Activity based funding for Australian public hospitals: Towards a Pricing Framework

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Glossary

| ABF | Activity Based Funding |
|---------|---|
| ABS | Australian Bureau of Statistics |
| АНСА | Australian Health Care Agreement |
| AIHW | Australian Institute of Health and Welfare |
| AR-DRG | Australian Refined Diagnosis Related Group |
| CCs | Co-morbidities and Complications |
| COAG | Council of Australian Governments |
| DRG | Diagnosis Related Group |
| GFCE | Government Final Consumption Expenditure |
| ICU | Intensive Care Unit |
| IHPA | Independent Hospital Pricing Authority |
| LHN | Local Hospital Network |
| MBS | Medicare Benefits Schedule |
| MedPAC | Medicare Payments Advisory Commission (United States) |
| MH-CASC | Mental Health Classification and Service Costs |
| MPS | Multi Purpose Service |
| NEP | National Efficient Price |
| NGO | Non-Government Organisation |
| NHA | National Healthcare Agreement |
| NHCDC | National Hospital Cost Data Collection |
| NHHNA | National Health and Hospitals Network Agreement |
| NHHRC | National Health and Hospitals Reform Commission |
| NHPA | National Health Performance Authority |
| NHRA | National Health Reform Agreement |
| NWAU | National Weighted Activity Unit |
| P4P | Pay for Performance |
| PBS | Pharmaceutical Benefits Scheme |
| RWU | Rehabilitation Weighted Units |
| SRSRH | Small Rural and Small Regional Hospitals |
| UDG | Urgency and Disposition Groups |
| URG | Urgency Related Group |
| WAU | Weighted Activity Unit |
| WIES | Weighted Inlier Equivalent Separation |

Executive Summary

This Discussion Paper develops the elements of a Draft Pricing Framework for use by the Independent Hospital Pricing Authority in the national implementation of activity based funding (ABF) for Australian public hospitals.

First, a set of **principles** has been articulated to make explicit the policy choices in making decisions about how to fund public hospital services. These principles comprise:

- > Timely-quality care: ABF should support timely access to quality health services.
- Efficiency: ABF should improve the value of the public investment in hospital care and ensure a sustainable and efficient network of hospital services.
- **Fairness:** ABF payments should be fair and equitable.
- Maintaining agreed roles and responsibilities of governments: ABF design should recognise the complementary responsibilities of each level of government in funding health services.
- > **Transparency:** all steps in the ABF process should be clear and transparent.
- Administrative ease: ABF should not unduly increase the administrative burden on hospitals.
- Stability: the payment relativities are consistent over time.
- **Evidence based:** ABF should be based on best available information.
- Supporting innovation: ABF pricing should respond in a timely-way to introduction of evidencebased, effective new technology and innovation.
- > Price harmonisation: Pricing should facilitate best practice provision of appropriate site of care.
- Minimising undesirable and inadvertent consequences: ABF design should minimise susceptibility to gaming, inappropriate rewards and perverse incentives.
- > **ABF pre-eminence:** ABF should be used for funding wherever practicable.
- Single unit of measure and price equivalence: ABF pricing should support dynamic efficiency and changes to models of care with the ready transferability of funding between different care types and service streams through a single unit of measure and relative weights.
- Patient-based: Adjustments to the standard price should be, as far as is practicable, based on patientrelated rather than provider-related characteristics.
- Public-private neutrality: ABF pricing should not disrupt current incentives for a person to elect to be treated as a private or a public patient in a public hospital.

The Independent Hospital Pricing Authority can make determinations on the **scope of public hospital services** eligible for Commonwealth funding. **A set of nine criteria** has been developed for use by the Independent Hospital Pricing Authority in reviewing recommendations by states for eligible services. The outcome of this consideration would be the publication by the Independent Hospital Pricing Authority of a General List of services eligible for Commonwealth funding.

The National Health Reform Agreement states that activity based funding should be used wherever practicable. To determine when this is not the case, the Independent Hospital Pricing Authority is required to develop **Block Funding Criteria**. These criteria will be used from 2013/14 onwards in determining which public hospital services are better funded through block grants. The two proposed Block Funding Criteria are:

> The **technical requirements** for applying ABF are not able to be satisfied.

There is an absence of economies of scale that mean some services would not be financially viable under ABF.

The application of these criteria would suggest that some public hospital services will be funded in the **short term on a block grant** but will move to activity based funding as technical requirements are addressed. However, other services may need to be funded **using only block grants or a combination of block grants and activity based funding on an ongoing basis**.

The Independent Hospital Pricing Authority is required to determine the **national efficient price** for public hospital services. The following definition is proposed:

A hospital operating at the national efficient price will

- be able to provide episodes of care (on average, across all types of care, as measured using agreed classifications) at or below the national benchmark;
- > be able to respond to new technologies which are cost-effective from a societal point of view;
- minimise negative consequences that fall on patients (including those attributable to poor quality) or on other parts of the service system; and
- provide services which, at the margin, lead to the same improvement in individual or community health as services provided in other parts of the health system.

In setting the national efficient price, it is proposed that:

- > Activity in all service types is described using a single National Weighted Activity Unit (NWAU).
- In the short-term, the national efficient price is set using a measure of central tendency of the distribution of public hospital costs (with the median cost preferred over the average cost). In the medium and long-term, a lower than average or normative pricing could be used as cost data improve and/or there is clinical consensus on best practice clinical service delivery.
- The Government Final Consumption Expenditure hospitals and nursing home deflator is used as the index to convert past costs into current prices.
- Price loadings should only be approved if there is demonstrable evidence to support them, that the cost differences cannot be said to be created by affected providers and that, when assessing the data for identification of cost differences, all patient-related factors are considered and addressed before considering any provider-related factors.
- Payment is adjusted for quality through adoption of the United States Medicare list of hospital acquired conditions, so that specific complications occurring during a hospital admission are not included in the payment.
- The national efficient price for private patients in public hospitals is adjusted in recognition of existing funding from private health insurers and the Commonwealth Government that partially meets the cost of services for these patients.

1. Introduction

The Independent Hospital Pricing Authority has appointed Health Policy Solutions, in association with Casemix Consulting and Aspex Consulting, to develop a comprehensive Pricing Framework. (Appendix 1 provides details of all team members). The Pricing Framework will inform the determination of the national efficient price that will be used in the implementation of activity based funding (ABF) in Australian public hospitals from 1 July 2012.

