricing model is proposed which would adjust reimbursement levels for each clinical category of products to bring them in line with comparable health systems. By defining a basket of common products with domestic and international peers, and accounting for variances in delivery model, exchange rate, etc., this system can ensure that all stakeholders receive fair compensation for their value-add with little incremental overhead required.

Reference pricing is a well-accepted system which is currently used in several countries. For instance, Japan has employed international reference pricing for over a decade (see sidebar). France, Italy, the Czech Republic, Russia and the U.K. are other exemplars of domestic or international reference pricing. In applying this model to prosthesis pricing in the Australian health system, the proposed reform would closely resemble the recent reforms to the Pharmaceutical Benefits Scheme (PBS) where more stringent requirements on price disclosure and international references are expected to yield $3.1 billion in savings by 2018[24].

A concerted effort to introduce reference pricing could yield significant near-term impact; by setting a target of price parity with comparable benchmarks, the Australian Government could reduce expenditure levels by an estimated 45 percent, as described previously. In addition to reflecting external benchmarks, this objective would effectively undo the extreme price inflation of 2001-2004, when benefit levels rose by up to 27 percent every six months.

A 3-year sequence of price revisions is recommended, in order to bring benefit levels in line with benchmark levels as rapidly as possible, while providing adequate time for stakeholders to update their business models and contract terms. To maximise impact, the Australian Government should consider setting the largest decrease in the first year, for example, aim for a 25 percentage point price reduction in that time frame, if data permits.

It is therefore proposed that the Australian Government develop a reference pricing scheme to reduce prostheses expenditure by approximately 45 percent, or $800 million p.a., over three years. The following sections outline the expected benefits of this approach, analysis of risks and considerations, and one potential implementation design based on six key parameters.

Case study of international reference pricing – Japan

Japan uses a prostheses list to control prices for complex or innovative prostheses. Commoditised prostheses, such as sutures or gauze, are included in the cost of the procedure.

Price-setting for a new prosthesis incorporates reference pricing as a part of a multistage process. At the initial stage, a prosthesis is categorised as one of two types – devices that develop existing products and devices with innovative technologies. Prostheses that fall into the first category are benchmarked against existing comparable devices, with premiums for added value. The price of the second category is determined through zero-based pricing which breaks down manufacturer costs.

It is only at this stage that international reference pricing is applied. The price generated by the first stage is compared against those of the US, UK, Germany, France and Australia. If the initial price is more than 1.5 times the international average, it will be reduced by up to 25 percent.

Finally, Japan mitigates against the risk that manufacturers will delay or decline to release new products on the market by applying an additional premium to products that launch in Japan within 180 days of their US release.

Japan has successfully utilised international reference pricing alongside other pricing strategies. The Ministry has cut prices every two years (e.g., by 5.6 percent in 2012) which has held prostheses price growth below health inflation.[25]

EXPECTED BENEFITS FOR CONSUMERS AND GOVERNMENT

As described earlier, a 45 percent average reduction in prosthesis prices would yield significant benefits for the Australian consumer. Premium growth would be curtailed – for instance, if the reduction had been distributed across the past three years, annual premium growth rates would have been lowered by an average of ~1.5 percent per annum. This translates into total run-rate savings of ~4.5 percent per year on private health insurance premiums.

The Australian Government would also greatly benefit from increasing consumer demand for private insurance. The correlation described earlier indicates that a 4.5 percent reduction in premiums could encourage roughly 300,000 Australians to switch to private insurance. Based on this migration, the financial burden on the public system could be reduced by up to $276 million. Additional gains would be derived from consumers upgrading their insurance products, and hence consuming fewer high-cost public hospital resources.

In addition to these direct financial gains, the proposed reform would also yield secondary benefits across the system. New manufacturers will more easily introduce low-cost alternatives into the market, fostering competition. Quality of care is likely to improve with more appropriate provider incentives – the risk of physician influence and unnecessary product usage could decrease as providers receive less excess profit per procedure. Finally, the resources expended in negotiation between the PLAC and manufacturers can be repurposed, as reimbursement levels are set based on an objective fact base.

ANALYSIS OF POTENTIAL CONCERNS AND RESPONSES

The proposed reforms would have significant implications for manufacturers, providers, consumers and the Australian Government. As such, these stakeholders should be involved in all phases of the design, and potential unintended consequences must be carefully examined. A risk

analysis was conducted, divided into structural and clinical downsides.

Structural risks

Three structural risks were identified which could limit the reform's ability to achieve its stated aims: manufacturer exit, increasing gap payments, and price hikes for public hospitals.

Manufacturers will feel the greatest margin pressure, and may threaten to exit the market. While care must be taken to maintain a viable industry for medical technology players, three facts suggest that the risk of supplier flight is relatively low. First, the proposed reform would not reduce prices below comparable benchmarks. There are no evident reasons why prices should be higher in Australia, since transportation costs have been lowered by the shift to Asian production, product representatives assist to a similar degree in other systems, and Australia's distributor network is also comparable. Hence, suppliers should still attain the same margins in the private Australian market as elsewhere. Second, a scan of twelve developed countries did not reveal any instances where healthcare reform, including shifting to a reference pricing model for prostheses, spurred a major supplier exit, nor of disruption to supply. Finally, Australia's exposure to individual suppliers is quite low, with only 1.3 percent of prostheses spend in categories with only one supplier.[26] Thus, manufacturer exit appears to be an acceptably small risk to product supply.

The uncontrolled growth of gap payments could be another adverse consequence, if the current regulation prohibiting manufacturers from charging prices above the Prostheses List benefit levels were loosened. This could adversely impact consumers via growing out-of-pocket expenses, as well as potentially reducing the efficiency of providers and clinicians, who would spend more time discussing product choice with patients. However, 20 percent of prostheses included gaps as recently as 2011[27], suggesting that a moderate level of gap payments could motivate consumers to participate more actively in selecting the right prosthesis. The Australian Government may wish to establish protective measures such as requiring manufacturers to agree to no-gap pricing as a condition of listing.

Potential cross-subsidisation between public and private systems was also examined; manufacturers could claim that the high prices paid by private patients are effectively subsiding low prices in the public system. This is directly contradicted by domestic and international benchmarks (see Figure 2), which have demonstrated that Australia's public system has prices in line with several other countries. Hence there is no evidence to suggest that a decline in private prices should entail a commensurate rise in public prices. In fact, public buyers may benefit from the increased transparency afforded by international benchmarks in their negotiations.

Clinical risks

Three clinical risks were identified: surgeon throughput may be reduced if manufacturers reduce product representative levels in theatres, choice of prostheses may be curtailed by providers, and innovative products could be slower to reach the Australian market.