1.1 Consultation on the Draft Pricing Framework

This Discussion Paper outlines the implementation issues that need to be resolved in introducing new funding arrangements for public hospitals. The Discussion Paper has been produced for the purposes of consultation. In particular:

- There are a series of consultation questions that ask for feedback on the specific options and proposals included in relevant chapters. While feedback is welcomed on any issues, it would be particularly valuable to receive views on the consultation questions.
- The Independent Hospital Pricing Authority is calling for submissions on this Discussion Paper, with the closing date for submissions being Tuesday 21 February 2012. All submissions will be published on the IHPA website (www.ihpa.gov.au) unless respondents specifically identify any sections that they believe should be kept confidential due to commercial or other reasons.
- The Consulting Team is undertaking targeted consultations in early February 2012 in all states and territories¹ to seek the views of invited representatives of hospitals and health services, medical, nursing and other health professionals, consumers, private health insurers and governments.

The options and proposals in this report have not yet been endorsed by the Independent Hospital Pricing Authority.² This Discussion Paper includes analysis of public hospital costing data: this analysis is preliminary and should not be equated with decisions on the final level of, or adjustments to, the national efficient price. The Pricing Framework will be finalised following review of consultation feedback and submissions and the determination of the national efficient price will be based on the most recent resubmitted cost data from public hospitals.

The final Pricing Framework, together with the specification of the national efficient price, is expected to be publicly released by late May 2012. This will be preceded by the provision of the draft report to the Commonwealth and state governments for 45 days as required under Clause B7 of the National Health Reform Agreement.

1.2 Overview of the Draft Pricing Framework

In commissioning the development of a Pricing Framework, the Independent Hospital Pricing Authority posed four critical questions:

- What is the scope of public hospital services that should be eligible for Commonwealth funding under the public hospital funding reforms?
- ➢ How should the national efficient price be set, now and in the future, for eligible public hospital services that are to be funded using activity based funding?

¹ The term, state governments, is used to refer to state and territory governments throughout the rest of this paper. ² The full Board of the Independent Hospital Pricing Authority is still to be appointed.

- > What public hospital services should be block funded and how will this operate?
- What should be the approach to setting the national efficient price for private patients treated in public hospitals?

These questions indicate that a Pricing Framework is actually about more than pricing. The establishment of the 'national efficient price' is one task, albeit an important one, in implementing new funding arrangements for public hospital services across Australia.

Figure 1.1 provides an overview of the main building blocks that comprise the Draft Pricing Framework. This figure also serves as a roadmap to the implementation issues that are canvassed in this Discussion Paper.

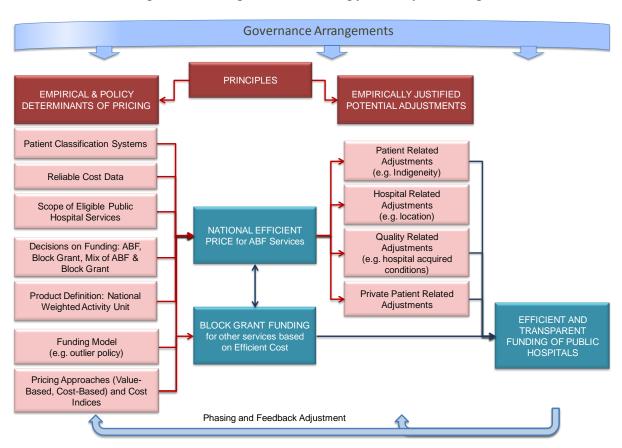


Figure 1.1: Building blocks in reforming public hospital funding

First, Figure 1.1 shows that the Pricing Framework has to be developed and operate within **governance arrangements** specified under the National Health Reform Agreement. These governance arrangements (described in Chapter 3) identify the relevant roles and responsibilities of the Commonwealth Government, state governments and the Independent Hospital Pricing Authority. It also needs to be remembered that the reforms to public hospital funding sit within a context of other reforms including:

- The development of Local Hospital Networks and Medicare Locals to improve local accountability and responsiveness to the needs of communities;
- The establishment of the National Health Performance Authority and the development of a new Performance and Accountability Framework that will involve transparent reporting on the performance of Local Hospital Networks (including hospitals within the LHNs), private hospitals, and Medicare Locals; and

A stronger focus on quality with improved standards of clinical care through the Australian Commission on Safety and Quality in Health Care.

There are at least two implications of this confluence of reforms, namely:

- The Pricing Framework (including its underpinning policy objectives and the incentives it creates in the health system) needs to align with other health reforms such as the Performance and Accountability Framework; and
- Pricing is only one mechanism that can be used to influence policy objectives such as improved patient access. Often, it may be more effective to use other policy instruments, rather than relying solely on pricing to drive desired changes in the health system.

The next element of Figure 1.1 is a set of **Principles** (developed in Chapter 4). These principles have been developed in order to help inform the development of options on other elements of the Pricing Framework. They make explicit the overarching values of timely-quality care, efficiency and fairness that should underpin pricing of public hospital services, as well as providing guidance on process and system design issues in pricing.

The left hand side of Figure 1.1 then outlines a series of factors that comprise the policy determinants and empirical analysis required to undertake pricing. Work on the first two factors, **patient classification systems** and **reliable cost data**, is being undertaken jointly by officials of the Commonwealth and state governments and the Independent Hospital Pricing Authority (IHPA). Effective classification systems and reliable costing data are essential precursors to the price-determination function of the IHPA.

Key decisions agreed by governments on these parameters³ include:

- Acute admitted services will be classified using AR-DRGs v6.0x;
- Emergency department services will be classified using either Urgency Related Groups (URGs) (for hospitals with emergency services classified at Levels 3B or above) or Urgency and Disposition Groups (UDGs) (for hospitals with emergency services classified below Level 3B);
- > Outpatient services will be classified using the modified Tier 2 clinic classification; and
- > The costing data used will be from the 2009/10 Round of the National Hospital Cost Data Collection.

The next element of the Pricing Framework is a set of draft criteria to assess the **scope of public hospital services** that are 'eligible' to receive Commonwealth funding under the National Health Reform Agreement (developed in Chapter 5). The Agreement requires that the IHPA develop and publish these criteria. State governments can make recommendations to the IHPA for services they believe meet the criteria, resulting in the publication by the IHPA of a general list of services eligible for a Commonwealth funding contribution.

Once the question has been resolved of 'what' services are eligible for Commonwealth funding under the Agreement, the next question is 'how' funding will be provided. Hence, the Pricing Framework must include a process and **decisions on whether eligible public hospital services will be funded using ABF, block grants or a mix of ABF and block grants**. Chapter 9 outlines the pathways and criteria to identify public hospital services that are better funded through block grants and approaches to determine the efficient cost of such block funded services.