Manufacturers' product representatives now attend the great majority, perhaps 90 percent, of orthopaedic surgeries. If lower revenues cause manufacturers to reduce their sales force, surgeons may no longer receive the same degree of support. However, interviews with surgeons and international experts indicate that product reps do attend in genuinely necessary cases even in systems with lower price points. Hence, any cutbacks in representative support would likely be limited to 'bread-and-butter' operations, where the surgeon's product knowledge is expected to be more than adequate.

Providers may assert that the loss of revenue from manufacturer rebates creates a financial pressure to constrain physician choice. This logic seems flawed, since the Prostheses List aims to flow payment through providers, eliminating any incentive to narrow suppliers. Furthermore, many private hospitals are already narrowing choice, for instance, nearly 50 percent of private providers purchase knees from only one or two manufacturers.[28]

Finally, manufacturers may claim that lower reimbursements will choke the supply of next-generation technology. While it is important to preserve access to such products, other countries are doing so at lower prices – matching their reimbursement levels, if carefully managed, can maintain a flow of innovative products without overpaying for their benefits.

KEY PARAMETERS OF THE PROPOSED DESIGN

The success of the proposed reference pricing reform will largely depend on the quality of its design and implementation. Six key parameters have been analysed below in order to permit a more comprehensive evaluation of the proposal and to accelerate progress towards a more sustainable pricing model (see Figure 6).

FIGURE 6

Six key parameters of the proposed reference pricing model

	Recommended solution
Data source	▪ **Combine domestic and international benchmarks** from high-performing, comparable healthcare systems with reliably available data
Calculation methodology	▪ **Set target levels as the best-practice** of product prices in reference health systems, extending to clinically equivalent products where necessary
Integration with current criteria	▪ **Gradually increase weight** of benchmark pricing to create a predictable transition period for business models and industry dynamics
Operating model	▪ **Codify a more transparent price-setting process** for an independent body, including clear points of interaction for each stakeholder with vested interests
Governance structure	▪ **Ensure appropriate involvement** of clinical, policy and industry bodies in each phase of managing prostheses, from overseeing the price-setting reform to evaluating and delisting products
Sequence of roll-out	▪ **Parallel-process** all categories where data is available over three years from May 2016 (as opposed to category-based sequential roll-out)

1. Data sources. To ensure that prostheses benefit benchmarks remain accurate and relevant, the Australian Government could consider adopting a PBS-style approach, wherein manufacturers must provide reference price points from other countries as part of their submission to the TGA or PLAC. The PLAC should define confidence criteria to determine when a benchmark may be used, and assess this independent of industry input. The inclusion of manufacturer catalogue numbers for each item in the Prostheses List would also facilitate cross-referencing.

If a PBS-style approach is unachievable, a secondary method of determining benchmarks would be to identify target systems by evaluating three criteria: their performance in achieving best-in-class benefit levels, their degree of comparability with the Australian health system, and the availability of comprehensive data. An initial assessment suggested that high-potential

systems include the Australian public system, the U.K., France, Spain, Japan, large U.S. health systems, and/or Sweden. Appendix B includes a case study illustrating the availability of comparable data for France.

As next steps, it is proposed that the Australian Government explore the PBS model of soliticing reference data from manufacturers, as well as looking into public and private sources of benchmark data.

2. Calculation methodology. Several formulae are employed for reference pricing worldwide, typically at the product level. The most common are average, median, or minimum prices from the benchmark set. It is proposed that reimbursement levels be set to the minimum benchmark price achieved in comparable systems, in order to ensure that consumers are paying efficient prices for prostheses. Where data is not available for a given product, three options exist: either the manufacturer can supply reference prices as described above, or prices of clinically equivalent products can be used, or similar products may be used as a starting point, with the supplier asked to justify any price premium. A mechanism should be added to adjust for currency fluctuations. The experience of other international reference pricing systems indicates that average exchange rates from the past three years should be used.[29]

As a next step, the Australian Government could define the formula which will be employed – potentially adopting the common minimum-of-comparable-systems formula.

3. Integration with current pricing levels. To smoothly progress towards full benchmark pricing, it is proposed that the PLAC define both current and target reimbursement levels for each product. A simple step-down mechanism can then be used to define interim reimbursement levels during the transition period. For instance, the first change to reimbursement levels could close half of the gap between current and target reimbursement levels, with the second half closed over the following one to two years. Exceptional cases, such as brand-new products, may be assessed separately, although clear guidelines should be set to ensure that this channel is limited to less than 5 percent of submissions.

As a next step, the Australian Government could define the step-down function to smoothly move reimbursement levels to benchmark in the near-term.

4. Operating model. Under a reference pricing scheme, the PLAC would function with a narrower focus of activities. Its price-setting functions would be simplified to administer reference pricing and rule on exceptional cases. The PLAC's composition and interaction points with industry could be restructured to ensure that reimbursement levels are set objectively as intended. This would involve a rebalancing to ensure equal representation of insurers to combined manufacturers and providers (who are frequently aligned), with a dominant representation of health economists and clinicians. Manufacturers would be invited to contribute input to the process via three clear steps – first by providing information during the submission, then by presenting to the PLAC prior to price-setting for high-spend products, and finally by choosing whether or not to accept the set benefit level.

The final proposed change would be to strengthen the delisting role of the PLAC. Under the current model, products are rarely delisted and outcomes may be compromised by clinicians continuing to use obsolete products. This is discussed further in the 'Complementary recommendations' section below. Patent expiration could be another trigger for review of relative clinical effectiveness and reimbursement level-setting.

As a next step, the Australian Government could refine the mandate, composition and processes of the PLAC in collaboration with affected stakeholders.

5. Governance structure. A steering committee of five members (three senior policymakers and representatives from the Medical Technology Association of Australia and Private Healthcare Australia) should be

established to review progress 2 months before the release of each Prostheses List. A balanced scorecard of performance metrics should be established to assess progress on average reduction of benefit levels, maintenance of adequate supply, control of gap payments, PLAC backlog, overhead cost of PLAC, and delisting of obsolete products.

As a next step, the Australian Government could establish this body, including a charter and performance scorecard.

6. Sequence of roll out. It is proposed that the 3-year timeline described above commence in May 2016, via inclusion in the national budget. Reimbursement levels should be adjusted as of the August 2016 Prostheses List for all products with reference prices meeting the defined confidence criteria. The benchmarking should initially focus on setting the right prices for the 500 prostheses that comprise 75 percent of total expenditure. The set of products with reference prices should be re-evaluated six weeks before the release of each Prostheses List to ensure that benchmarks are incorporated as soon as possible.

As a next step, the Australian Government could lay out a timeline of key milestones, objectives and priorities for the implementation of reference pricing.

To summarise, we propose that the Australian Government develop a reference pricing scheme based on domestic and international benchmarks from May 2016 to 2019. The key success factors include a robust methodology to obtain and calculate reference prices, a more objective process and team composition for price-setting, and a clear roll-out plan for smooth and predictable change. This investment would be amply justified by the benefits to consumers and government, and would bring Australia's pricing practices and performance in line with other developed countries.

Broader vision of a best-in-class health system

RATIONALE FOR BROADER REFORM

While the reference pricing model outlined above addresses the primary challenge of price disparities between Australia and peer health systems, three major inefficiencies would remain unresolved:

- Manufacturers would continue to operate with limited incentives for price competition. Central determination of benefit levels would lead manufacturers to negotiate with the Australian Government for higher prices, but to otherwise maximise pricing to providers.
- Knowledge would remain asymmetrical regarding the relative merits of the prostheses available, limiting providers' ability to choose the optimal prosthesis for any given situation.
- Providers would have no incentive to ensure that cost-effectiveness is factored into prosthesis selection.

A value-based reimbursement model can more effectively align incentives around selecting the right product for the right patient. Numerous health systems around the world have integrated the cost of prostheses into a broader episode of care, creating strong incentives for providers to improve both outcomes and cost-effectiveness.

Broadly speaking, two types of 'value-based reimbursement models' can be considered: reforms can target episode/unit cost management, or take on the holistic management of utilisation and total cost of care. As presented earlier (Figure 1), the market appears to have responded to fixed reimbursement levels by increasing volume utilisation following the re-introduction of the Prostheses List. This suggests that the Australian healthcare system could benefit from a holistic solution to address the utilisation of healthcare resources. However, this paper will focus on potential reimbursement mechanisms to control unit costs within each episode of care, as these measures are likely to be more readily implemented and drive near-term impact.

Various models have been adopted abroad. For instance, France, Germany, the US and the UK all generally embed prosthesis reimbursement into Diagnosis-Related Group (DRG) episodes (see the France example in sidebar). More recently, American bundled payment programs are integrating prostheses payments into an episode of care, negotiated by HMOs, providers and GPOs. Spain includes prostheses costs into hospitals' global budgets. Sweden has instituted a centralised program for value-based reimbursement, including significant narrowing of reimbursed products and standard follow-up on orthopaedic cases.

ONE VISION FOR VALUE-BASED REIMBURSEMENT

The basic concept of 'paying for the package, not for the piece' is well-established; labour and other costs are already integrated into a single DRG-based reimbursement for procedures involving prostheses, and DRG service weights are widely used in the public sector for budgets and funding allocation.

Integrating prostheses devices into a bundled payment could unlock value by encouraging competition among manufacturers, since providers would no longer pass on product-specific prices to insurers and would therefore be incentivised to control procedure costs.

With the management of costs in the hands of the providers, those providers that can both control product proliferation and optimise clinician needs in the context of medical device costs would benefit. Hospitals that failed to control product proliferation and/or struggled to engage clinicians and manufacturers would see their financial competitiveness decline. Critically, hospitals would be required to engage more actively with surgeons to balance the best outcomes for their patient with their individual accountability for cost to the hospital. The hospital would be required to shift from being passive cost centres

(or even misaligned operators). The ensuing clinical dialogue would be likely to improve costs and patient outcomes.

Operationalising this solution appears very feasible. Instead of relying on a Prostheses List to set the minimum benefit per product, the Australian Government could limit regulation to requiring suppliers to agree to low- or zero-gaps for patients on items that are listed. By legislating this requirement, hospitals and manufacturers would be pressed to agree on mutually satisfactory prices and protect against consumer cost inflation. The role of the PLAC would thus be limited to obtaining agreement on gap conditions, and identifying the link to a valid MBS item number. Application for listing would be predicated by approval by the TGA.

MBS item numbers seem preferable to DRGs as a basis for prosthesis value funding. Some DRGs contain several subtypes of procedures, which may differ significantly in prosthetic device needs. Hence, a single blended reimbursement level per DRG for prostheses would be complex to calculate, and some hospitals may 'cherry pick' subtypes with low prosthesis outlays. MBS items, however, are much more granular and better-suited to match prosthesis needs to a given procedure. Furthermore, the Prostheses List already includes a valid MBS item for each prosthesis on the list.

The Australian Government may have a role to play in ensuring fair determination of the prosthesis value assigned to each MBS item. These price points should be connected to comparable benchmarks, while ensuring that surgeon's product choice is not unduly inhibited. Regulation may also be required to determine the regular revision of these values (e.g., refresh benchmarks every two years) and to ensure that procedures do not result in multiple MBS numbers with prosthesis costs. Once the system stabilises, a further de-regulation could see insurers and providers independently negotiating prosthesis values for each MBS item.

Such changes could also support the Australian Government's broader reform agenda. For instance, the ongoing MBS review aims to transform Medicare reimbursement into 'a contemporary tool for helping drive best practice in healthcare, not just in primary care but across the system ... it could potentially change the way treatment is organised for patients', according to Dr. Bruce Robinson, the review lead.[30]