For public hospital services that are able to be funded under ABF, there needs to be further specification of the **unit of activity** (described in Chapter 6) and the business rules that guide the **funding model**. Officials of the Commonwealth and state governments and the Independent Hospital Pricing Authority have been undertaking work outside this project on funding model issues including the treatment of high and low-stay outliers and the designation of same-day DRGs.

³ Work on classification and costing sits outside this current project, but a summary of key decisions has been included to provide a complete picture for readers.

The final box on the left hand side of Figure 1.1 is about the **pricing approaches**. The Pricing Framework has to be based on some choices about the extent to which pricing will be driven mainly by costs or incorporate aspects of normative pricing where price is set to achieve certain policy objectives such as reducing waiting times (these issues are discussed in Chapter 6).

The middle of Figure 1.1 identifies two 'outputs': the **national efficient price** for services funded on an activity basis and an **approach to block grant funding** for other services.

Moving on to the third column, the Pricing Framework must identify whether (and how) the national efficient price needs to be adjusted for legitimate and unavoidable differences in costs. The analytical basis for including **adjustments**, on the basis of price and/or quality, is developed in Chapter 7.

The National Health Reform Agreement also identifies that the determination of the national efficient price for **private patients** needs to incorporate adjustments in recognition of the existing funding sources that contribute towards the cost of these patients (described in Chapter 8).

The Pricing Framework must be dynamic: the implementation of reforms to public hospital funding must include **phasing and feedback adjustment** (discussed in Chapter 10).

Finally, Figure 1.1 indicates that the intended outcome of these reforms is the **transparent and efficient funding** of public hospitals (the rationale for implementing activity based funding is outlined in Chapter 2).

Consultation question:

Are these the right elements that need to be included in a Pricing Framework for public hospitals?

2. Why Australia is implementing activity-based funding for public hospitals

This Draft Pricing Framework is mainly about 'how' to price public hospital services under a national approach to activity-based funding. However, some people might ask: 'why' did Australian governments decide to introduce activity based funding and fundamentally reform public hospital funding arrangements? And, what are the anticipated benefits of these reforms?

2.1 Historical approaches to public hospital funding

Prior to the implementation of casemix funding for acute inpatient services, public hospital budgets were determined at state level by a mix of negotiation, history and politics (Duckett 1998). Funding on the basis of historical costs enshrines inequities in funding available to different hospitals (and hence to the populations served by these hospitals), based largely on their relative (contemporary or historic) skills in arguing for additional resources.

Australia has had over two decades of experience in researching, planning and implementing ABF in public hospitals. The Commonwealth Government stimulated this enterprise with its \$25 million Casemix Development Program in 1988. It commissioned a study to identify approaches to the implementation of DRGs in Australia, with options examined including the Commonwealth funding public hospitals directly using open-ended DRG case payments, and the Commonwealth using DRGs as the basis for distributing capped hospital funding grants to states (Scotton and Owens 1990).

Following the Victorian introduction of casemix funding in 1993/94, other states implemented casemix funding of public hospitals, or used casemix as part of budget allocation processes. However, the state by state implementation of casemix resulted in considerable variability in approach, as noted:

Five states have either implemented or are in the process of implementing casemix funding, but the funding models used have significant design differences...There are different weight setting processes and base prices between the states, which result in marked differences in the price paid for the same type of case treated in similar hospitals...There is thus a strong argument that there should be some form of joint development to facilitate better funding system design (Duckett 1998, S17-S21).

2.2 The National Health and Hospitals Reform Commission reports

In 2009 the National Health and Hospitals Reform Commission (NHHRC) recommended that activity based funding should be the principal mode of funding for public and private hospitals (NHHRC 2009). This recommendation was made in the context of health expenditure estimates which showed that hospitals would be one of the fastest growing areas of health spending over the next few decades. Spending on hospital services was projected to triple from \$25.9 billion in 2002-03 to \$81.4 billion in 2032-33 (Goss 2008). Many studies have indicated that there is considerable variation in hospital costs across Australia, with scope for significant improvements in efficiency (Productivity Commission 2006, Gabbitas and Jeffs 2007, Erlandsen 2007, Novak and Judah 2011).

The potential of activity based funding to improve hospital efficiency was one important reason behind the NHHRC recommendation. The NHHRC estimated that the implementation of ABF could result in recurrent savings of between \$570 and \$1,330 million annually (NHHRC 2009, p 260). However, the NHHRC advocacy for ABF was not simply focused on improving technical efficiency, with the Commission citing other benefits as follows:

Activity-based funding provides a powerful incentive for hospitals to perform as efficiently as possible, maximising services provided for the available funds...Other advantages are that:

- It is person centred, in that the funding is tied to the treatment of people, not simply the funding of an organisation or the size and characteristics of a population.
- It is information rich generating useful data on what services are provided to whom and at what cost across many different types of hospitals and services, enabling better understanding of the provision of hospital services.
- It is transparent, making clear on what basis funding is provided, with less opportunity for funding based upon influence or special pleading.
- It also increases hospital autonomy to deliver care within a clear funding and accountability framework it separates and clarifies the role of the funder to determine, and be accountable for, the overall level of services to be provided and the level of funding to deliver those services, while requiring (and empowering) hospitals to deliver those services in the best possible way (NHHRC 2008, pp 138-9).

2.3 ABF and intergovernmental funding agreements for public hospitals

Activity based funding fundamentally changes the incentives for hospitals at the **operational level**. Patients become a source of revenue, rather than a cost as occurs under fixed historical budgets. Hospitals are strongly motivated to better understand their cost structures, to examine the inputs used to provide episodes of care and to identify innovative models of care which are more cost-effective than existing arrangements.

However, it is at the **whole of health system level** that the national implementation of ABF could best be described as a 'game-changer'. Since the 1984 introduction of Medicare, Australian governments have negotiated five-yearly funding agreements for public hospital services. Under these agreements, Commonwealth funding to states comprised block grants based on historical funding levels, adjusted for population growth and ageing and some wage-cost indexation. However, the Commonwealth Government was not significantly exposed financially to the demand growth⁴ facing public hospitals due to factors such as higher utilisation associated with changing consumer preferences and the introduction of new technologies. This will change with the national implementation of ABF as Commonwealth funding is, for the first time, directly linked to the utilisation of public hospital services.

This new approach by governments to directly sharing the costs of public hospital services through activity based funding has many benefits. States have much more limited revenue-raising capacity than the Commonwealth Government: it has been estimated that without changes to existing funding arrangements, the cost of running public hospitals and other health services would totally consume state budgets by 2045/46 (Commonwealth of Australia 2010). As the Commonwealth Government has argued:

The Commonwealth Government is better placed to take responsibility for the future growth across health and hospitals, due to its stronger budget position, characterised by revenue sources that are better able to handle fiscal adjustment over time. These reforms will reduce future pressure on the states to raise more revenue to finance health services through their less efficient taxes. This will yield productivity dividends across the national economy. These changes will also lead to better alignment between spending responsibilities and revenue-raising capacity in both Commonwealth and state governments (Commonwealth of Australia 2010, p52).

⁴ Some of the additional demand was met by the Commonwealth Government from 1998 onwards with the introduction of a utilisation growth indexation factor in the Australian Health Care Agreement. This was initially set at 2.1%, but was reduced to 1.7% in the 2003-2008 Agreement.

Another long-term benefit of the national implementation of ABF is that it creates stronger incentives for governments to examine their relative level of investment in public hospitals and other health services. The NHHRC suggested that reformed funding arrangements for public hospitals:

...will provide incentives for cooperative action that ensures hospitals are only used when they are the best and most efficient form of care. For example, the Commonwealth Government will be able to invest in effective primary health care and, together, governments will be encouraged to develop alternative, more appropriate services, such as hospital-in-the-home, step down and sub-acute care, and post-acute care (NHHRC 2009, p150).

In other words, the transparency of activity based funding encourages governments and other funders (such as private health insurers) to consider the relative clinical and cost-effectiveness of different types of health services. Hence, activity based funding is an important tool in allocative efficiency or seeking to ensure that payment is made for the 'right' health services at the 'right' price in the 'right' setting.

The national implementation of activity based funding is, thus, expected to drive improvements in public hospital efficiency and to create a more sustainable approach by governments to funding public hospitals.

This was articulated in the National Health Reform Agreement when governments agreed to the following specific policy objectives as underpinning the national implementation of activity based funding:

- To improve patient access to services and public hospital efficiency through the use of activity based funding based on a national efficient price;
- To ensure the sustainability of funding for public hospitals by increasing the Commonwealth's share of public hospital funding through an increased contribution to the costs of growth; and
- To improve the transparency of public hospital funding through a National Health Funding Pool and a nationally consistent approach to ABF (Clause 3).

In conclusion, these anticipated benefits and agreed policy objectives for the national implementation of ABF should provide the foundation for the development of the Pricing Framework and the determination of the national efficient price.

3. Governance of activity based funding: the National Health Reform Agreement

Activity based funding will have different impacts, depending upon the specific context in which it is implemented. This was illustrated in the Literature Review undertaken for this project (available at: http://www.ihpa.gov.au/internet/ihpa/publishing.nsf/Content/publications) which examined the international experience with the implementation of ABF. The Literature Review identified that ABF can operate quite differently, depending on parameters including:

- Whether ABF is used as a case payment or under a budget allocation model (i.e. whether the volume of activity that is funded is open-ended or capped in some way);
- > The extent to which there is national, state or local variation in weight-setting and price-setting; and
- The scope of services that are subject to activity-based funding and the operation of other, non-ABF funding mechanisms.

The development of the Pricing Framework needs to recognise the complex environment for the national implementation of ABF in Australia including:

- ➤ The respective roles of Commonwealth and state governments including the important responsibilities of states as 'system managers' of the public hospital system;
- The different funding and incentive arrangements that will operate under the phasing-in of ABF from 1 July 2012 and in subsequent years; and
- > The different approaches to resolution of major issues specified in the National Health Reform Agreement⁵, including the determinative functions of the IHPA and the potential for bilateral negotiations between governments on some matters.

Accordingly, this chapter provides a background primer on the governance model under which ABF will be operating. Its purpose is to ensure a common baseline of understanding of the key provisions of the National Health Reform Agreement (NHRA), and other relevant Agreements and legislation governing the implementation of ABF. Understanding the governance environment is critical to thinking about the optimal design for the elements of the Pricing Framework and the national efficient price.

3.1 States as 'system managers' of public hospital services

National pricing of public hospital services is being implemented in the context of **state governments retaining responsibility for system-wide planning** of the required range, type and volume of public hospital services within their state. Neither the Commonwealth Government (through its funding role), nor the IHPA (through its role in price determination), has any direct role in determining what services will be funded locally or the level at which services should be provided. These decisions are primarily shared between state governments and Local Hospital Networks (LHNs)⁶ as specified in the National Health Reform Agreement:

> LHNs will 'have the flexibility to shape local service delivery according to local needs' (Clause D2);

⁵ The National Health Reform Agreement can be accessed at:

http://www.coag.gov.au/docs/national health reform agreement.pdf

⁶ While the term Local Hospital Network is used in the NHRA, it is recognised that these governance entities for public hospitals have been introduced using state–specific nomenclature (e.g. Tasmanian Health Organisations (THOs) and Queensland Local Health and Hospital Networks (LHHNs)).

- The number and broad mix of services to be provided by each LHN is to be specified in LHN Service Agreements, negotiated and agreed between each state government and each LHN. The Commonwealth has no role, directly or indirectly, in these Service Agreements (Clauses D8 & D10); and
- LHNs are required to engage with a range of clinicians, health and aged care services and the local community in making decisions on service delivery at the local level and service and capital planning at the state level (Clause D7).

While the NHRA has a strong focus on local flexibility in the provision of public hospital services, there are several mechanisms to foster the national interest in ensuring that there is equitable access to specific services across communities and states, as follows:

- Service agreements between states and LHNs will be publicly released, so that there is transparency of the range and volume of services expected to be provided by each LHN (Clause D9);
- The National Health Performance Authority (NHPA) will publicly report on the performance of each LHN (as well as other health service providers) including reporting on access to services, quality of service delivery, financial responsibility, patient outcomes and patient experience (Clause C6); and
- The Administrator of the National Health Funding Pool will publicly report on the volume of public hospital services provided by LHNs and the delivery of other public hospital functions (Clause B26)

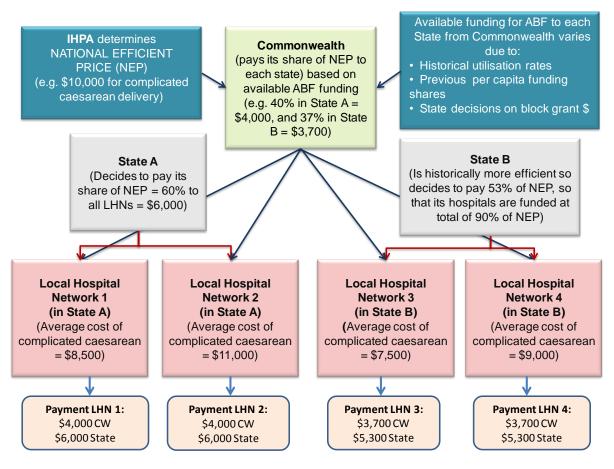
These public reporting mechanisms will allow comparison across LHNs and states as to the level of public hospital service provision. For example, it will be possible to examine differences in the provision of radiotherapy services across states, or the level of access to maternity services in metropolitan and rural communities, so fostering a debate about what constitutes equitable access.