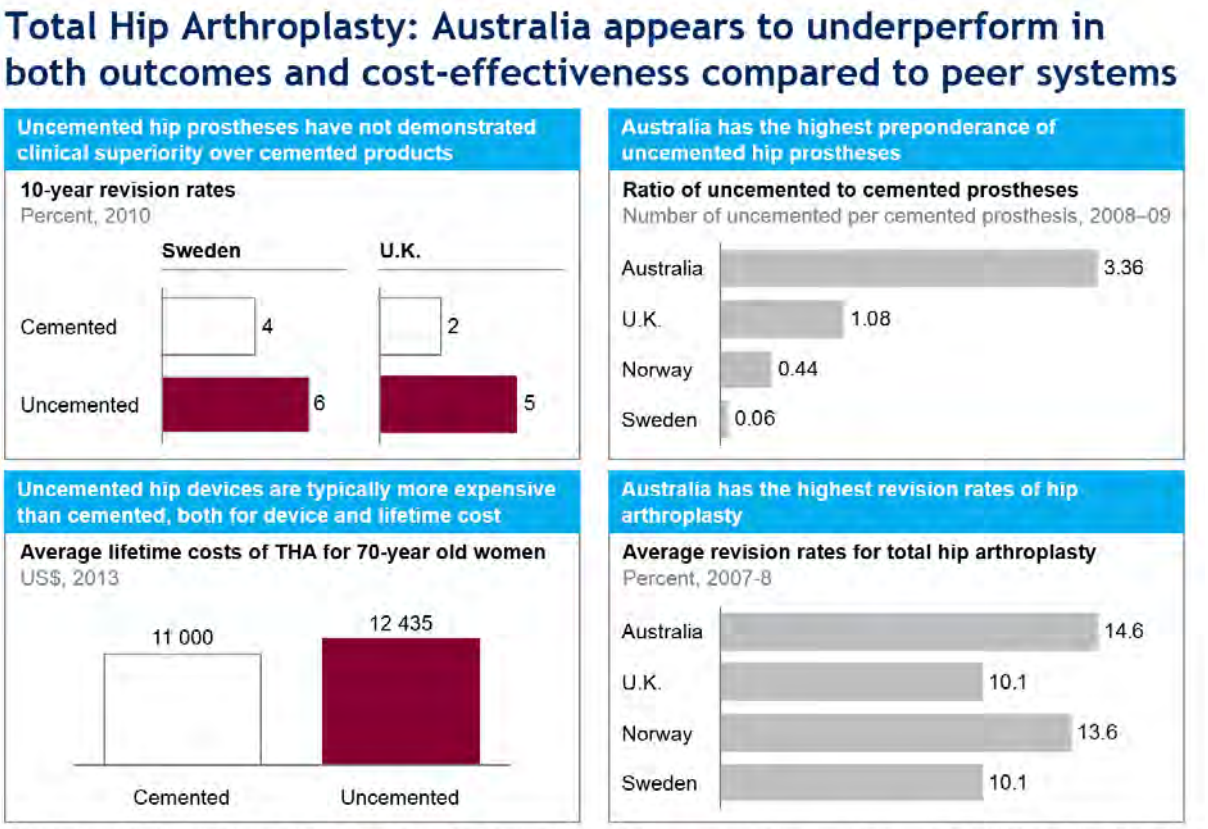
POTENTIAL ADDITIONAL BENEFITS OF EPISODE-BASED REIMBURSEMENT

Value-based reforms have been proven to improve outcomes and cost-effectiveness by aligning incentives in numerous health systems. For instance, a Swedish university hospital reduced waiting times by half, increased patient satisfaction from 85 to 91 percent, and reduced complications by 20 percent.[31] The American CMS is also building on successful pilots to mandate bundled payments for hip and knee replacements in 75 major geographies.[32] Leading providers, such as Brigham and Women's, have collaborated with surgeons to agree on three low-cost knee prostheses, with only a few, clinically-justified exceptions, reducing knee-implant costs by half.[33]

To illustrate the potential benefits for Australians, two examples are developed below. First, a comparison of hip prosthesis selection, and second, an analysis of stent usage in Australia versus international benchmark. In both cases, incentives could more effectively motivate decisions that improve both outcomes and cost-effectiveness to bring Australian performance in line with clinical benchmarks on product selection. It is important to note that these examples are illustrative and the impact of such unit cost-based reimbursement reforms would depend on the local patient population and latest evidence-based treatment standards.

Australia's current system aims to maximise quality of outcomes by eliminating cost considerations from prosthesis selection. However, the example of total hip arthroplasty (see Figure 7) illustrates how misaligned incentives may be leading to suboptimal quality and cost-effectiveness performance.

FIGURE 7



SOURCE: Swedish Hip Arthroplasty Register 2010, R. Kallala, et al, 'The cost analysis of cemented vs cementless total hip replacement operations on the NHS' (2013) 95 *Bone Joint Journal* B; F. Malassi, et al, 'Cemented versus cementless fixation in total knee arthroplasty' (2013) 1 *Joints* 121, E.J. Griffiths, et al, 'Cost savings of using a cemented total hip replacement: an analysis o the National Joint Registry data' (2012) 94 *Journal of Bone and Joint Surgery* 1032

A comparative assessment of joint registries found that Australian surgeons favour uncemented hip prostheses to an unusually high degree. While these enable higher throughput by reducing operating time by up 20 minutes[34], they tend to have significantly higher price points than cemented prostheses: a 2013 study in the BMJ found average costs in the UK of £739 for a cemented prosthesis versus £1697 for a cementless prosthesis.[35] Furthermore, most research has found higher rates of revision in uncemented prostheses.[36] This may contribute to the measured outcomes: Australia has higher revision rates than available peers.[37] This may be partly due to the current incentive system, which rewards surgeons for increasing procedure volume, but not for achieving lower revision rates or optimising cost.

Researchers have found that increasing usage of uncemented prostheses may be due to 'intensive marketing of more expensive uncemented implants.'[38] Hence, the frequent presence of manufacturer reps in Australian theatres may help explain the high usage rates of these devices. While a scan of European countries indicates that medical device reps traditionally attend the majority of procedures, the United States is notable for its recent efforts to limit the influence of reps; most hospitals now only allow medical device reps to interact with the purchasing department.[39]

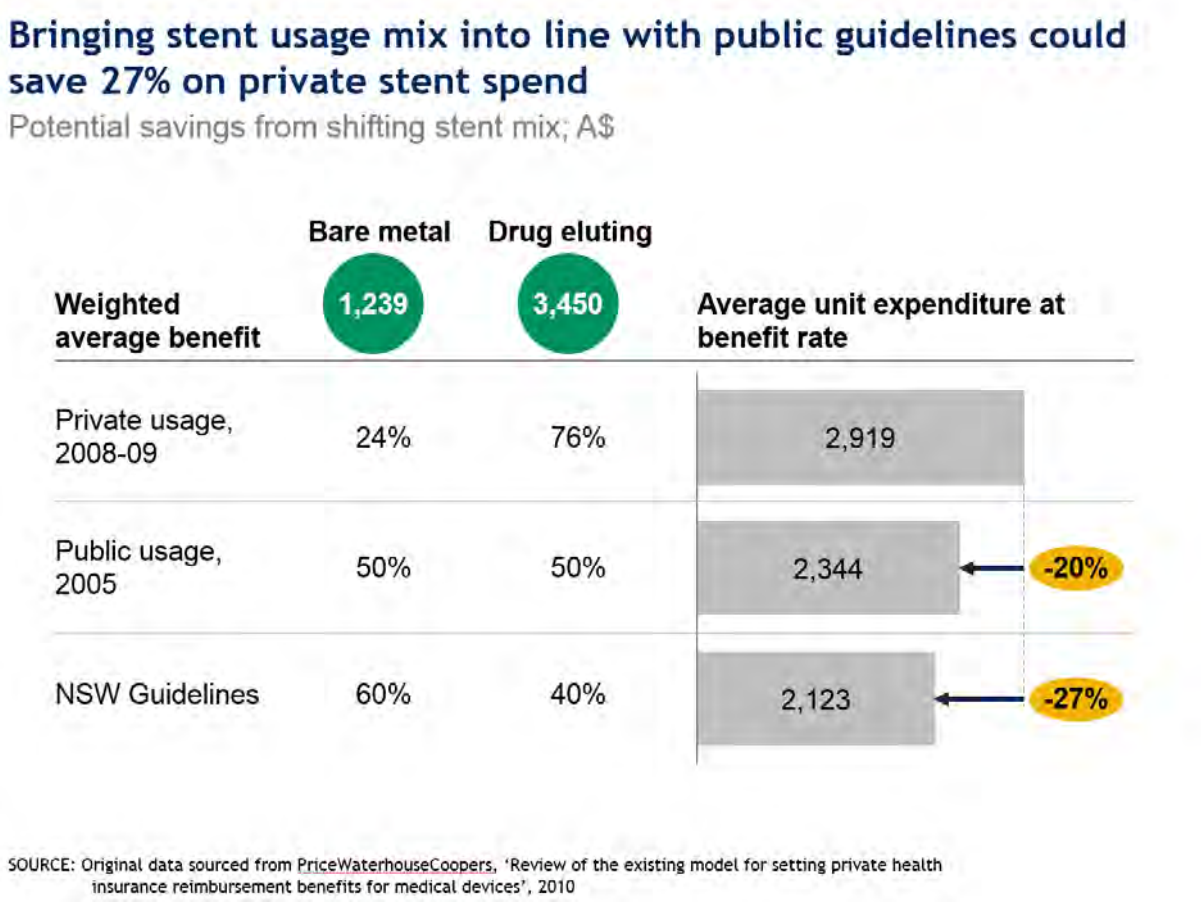
As a second example, drug-eluting stents are significantly more prevalent in Australia than in other countries that have different reimbursement models.