3.2 Relationship between the national efficient price and government funding of public hospital services

One of the main functions of the Independent Hospital Pricing Authority is the determination of the national efficient price for services provided on an activity basis in public hospitals. The NHRA identifies principles and some factors that should be considered in determining the national efficient price and any adjustments to this price based on legitimate and unavoidable variations in wage costs and other inputs.

However, it is important to recognise that the funding received by individual public hospitals for services provided on an activity basis is not necessarily equal to the volume of services multiplied by the national efficient price. The national efficient price is used to calculate the level of Commonwealth funding to public hospitals; however, there is no similar requirement for states to use the national efficient price in determining their level of funding contribution to public hospitals. This is shown in Figure 3.1 which illustrates the context for use of the IHPA's efficient price in 2012/13 and 2013/14.

It is important in considering Figure 3.1 to recognise that the IHPA's role is to set the national efficient price. This price-setting role by the IHPA is independent of decisions subsequently taken by governments on how to apply the price, which reflect, in part, historical utilisation and current funding availability. These issues are discussed further below.





3.2.1 COMMONWEALTH FUNDING AS A SHARE OF THE NATIONAL EFFICIENT PRICE

There may be a misperception that the Commonwealth will pay a flat 40% of the national efficient price for public hospital services in every state from 1 July 2012.⁷ Instead, Commonwealth funding for public hospital services will be expressed as a share of the national efficient price, but it is not necessarily the same share in each state for the following reasons:

- There are historical differences in hospital utilisation between states. Some states might have chosen to fund higher levels of provision of certain services (for example, rehabilitation services) than other states, and there may also be quite different aggregate levels of spending across states on public hospital services on a per capita basis.
- But, Health Care Grants from the Commonwealth to states for public hospital services have previously been calculated on the basis of the age-sex weighted population in each state (i.e. a per capita funding basis). These Commonwealth Health Care Grants have been payable, irrespective of the volume of services provided in each state. In effect, this means that the Commonwealth funding for each 'unit of activity' has varied, and could continue to vary, between states. Moreover, transition arrangements for the new funding model provide that no state will be worse off than under pre-existing arrangements. Up until the additional Commonwealth payments kick-in in 2014/15, this

⁷ The 2010 National Health and Hospitals Network Agreement (now superseded) included a public hospital funding split of 60% Commonwealth and 40% state. Media coverage suggested that this reversed an existing funding split, implied to be 40% Commonwealth and 60% state government funding of public hospitals.

effectively means that Commonwealth funding will be allocated to states on the pre-existing age-sex adjusted population basis.

Another critical factor is that the amount of Commonwealth funding available for ABF services (and hence the 'price per unit') in each state in July 2012 will be determined as an outcome of each state's decision about the share of the total Commonwealth funding that will be allocated towards block grant funding of other (non-ABF) services (Clause A32, National Health Reform Agreement).

These factors contribute to explaining why Commonwealth funding is not the same proportion of the national efficient price for each unit of activity in each state in July 2012. The level of Commonwealth funding (and its share of the national efficient price for each state) thus flows consequentially from its historical per capita funding contribution to each state and that state's decision about the split of the total funding pool available in July 2012 between ABF and block grant funded services. The Commonwealth does not determine its funding contribution based on the relative efficiency of hospitals in different states.

Over time, Commonwealth funding as a share of the national efficient price for public hospital services will converge across states, because the Commonwealth will be paying higher fixed shares of the national efficient price from 2014/15 (e.g. 45% in each state).

3.2.2 STATE FUNDING AS A SHARE OF THE NATIONAL EFFICIENT PRICE

States have a very different role to the Commonwealth in the new ABF environment. States are the 'system managers' of public hospitals and have responsibility for deciding how to encourage and support public hospitals in improving their efficiency. This is why the National Health Reform Agreement provides states with autonomy as to the level of funding they provide to LHNs (and the nature and level of services provided). Clause A65 of the NHRA explicitly allows states to fund LHNs below the full national efficient price:

If a state considers that a lower payment is appropriate, having regard to the actual cost of service delivery and the Local Hospital Network's capacity to generate revenue from other sources.

This is illustrated in Figure 3.1 which gives the example of State A funding at a level so that its LHNs receive 100% of the national efficient price, while State B funds at a level so that its LHNs receive 90% of the national efficient price (on the basis that it considers its hospitals are generally more efficient than the national efficient price). States can also choose to fund so that LHNs receive greater than 100% of the national efficient price.

States can make decisions about the level of funding provided to each LHN, meaning that the state share of the national efficient price may also vary between LHNs within a state. In the early period of ABF implementation, states may choose to recognise higher cost structures of some LHNs and pay a higher share of the national efficient price. In effect, this strategy could be used to facilitate the necessary transitions to assist LHNs achieve the productivity improvements that will be required to operate successfully at the national efficient price.

In summary, Figure 3.1 illustrates that the total funding received by any individual LHN is ultimately determined by the funding contribution made by its state government to public hospital services.

3.2.3 PRIVATE OR NOT-FOR-PROFIT PROVISION OF PUBLIC HOSPITAL SERVICES

The National Health Reform Agreement specifically recognises that public hospital services can be provided by private or not-for profit operators. Clauses A52 to A57 of the Agreement indicate that:

- Hospitals owned by charitable organisations which are recognised as public hospitals (whether by legislation or other arrangements) will be treated as public hospitals for the purposes of the Agreement; and
- Where a state contracts with a private or not-for-profit provider to operate a public hospital, that hospital will be treated as a public hospital for the purposes of the Agreement.