Drug eluting stents are often two or three times more expensive than bare metal stent alternatives.

When first introduced into the market, they appeared to bring benefits that sometimes justified the price difference, however more recent evidence suggests that these benefits were at least overstated, and that they may even be less effective than bare metal stents in certain situations. A 2006 UK study found that drug-eluting stents were acceptable on a cost/utility basis in only 4 percent of cases.[40]

However, drug-eluting stents account for ~76 percent of stents used in Australian private hospitals – above the public domestic benchmark of 50 percent, and almost double the NSW Guidelines of 40 percent.[41] Based on the weighted average difference in benefits, private stent spend could be reduced by 20 to 30 percent if price signals were introduced into the private market that brought stent usage in line with public practice (see Figure 8).

FIGURE 8



SOURCE: Original data sourced from PriceWaterhouseCoopers, 'Review of the existing model for setting private health insurance reimbursement benefits for medical devices', 2010

Case study of value-based prostheses reimbursement – France

In France, prostheses costs are reimbursed as part of an episode of care or diagnostic related grouping (DRG). In arriving at the appropriate price level for a DRG, the Ministry considers average prostheses costs across comparable French hospitals. As pricing data is reported on a voluntary basis, gathering reliable data remains a key challenge. In 2012 for example, 16 percent of hospital cases formed the basis of domestic benchmarks. However, participation is increasing.[42]

Hospitals are ultimately responsible for the overall cost of a DRG. They are therefore incentivised to negotiate the best possible price for prostheses. Any savings from price reductions beyond benchmark levels are shared evenly between providers and insurers, although adherence to this policy is inconsistent.

The DRG system has encouraged hospitals to make cost-effective clinical decisions. A comparison of French and Australian list prices indicates that, on average, similar prostheses are 40 percent less expensive in the French market.

Complementary recommendations

While this report focuses on mechanisms to ensure benefit levels are set fairly and efficiently, a cohesive reform package could also include the following measures to improve clinical safety, competition, and decision-making. Three categories of complementary recommendations are presented, addressing removal of underperforming products, refining the scope of the Prostheses List, and improving decision-making processes, outlined below.

Remove underperforming products from the Prostheses List

Products with poor clinical outcomes should be removed from the Prostheses List. However, currently the list does not adequately safeguard clinical safety and patient outcomes beyond the initial listing stage. The following measures would allow better assessment of the efficacy of products:

- Clinical effectiveness measures need to be monitored, re-evaluated, and acted upon
  - Items should be regularly reviewed to ensure clinical safety and patient outcomes
  - A registry, similar to the National Joint Replacement Registry, should be established for high risk prostheses[vi]
  - Underperforming prostheses (e.g. those with higher than acceptable revision rates) should have their Australian Register of Therapeutic Goods (ARTG) certificate revoked
  - Patients and surgeons should be better informed through the establishment of publicly-accessible comparative effectiveness reviews
- Costs associated with product failures should be met by manufacturers
  - If a product fails or is recalled during the guarantee or recall period, any associated costs should be met by manufacturers. Currently, hospitals have little incentive to follow up product guarantees and tend to bill insurers for all revisions, regardless of failure reason.
  - Manufacturers should be required to have appropriate levels of insurance to meet these costs in order to receive an ARTG number or be registered on the Prostheses List. This recommendation responds to the recent high profile example of the liquidation of Medical Vision following the recall of PIP breast implants.

Refine the scope of the Prostheses List

The Prostheses List needs to be better aligned with its initial aim of regulating the benefit levels for a specific category of medical products. It should provide adequate information, on items that are clearly defined as qualifying prosthesis items (see Appendix C for suggested revisions to the definition):

- Commoditised items which are subject to a high degree of competition should be removed from the Prostheses List
  - The current Prostheses List includes over 10,000 items, many of which sit outside the generally accepted definition of 'prostheses'
  - The original intent of the List was to regulate only those products which were 'advancing the edge of their discipline', 'surgically implanted', and 'expensive',

[vi] "High risk" refers to class 2A devices, class 3 devices, and active implantable cardiac devices.

however the List has expanded to include items that do not require strictly regulated pricing

  - As a result, market forces are constricted for many commodity products (e.g. gauze or sutures) that would benefit from increased competition

  - Furthermore, some products are already included in theatre fees/episodic payments/other hospital payments, yet are also included on the Prostheses List. This results in private health insurers paying for the same item twice

- All relevant information, including catalogue numbers and warranties should be included on the List to better identify the prostheses covered by a billing code

  - Manufacturer catalogue numbers would be of particular utility in facilitating reference pricing

  - Hospitals should be able to identify when product failure falls within manufacturer warranty periods

Improve the decision making process

The structure and processes of PLAC decision-making should be fair and efficient – it needs to respond to changing markets and technological innovation. Steps towards such improvement could include:

- The same clinical assessment process should be applied to incremental changes to currently listed items as to new items for listing

  - The current system creates unfair advantages for established manufacturers over manufacturers attempting to create a generic version of an existing product

- Private health insurers' representation on the PLAC should be increased from two to four members

  - There are currently 16 PLAC members. Alongside PHI representatives, there are two hospital representatives, four doctors, two sponsor representatives, one consumer representative, two Department of Veterans' Affairs representatives, two health economists and the chair

  - It is appropriate for private health insurers to have greater input into the pricing of prostheses given that they ultimately bear the cost of PLAC decisions

CONCLUSION

Now is the time to reform prostheses pricing. Private health insurance is becoming increasingly unaffordable in a challenging financial environment, putting more pressure on the public system. Australians are paying nearly twice the benchmark price for prostheses, reducing consumers' disposable annual income by $800 million. Furthermore, setting efficient benefit levels for prostheses could also alleviate up to $276 million in financial pressure on the public system by making private insurance more affordable. All that is needed to unlock this potential is to enhance the PLAC with a fair and effective reference pricing scheme, bringing Australia in line with other health systems.

In the longer term, Australians may also benefit from the aligned incentives and increased competition of a value-based reimbursement model. Manufacturers, providers, surgeons, insurers and patients alike could better partner to ensure that the right prosthesis is being implanted into the right patient at the right price. Embarking on such a reform would require significant consultation with all stakeholders, to ensure that quality of care remains at the heart of clinical decision-making and that the desired outcomes are achieved.

By rapidly implementing an effective reference pricing scheme in the short-term, and creating a shared long-term vision for reform, the Australian Government can take a significant and low-risk step towards making healthcare more affordable for all Australians.

Appendix A: Prioritisation of potential reforms

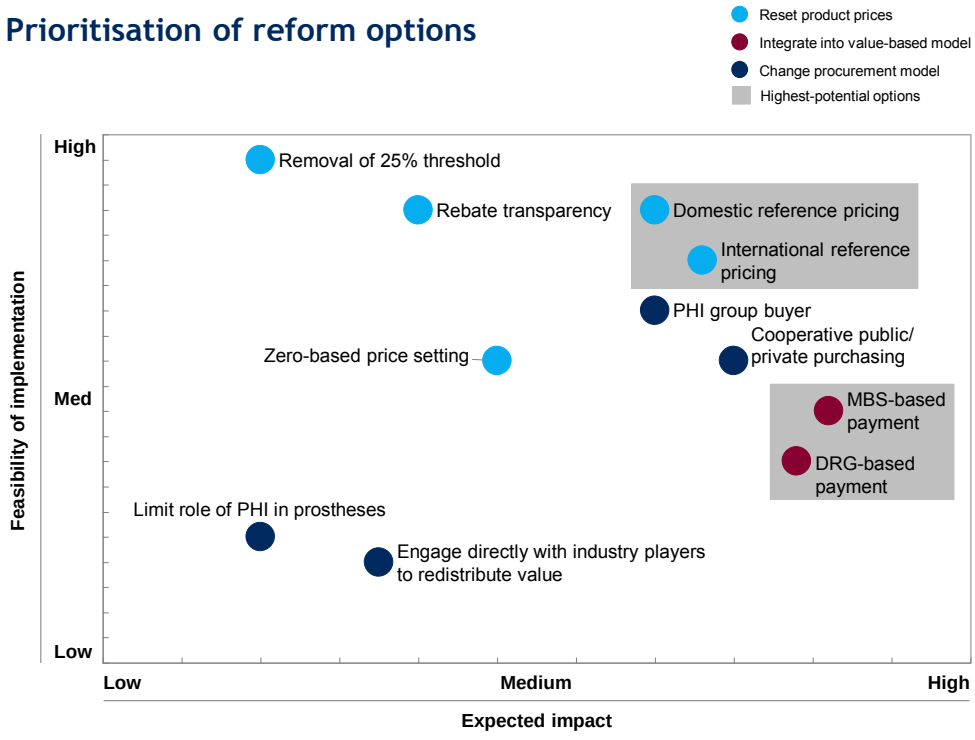
SELECTION AND EVALUATION OF POSSIBLE MODELS FOR REFORM

An international survey of prostheses pricing mechanisms revealed 11 potential options for reform. The relative strengths and weaknesses of each option were evaluated in the context of the Australian market. Each option was assessed against seven criteria along two dimensions: first, its potential to deliver significant impact (including magnitude, fairness, creation of incremental value, and timing), and second, the ease of implementation (including viability for all stakeholders, operational complexity and downside risk) The results of this exercise are illustrated in Figure 9, below.

These models should not be considered mutually exclusive alternatives. Different models can be complementary, either simultaneously or as part of a gradual timeline for broader reform.

The strengths and limitations of the most promising avenues for reform – reference pricing and value-based pricing – are discussed above. Each of the alternative models for reform is briefly evaluated below.

FIGURE 9



ZERO-BASED PRICING

Zero-based pricing would retain the Prostheses List while re-setting benefit levels based on a close interrogation of manufacturer costs. This mechanism has the potential to significantly reduce prostheses benefit levels, limiting the scope for rebates to providers and excess margins for manufacturers.

However, this model would be difficult to operationalise as it depends on manufacturers to divulge their cost of production. The burden of securing accurate cost data would primarily fall on the PLAC which is already tasked with a significant workload. Furthermore, there is a significant downside risk to this proposal. Manufacturers would have a strong incentive to overstate costs, effectively 'padding' the minimum benefit amount and concealing their actual cost base to maximise profitability.

PRICE TRANSPARENCY

Price transparency requires providers to disclose the actual prices paid for prostheses. Although this model does not address inflated manufacturer margins, hospitals would no longer be able retain excess value in the form of rebates. If hospitals regularly negotiated discounts on Prostheses List benefit levels, the PLAC would be expected to use this disclosed information to gradually reduce minimum benefits.

In practice, providers would be unlikely to reveal the full extent of discounts on minimum benefit amounts. Due to the prevalence of block purchasing arrangements, it would be difficult to identify savings on any particular list item. Furthermore, excess margins to providers may take the form of non-cash incentives such as free consumables and product representative support in the operating room.

REMOVAL OF THE 25 PERCENT MARKET SHARE THRESHOLD

Removing the 25 percent threshold would allow reimbursement levels to reflect the prices of small, low-cost manufacturers. Currently the PLAC uses the prices of manufacturers with a minimum 25 percent market share to determine the minimum insurer reimbursements. This threshold is designed to ensure that benefits are set at a level where the market will be supplied. However, the threshold currently operates to entrench large, incumbent manufacturers and prevent newer, low-cost manufacturers from putting downward pressure on benefit levels.

This measure may be a worthwhile complement, but alone is unlikely to close the gap to benchmark systems. Research and interviews indicate that there are a limited number of manufacturers who are attempting to compete on price. The price impact of low cost manufacturers entering the market would also be moderated by the need to reliably supply the market and ensure equivalent quality.

FORMATION OF COOPERATIVE PURCHASING AGREEMENTS BETWEEN PUBLIC AND PRIVATE HOSPITALS

Allowing public hospitals to purchase on behalf of their private counterparts would allow private patients to share in the discounts negotiated by the public system. Given that prostheses purchased by the public system are approximately 40 percent less expensive than Prostheses List benefit levels, this would offer significant savings to consumers. Additional savings could be driven by the combined bargaining power of the public and private system.

However, this course of action is unlikely to garner the necessary support from the public system. By adding high-price private volumes to low-price public volumes, manufacturers could demand higher average prices than current public levels. One potential path forward would be for motivated public buyers to explore the incremental discounts that manufacturers would be willing to offer for the additional volume of private insurers.

FORMATION OF GPO BY PRIVATE HEALTH INSURERS

The formation of a group purchasing organisation (GPO) by private health insurers would better

align incentives by placing purchasing decisions in the hands of payers. This proposal addresses the core structural disadvantage of the current model, which creates little incentive to reduce costs by those who control purchasing decisions (clinicians and hospitals).