Hence, the use of the term 'public hospitals' or 'public hospital services' in this Discussion Paper should be interpreted as also including private or not-for-profit provision in accordance with Clauses A52 to A57 of the National Health Reform Agreement.

3.3 Roles of governments and the Independent Hospital Pricing Authority

The National Health Reform Agreement, together with the *National Health Reform Amendment (Independent Hospital Pricing Authority) Act 2011*, provide the authority for the operation of the Independent Hospital Pricing Authority.

The IHPA has been tasked with a range of determinative functions, meaning that it can independently make determinations or decisions on specific matters. Determinative powers granted to the IHPA include:

- Development and specification of the national classifications for public hospitals to be used as part of activity based funding;
- > Determining the national efficient price for public and private patients, and any adjustments to that price, for services provided on an activity basis in public hospitals;
- Developing projections of the national efficient price for a four year period, updated on an annual basis;
- > Determining the national efficient cost of block funded services in public hospitals;
- > Determining the scope of public hospital services that are eligible for Commonwealth funding; and
- Determining the Block Funding Criteria to be applied to agreed hospitals, functions and services (NHRA, Clause B3).

However, it is also important to recognise that on some issues, the National Health Reform Agreement allows for the Commonwealth and state governments to enter into bilateral agreements, rather than be subject to determinations by the IHPA. This is not the case for setting the national efficient price, which is solely the responsibility of the IHPA. However, there can be bilateral agreements between governments on the scope of public hospital services eligible for funding and, in 2012/13 only, the share of Commonwealth funding allocated through block grants. The relationship between the IHPA's determinative role and the bilateral agreement processes is discussed further in Chapters 5 and 9 respectively.

While the IHPA has been granted determinative powers, some of its recommendations are subject to review by either the Standing Council on Health (Health Ministers) or the Council of Australian Governments (COAG). The two most significant areas where the IHPA's decisions are subject to review are:

- Scope: Once the IHPA has developed a General List of services eligible for Commonwealth funding, the Standing Council on Health may until 30 June 2013 direct the IHPA with regard to specific inclusions or exclusions of services to or from the general list (Clause A13); and
- Block Funding Criteria: Once the IHPA has developed Block Funding Criteria, it is required to seek endorsement by COAG of these criteria which may involve COAG requesting refinements to the criteria (Clause A27).

Once again, the IHPA's determinative power with regard to setting the national efficient price is not subject to review by the Standing Council on Health or the Council of Australian Governments.

3.4 Phasing the implementation of ABF

Chapter 10 discusses phasing of the specific implementation options developed in this Discussion Paper. However, the National Health Reform Agreement specifies the overarching context under which Commonwealth payments for public hospital services are shifting to an activity based funding basis. In summary, these arrangements are that:

- In 2012/13 and 2013/14: Commonwealth funding for each state will be equivalent to the level that would otherwise have been payable through the National Healthcare Specific Purpose Payment. This does not influence the process used by the IHPA in setting the national efficient price for public hospital services; instead, it impacts on the share of the national efficient price funded by the Commonwealth.
- In 2014/15, 2015/16 and 2016/17: Commonwealth funding for each ABF service will be calculated individually for each state by summing the previous annual amount and incorporating both price and volume adjustments, with the Commonwealth's share of the national efficient price increasing to 45% for the net change in volume of weighted services in the previous year.
- For 2017/18 and beyond: Commonwealth funding for each ABF service will be calculated individually for each state by summing the previous annual amount and incorporating both price and volume adjustments, with the Commonwealth's share of the national efficient price increasing to 50% for the net change in volume of weighted services in the previous year.

Note: The issues included in this chapter are policy matters that have already been agreed by governments under the National Health Reform Agreement. Accordingly no consultation questions are included in this chapter.

4. Principles

The design of an ABF system involves numerous choices about what classification systems to use, how to deal with cases that don't fit well into the chosen classification systems, how to set prices and so on. These choices shape the incentives in the system and affect the financial viability of the organisations funded under the system.

Some of the choices are technocratic in the sense that there are now well established international criteria for some aspects of funding system design (e.g. how to evaluate a classification system's appropriateness). But other choices reflect policy judgements and perceptions of desirable policy directions. Where judgements are involved, different people can emphasise different criteria or place different emphases on proposed policy objectives.

This Discussion Paper has approached the task of system design by first articulating a set of principles to inform design choices. These principles have been developed *a priori*, without knowledge of how they might affect particular states or hospitals. They have been informed by explicit statements incorporated in the National Health Reform Agreement and other policy documents, by policy directions which are implicit but which appear to have broad consensus, and by experience about good payment system design.

Three types of principles have been articulated: overarching principles which express the overall policy intent of ABF; principles to guide ABF processes; and principles to inform detailed system design choices.

4.1 Overarching principles

The four proposed overarching principles are:

- > **Timely–quality care**: ABF should support timely access to quality health services.
- Efficiency: ABF should improve the value of the public investment in hospital care and ensure a sustainable and efficient network of hospital services.
- **Fairness:** ABF payments should be fair and equitable.
- Maintaining agreed roles and responsibilities of governments: ABF design should recognise the complementary responsibilities of each level of government in funding health services.

The National Healthcare Agreement, endorsed by all governments, provides a context for the national introduction of ABF and a source for the overarching principles.

Clause 4(d) of the National Healthcare Agreement affirmed:

the agreement of all governments that Australia's health system should ...provide all Australians with timely access to quality health services based on their needs, not ability to pay, regardless of where they live in the country.

This is summarised as the first overarching principle on **Timely-quality care**.

The objectives specified in the National Health Reform Agreement included an aim to 'improve ... public hospital efficiency through the use of activity based funding (ABF) based on a national efficient price' (Clause 3(a)). The National Healthcare Agreement went further and identified a number of long-term objectives

shared by all governments including that 'Australians have a sustainable health system' (Clause 13 (g)). The Agreement also affirmed that

Governments will seek to make best use of taxpayers' funds, including through developing new, costeffective approaches and planning for future healthcare needs (Clause 6).

This was elaborated in Clause 33 with endorsement of a key policy direction to:

Build a collaborative approach to evidence based, cost effective practices and policies within and across government and private sectors including investment decisions and clinical care.

Introduction of the new ABF arrangements was cited as a priority area for reform in this regard.

One of the roles for states specified in the National Healthcare Agreement is to

provide service planning, capital works and adequate infrastructure for public hospitals and community health facilities to meet future needs; (Clause 24 (b))

In parallel with the introduction of ABF, other reforms are being introduced including to hospital governance and to strengthen the interface between hospitals and Medicare Locals. Together with Clause 24(b) of the National Healthcare Agreement, these changes signal an intention from governments to improve hospital provision, its responsiveness, accessibility and efficiency. ABF introduction should thus be guided by a principle that recognizes the importance of local networks of hospital services, operating efficiently.