There is, however, a sound rationale for the current basic purchasing structure. First, hospitals are better able to respond to the clinical needs of doctors and negotiate appropriate product choice. Product purchasing that is further removed from practitioners may face resistance from doctors. Secondly, there are potential legal complications to this model. PHIs would need to mobilise their combined purchasing power to avoid the rise in benefit levels that occurred in 2001-2004 (where PHIs negotiated individually with large multi-national manufacturers). This would require active collaboration with regulators to ensure that Competition Law is fully respected.

LIMIT ROLE OF PRIVATE HEALTH INSURANCE REIMBURSEMENT IN PROSTHESES

Given that prostheses tend to be less expensive in public hospitals, prostheses spending could be reduced by shifting an increasing share of prosthesis activities to the public system. However this reform would likely have wide-reaching, negative effects on the health system. Lengthy waiting times for elective procedures would only increase, private hospitals would lose a source of revenue, public healthcare expenditure would increase, and private insurance would become less attractive for many consumers.

ENGAGE WITH OTHER INDUSTRY PLAYERS FOR A MORE EQUITABLE DIVISION OF VALUE

Cooperation between private health insurers and manufacturers could reduce excess margins and pass on savings to consumers. For example, manufacturers could agree to pass on a proportion of costs savings to insurers, rather than providing rebates to hospitals.

However, any savings would be limited to excess margins currently flowing to providers. There would be little incentive for manufacturers to voluntarily reduce their own margins. This is only exacerbated by the fact that individual health insurers with no control over product choice would be in a weak bargaining position relative to manufacturers.

Appendix B: Benchmarking methodology

Given the important consequence to the industry and government of any price benchmarks published in this report, every effort was made to take a rigorous and data-driven approach. Further detail is provided below on the sources and methods used for each stage of the benchmarking analysis.

AUSTRALIAN PRIVATE BENEFITS

Prices paid by private health insurers in Australia were drawn from the August 2015 Australian prostheses list, available online at: http://www.health.gov.au/internet/main/publishing.nsf/content/prostheses-list-pdf.htm.

WEIGHTING BY SPEND

In order to arrive at an accurate comparison, each item's minimum benefit was weighted by the overall spend on that item, as measured through aggregated 2014 Australian private health insurer claims data. This process ensured that items could not be deliberately selected to bias the results towards products with extreme price differentials.

DOMESTIC BENCHMARKS

Western Australia Health public hospital procurement data was used as an indicator of prostheses prices in Australian public hospitals. Spend-weighted prices for a basket of 41 prostheses SKUs were compared, to arrive at an average benchmark. Of the 41 SKUs, Prostheses List process were lower for only two SKUs and higher for the other 39 – ranging from being 0.9 to 5.2 times the level of the Western Australia Health price points. As publicly available Western Australia data is limited to particular categories, only cardiac, ophthalmic and orthopaedic prostheses were examined. These three categories represent approximately 34% of overall private health insurance prostheses expenditure. It should be noted that the data is currently limited to Western Australia Health. It is possible that public hospital buying groups in more populous states (e.g. Health Purchasing Victoria) have different - and potentially lower - prices, but information is not yet publically available for these groups.

INTERNATIONAL BENCHMARKS

Prostheses pricing data from the United States, New Zealand, Spain, Japan, France and Italy was used to determine an international benchmark of prostheses prices. A spend-weighted basket of 50 prostheses SKUs from hip, cardiac, and general miscellaneous categories was analysed, representing 42% of total prostheses spend. A rolling 12-month average was used to determine each exchange rate used in the analysis. Of the 50 SKUs, Prostheses List prices were only lower for one SKU and higher for the other 49 – ranging from being 0.8 to 5.3 times the level of international price points. Given the benchmarks across the countries provided a wide range of data points, a weighting was assigned to each based on the number of items making up the sample, the representation of prostheses categories in the sample, and the country's level of comparability with Australia, to arrive at an overall benchmark.

Case example: Referencing the French Prostheses List

France provides both comparable and accessible data that could be used in international reference pricing. The French system employs a DRG model for financing medical devices, informed by a publically available benchmarked price list called the SPP. The list includes both general items (for commodities), and manufacturer-specific items (for products that are demonstrated to be materially distinct from the closest device in their category). It is available online - searchable by unique code and category - as well as being downloadable in full.

The SPP is divided into four overall sections, of which section 3 is a direct match to the Australian Prostheses List:

Title I: Medical devices for treatments and devices for life care, dietetic food and dressing articles

Title II: External prostheses and orthotics

Title III: Implantable medical devices & human tissue

Title IV: Physical handicap vehicles

Under Title III, items are first categorised by material type (ie. disposable synthetic; disposable derivatives and animal tissue; human tissue; active devices), then divided by area of medical specialty. This categorisation differs slightly from the Australian Prostheses List, which divides directly by area of medical specialty (see Figure 10), but is similar enough to enable relatively straightforward matching of items using the French online category sorting tool, and/or keyword searches. While neither the French nor the Australian list uses a common internationally recognised manufacturer code, once a match is found then the French and Australian unique codes can be linked, to enable continued tracking and comparison.

For any group looking to compare French and Australian item prices, the suggested process to follow would be:

1. Search for each item by manufacturer name and description in the French list. If a particular manufacturer item line is included, use this price.
2. If there is no manufacturer-specific item, search for only the generic description match, and use this price.
3. Once a match has been found, link the unique French code with the unique Australian billing code, to allow for continued tracking and comparison.

It is recommended that the initial matching process outlined above be completed by someone with both French and English skills, and medical knowledge (such as a bilingual physician)

FIGURE 10

Comparing the French and Australian Prostheses List structure

French List	Australian List
Liste des produits et prestations remboursables	**Prostheses List**
▪ Title III: implantable medical devices & human tissue – Chapter 1: Disposable - synthetic origin ▫ Section 1: Cardiac ▫ Section 2: Ophthalmic ▫ Section 3: Orthopaedic ▫ Section 4: Ear, Nose & Throat ▫ Section 5: Hearing Aids ▫ Section 6: Urogenital ▫ Section 7. – Supporting implants (digestive, cardiac, pleuropulmonary, orthopedic, gynecological, urological, in particular) ▫ Section 8: Plastic and Reconstructive - Breast ▫ Section 9: Plastic and Reconstructive – Liposuccion – Chapter 2 – Disposable - from derivatives or animal tissue – Chapter 3 – Human tissue implants – Chapter 4 – Active implantable devices	▪ Part A – Category 1: Ophthalmic – Category 2: Ear, Nose & Throat – Category 3: General Miscellanous – Category 4: Neurosurgical – Category 5: Urogenital – Category 6: Specialist Orthopaedic – Category 7: Plastic and Reconstructive – Category 8: Cardiac – Category 9: Cardiothoracic – Category 10: Vascular – Category 11: Hip – Category 12: Knee – Category 13: Spinal

Appendix C: Suggested definition of prostheses

The following definition was agreed by all parties in 2003. However, it was not adopted by Government. [43]

To be included on the list of prostheses, prosthesis must be:

1. Approved by the TGA;
2. Implanted in the course of hospitalisation, including day surgery (admitted patients);
3. Permanently or semi-permanently implanted, such that it must leave the hospital with the patient;
4. A partial or total replacement for a body part or function;
5. Limited to being able to be used on one single patient only by nature of its function and not because it is possible to design a product with a specification that it is a single use item; and
6. Medically necessary.

Prostheses do not include devices which are:

- Temporarily or permanently implanted or applied in the patient which does NOT replace a body part or function (e.g. all implanted drug and radiation source delivery devices);
- Non-implantable drug infusion devices or a non-implantable high cost items or devices, largely used and/or provided in the outpatient setting;
- Not permanently implanted e.g. tissue expanders;
- High cost single use devices which do not remain with the patient at discharge, which are not used routinely in each procedure of the type for which they are used and whose cost is not included in theatre banding;
- Nerve stimulators other than cardiac pacemakers and defibrillators;
- Consumables for which there may be repetitive requirements (such as dressings, catheters, batteries, etc);
- Re-usable devices including equipment which may be applied to more than one patient;
- Drugs; or
- Items funded by any other means.

Appendix D: Protocol for interaction between competing funds

The authors of this report are competitors in the private health insurance industry. As a result, the following procedures were observed to ensure legal compliance:

- All meetings were conducted in the presence of an independent third party;
- An agenda was circulated to all participants in advance of each meeting and minutes were taken of every meeting;
- No 'commercially sensitive' information was shared between participants;
- All communications between private health insurance funds were supervised by an independent third party;
- An independent third party collected all relevant data relating to the relevant entities and did not disseminate any identifiable data (including any 'commercially sensitive' information) of any relevant entity or any third party to any other relevant entity or third party.

Bibliography

1 Private Health Insurance Australia, 'Quarterly Statistics', June 2015, June 2014, June 2013.

2 Australian Prudential Regulation Authority, 'Private Health Insurance Membership and Coverage', 2015.

3 Australian Prudential Regulation Authority, 'Trends in Hospital Accommodation, Medical Services, and Prostheses', 2015.

4 Ibid.

5 Private Health Insurance Administration Council, 'Annual Report', June 2003, June 2004, June 2005, June 2006, June 2007, June 2008, June 2009, June 2010, June 2011, June 2012, June 2013, June 2014.

6 Expert interviews.

7 Private Healthcare Australia, 'Past Prostheses Lists', August 2011, August 2012, August 2013, August 2014; Department of Health, 'Australian Prostheses List', August 2015.

8 Department of Health, 'Prostheses List: Guide to listing and setting benefits for prostheses', 2010.

9 Applied Medical, 'Submission to competition policy review', 2014.

10 Western Australia Health, prostheses pricing list; Australian Prostheses List, August 2015

11 Productivity Commission Research Report, 'Public and Private Hospitals', 2009.

12 L'Assurance Maladie, 'Liste des produits et prestations remboursables', 2015; Australian Prostheses List, August 2015

13 Applied Medical, 'Submission to competition policy review', 2014; Private Healthcare Australia, 'Submission to the National Commission of Audit', 2013.

14 Medtronic, 'Annual Report', 2014-15; Johnson & Johnson, 'Annual Report', 2014-15; Stryker, 'Annual Report', 2014-15; Zimmer, 'Annual Report', 2014-15; St Jude Medical, 'Annual Report', 2014-15.

15 Healthscope, 'Financial Report Investor Presentation', 2014-15.

16 Modern Healthcare Financial Database.

17 Calculation based on ~5.33 million private healthcare policies in Australia, sourced from Private Health Insurance Administration Council, 'Operations of the Private Health Insurers Annual Report', 2013-14.

[18] Calculation based on 30 percent rebate on 45 percent saving off of annual private prostheses benefit spend, sourced from Private Health Insurance Administration Council, 'Operations of the Private Health Insurers Annual Report', 2013-14.

[19] Private Health Insurance Administration Council, 'Statistical Trends', June 2015.

[20] Australian Institute of Health and Welfare, 'Australian Hospital Statistics 2013-14: Elective surgery waiting times', 2014.

[21] Australian Institute of Health and Welfare, 'Australian Hospital Statistics', 2013-14.

[22] Private Health Australia, 'Australian Government Private Health Insurance Rebate', 2015.

[23] Private Health Australia, 'Medicare Levy Surcharge', 2015.

[24] Victoria University, 'The Impact of PBS Reforms on PBS Expenditure and Savings', 2009.

[25] Japanese Ministry of Health, Labour and Welfare, 2012.

[26] Calculation based on the 'Product Group' of the Australian Prostheses List August 2014 and private health insurers' claims data, 2014.

[27] Private Health Insurance Administration Council, 'Trends in Hospital Accommodation, Medical Services and Prostheses', 2015.

[28] Private health insurers claims data, 2014.

[29] RAND, 'Pharmaceutical pricing: the use of external reference pricing', 2013.

[30] S. Parnell, 'Medicare review chief says 30pc of treatments of little benefit', *The Australian*, 16 September 2015.

[31] Sahlgrenska University Hospital, Halverade väntetider med värdebaserad vård. 2015.

[32] Centers for Medicare and Medicaid Service, 'Comprehensive Care for Joint Replacement', 2015.

[33] A. Gawande, 'Big Med', 2012.

[34] R. Kallala et al., 'The cost analysis of cemented vs cementless total hip replacement operations on the NHS' (2013) 95 *Bone and Joint Journal* 874.

[35] M. Pennington et al., 'Cemented, cementless, and hybrid prostheses for total hip replacement: cost effectiveness analysis' (2013) 346 *British Medical Journal* 1026.

[36] N.B. Kandala, 'Setting benchmark revision rates for total hip replacement: analysis of registry evidence' (2014) 350 *British Medical Journal* 756.

[37] Ibid.

[38] Ibid.

[39] Eucomed, 'Access to the Operating Room for Medical Device Representatives', 2011; LEK, 'Hospitals adopt new strategies to boost profitability, but still face deep challenges: A new imperative for MedTech', 2013; expert interviews.

[40] M. Thomas, 'Are drug eluting stents really worth the money?' (2006) 92 *Heart* 5.

[41] PriceWaterhouseCoopers, 'Review of the existing model for setting private health insurance reimbursement benefits for medical devices', 2010.

[42] Z. Or, 'Implementation of DRG Payment in France: Issues and recent developments' (2014) 117 *Health Policy* 146, 147.

[43] Private Healthcare Australia, 'The Proposed Reform of Prostheses Management Version 3', 2014.