These elements are captured in the **efficiency** principle which is phrased broadly in terms of getting value for the public investment and an efficient network of hospital services.

The third overarching principle of **fairness** is implicit in much discussion about ABF. Traditional ways of funding hospitals (history, negotiations) meant that, in effect, hospitals were being funded differently for providing the same services, neither fair nor equitable. The same arguments apply for Commonwealth payments to the states. The complexities of funding formulae and Commonwealth Grants Commission equalisation arrangements meant that the amount of Commonwealth support for each hospital service also varied across the country. Some of this variation was, of course, reasonable, in that there were differences in cost structures caused by indigeneity, remoteness and so on. But some was a result of different utilisation rates leading to differences in contribution per patient treated.

The first three principles are effectively about 'what' and 'how' the health system should deliver. The fourth principle, **maintaining agreed roles and responsibilities of governments**, is about explicitly recognising that ABF design sits within the overall context of a new framework for Commonwealth-State relations in health care articulated in the National Healthcare Agreement and the National Health Reform Agreement. These two Agreements reflect agreed government decisions about roles and responsibilities, including the increased financial responsibility of the Commonwealth government for hospital care and the continuing role of states both as system managers and with responsibilities in public and community health care. This principle is particularly important in providing a foundation for determining the issue of the scope of public hospital services eligible for Commonwealth funding.

4.2 Process principles

The four proposed process principles are:

> **Transparency:** all steps in the ABF process should be clear and transparent.

- > Administrative ease: ABF should not unduly increase the administrative burden on hospitals.
- **Stability:** the payment relativities are consistent over time.
- **Evidence based:** ABF should be based on best available information.

Transparency is central to the new funding arrangements. A commitment to transparency is incorporated in both the National Healthcare Agreement and the National Health Reform Agreement:

The decisions governments make in operating our healthcare system should be clear and transparent (National Healthcare Agreement, Clause 7); and

The new arrangements will... improve the transparency of public hospital funding through a National Health Funding Pool and a nationally consistent approach to ABF (National Health Reform Agreement, Clause 3 (c)).

Linked to the principle of transparency is one of **administrative ease**. In their original design of the Diagnosis Related Groups classification system, Bob Fetter and his colleagues emphasised key characteristics of a desirable classification system. One of these was that 'Class definitions were to be based on information routinely collected on hospital abstracts' (Fetter 1991). The practical import of this was that inpatient casemix classifications should not require additional data collection: that the groups could be identified by application of computer software to existing data sets. Nevertheless, there is recognition that with the development of new classification systems will bring with it new data reporting requirements.

This is still relevant and ABF implementation in Australia should not unduly increase the administrative burden and red tape in the health system. This concept though is not the same as saying that ABF will not change organisational requirements in health care. To respond well to the new incentives, hospitals will have to have effective systems of clinical engagement so that efficiency variations can be identified and analysed to determine their underlying cause.

A key purpose of ABF as articulated in the National Health Reform Agreement is to improve public hospital efficiency. That can only occur if managers know and understand the nature of the incentives enshrined in ABF design. Transparency is essential for this. But the incentive effects in ABF might be attenuated if the incentives change regularly, so managers don't respond to any current incentives in the belief that the incentives will change in the near future.

The National Health Reform Agreement requires the IHPA to 'have regard to the need for continuity and predictability in prices' (Clause B12 d).

Casemix classifications need to be updated regularly, with payment relativities requiring update more frequently to take account of new codes, clinical practice change and differential rates of inflation for different services. This regular updating however needs to be balanced against the need to ensure consistency of incentives over time. The third process principle of **stability** addresses this issue.

Previous ways of funding hospitals involved either adjustments to a prior historical base or negotiations as the way of establishing budgets. ABF is quite different in that it links a hospital's revenue stream to its activity. But as mentioned above, there are choices involved in ABF design and affected groups are likely to argue for 'special accommodations' to take account of their different circumstances. Some of these adjustments may be reasonable. The fourth process principle articulates that central to the design of the ABF system should be that data and **evidence** should be paramount: that any adjustments should be demonstrated through analysis of the data. This principle is linked to one aspect of Clause 8 of the National Healthcare Agreement wherein governments committed to 'make use of the best available information'.

4.3 System design principles

The proposed classification and system design principles are as follows:

- Supporting innovation: ABF pricing should respond in a timely-way to introduction of evidencebased, effective new technology and innovation.
- > Price harmonisation: Pricing should facilitate best practice provision of appropriate site of care.
- Minimising undesirable and inadvertent consequences: ABF design should minimise susceptibility to gaming, inappropriate rewards and perverse incentives.
- > **ABF pre-eminence:** ABF should be used for funding wherever practicable.
- Single unit of measure and price equivalence: ABF pricing should support dynamic efficiency and changes to models of care with the ready transferability of funding between different care types and service streams through a single unit of measure and relative weights.
- Patient-based: Adjustments to the standard price should be, as far as is practicable, based on patientrelated rather than provider-related characteristics.
- Public-private neutrality: ABF pricing should not disrupt current incentives for a person to elect to be treated as a private or a public patient in a public hospital.

These principles are more into the 'nitty-gritty' of aspects of ABF design.

A key objective of ABF introduction is to improve the efficiency of public hospital services. But health care is not static and what is efficient practice today may not be the best way of providing care tomorrow. This reality needs to be recognised in ABF design in a number of ways. First, ABF pricing should **respond to innovation** in a timely way (the first design principle). There are inevitably lags in incorporating innovations into an ABF system. These might occur from differential rates of implementation of practice change across the country. But they also occur because of the lags between a new approach being adopted, the costs of that being recorded in costing systems and those data being used for weight setting purposes. Typically costs in a hospital in financial year X do not flow through to weights until year X + 2. Funding arrangements in the interim vary (e.g. hospitals absorbing the costs as part of their commitment to innovation, states providing separate funding streams). However, the principle enunciated here is that ABF design should recognise the dynamic nature of health care.

Another issue raised by innovation is that pricing should not inhibit or militate against good clinical care. This could occur if pricing encouraged overnight stays for example, when day stay (or even outpatient delivery) had become good practice. The **price harmonisation** principle addresses this issue.

Introduction of ABF creates new incentives on hospitals and their management and clinicians and new risks of perverse responses. To the extent perverse responses occur, they undermine the very objectives of ABF in terms of improving efficiency. Perverse responses also offend against an overarching principle of fairness.

Gaming as an organisational response was identified early in the first ABF implementation in the United States' Medicare program, with the labelling of one manifestation, up-coding or DRG creep as a 'new hospital acquired disease'. Up-coding and splitting of stays was also evident in the early stages of ABF implementation in other countries. Other perverse responses include cost shifting to payers or services outside ABF, and skimping on care, effectively shifting costs onto patients through incomplete or poor quality care. Different design characteristics of ABF and coding policies can influence the risk of gaming and other perverse responses. Thus the third design principle, about **minimising undesirable and inadvertent consequences**, is to recognise the potential of perverse incentives and minimise those risks in system design. Hospitals provide an impressive array of services including patient care (both for inpatients and outpatients), teaching and research. For some of these, casemix classifications are well accepted; Diagnosis Related Groups to describe inpatient care being the best example. But not all services have robust classification systems in place, or the ability to cost those services using agreed descriptors. For some services, such as teaching, it becomes even more complex as the service might be produced jointly with another service such as an inpatient stay. Despite these difficulties, hospitals need to be funded for the services they are providing. Different contributions to inpatient provision, teaching and outpatient care all need to be recognised.

Where good descriptors of activity exist, they should be used. The incentive effects of ABF will be undermined to the extent that they apply only partially, to a narrow subset of hospital activity. Clause A2 of the National Health Reform Agreement provides that:

From 1 July 2012, funding will be provided on the basis of activity through ABF wherever practicable.

Under clause 7 (a), the alternative approach is block grants. These clauses are carried over into the fourth system design principle, **ABF pre-eminence**.

A dictionary definition of 'practicable' is 'capable of being done with means at hand and circumstances as they are'. This suggests that what might not be practicable today may become practicable over time with additional research and development.

A key system transformation enshrined in the National Health Reform Agreement is toward 'a nationally unified and locally controlled health system' which will 'improve local accountability and responsiveness to the needs of communities' (Clause 3 (g)). The National Health Reform Agreement (Clause D2) notes that

The Commonwealth and the States agree that the establishment of Local Hospital Networks will decentralise public hospital management and increase local accountability to drive improvements in performance. Local Hospital Networks will be accountable for treatment outcomes and responsive to patients' needs and will make active decisions about the management of their own budget. They will have the flexibility to shape local service delivery according to local needs.

Local responsiveness requires a degree of autonomy to respond flexibly to different local circumstances. One way to facilitate this is to eliminate silos in funding design. To achieve this, the funding metric should be 'fungible'⁸ so local networks can move their targets around between inpatient, outpatient, mental health services etc. in line with local priorities. The **single unit of measure and price equivalence** principle will be used to guide design choices to facilitate such local responsiveness.

If an ABF system is fair and equitable, then where hospitals provide equivalent services, they should be paid the same. A corollary of this, expressed in the **patient-based** principle, is that payment should as far as possible be based on characteristics of the patient or the service being provided rather than the setting in which the service is being provided. The value to society of a relief of a person's hip pain is the same whether that pain is relieved through treatment in a major academic hospital or in a suburban hospital. Following that line of reasoning, the price to be paid should be the same. Obviously, if an additional service (such as teaching or research) is being provided in the major academic hospital at the same time, then that should also be compensated.

Ideally, differences between patients will be captured in the classification system. However, this is not always the case. The best example is probably the additional costs associated with treating Aboriginal people and Torres Strait Islanders where the small numbers involved would mean that the group splitting criteria in

⁸ Fungible refers to the ability to substitute or interchange services or products.

classification development are not met. This issue can be addressed by paying an evidence-based price premium for treatment of Aboriginals and Torres Strait Islanders. This approach is preferred to a facility-based premium: paying a loading for additional costs of remote hospitals on the argument that it is due to the proportion of Aboriginal and Torres Strait islanders treated in those remote hospitals.

The Australian health system is a mixed one involving public and private care. There is an intersection between the sectors as public hospitals have traditionally provided services to private patients. The National Healthcare Agreement provides that current levels of Commonwealth subsidy to private health care will continue (Clause 21). Although the National Healthcare Agreement and the National Health Reform Agreement involve significant change in the health sector in Australia, there is nothing in the Agreements or in any of the reports and discussions leading up to the Agreements that suggest that change to existing private arrangements were contemplated.

The **public-private neutrality** principle is framed such that the existing balance and system of indirect subsidies should be maintained. Introduction of ABF *per se* should not lead to any change in the public private balance within public hospitals, nor any increased burden on private health insurance funds through cost-shifting or incentives to increase private patient activity.

Consultation questions:

- Do you agree with the proposed principles to guide the development and operation of the Pricing Framework?
- Are there other important principles that should be included?

5. The scope of public hospitals and services included under new funding arrangements

The threshold issue in pricing public hospital services is actually agreeing what public hospital services are in scope. Like the perennial question of how to count hospital beds, the question of what constitutes a public hospital or a public hospital service has many possible answers.

However, the 'letting a hundred flowers bloom' approach to deciding what is a public hospital service is not compatible with the move to the Commonwealth paying a fixed share of the national efficient price from July 2012. It becomes even more critical to resolve this question when the Commonwealth starts paying a higher share of growth of both activity-based and block funded services in July 2014. An absence of a common approach to determining scope of public hospital services threatens to erode one of the overarching principles of the Pricing Framework, namely, that the payment system should be fair and equitable.

Accordingly, this chapter outlines the approaches to resolving the scope issue identified in the National Health Reform Agreement. It then focuses, in particular, on the criteria that the IHPA might use to assess services for inclusion on a 'General List' of public hospital services, eligible to be funded by the Commonwealth.

5.1 The National Health Reform Agreement and the scope of public hospital services

There is no definition of either a public hospital or a public hospital service in the National Health Reform Agreement. However, the National Healthcare Agreement includes the following definition of a public hospital service:

Means health and emergency services of a kind or kinds that are currently or were historically provided by hospitals that are wholly or partly funded by a State or Territory. This agreement recognises that clinical practice and technology change over time and that modes of service of methods of delivery will change over time (NHA 2011, Schedule B, Definitions).

This definition is obviously broad, particularly the reference to services 'historically' provided by hospitals. Health care delivery models are continually evolving, with many services shifting out of hospitals into the community. For example, an English review noted that improved treatment regimes for patients with tuberculosis in the 1940s resulted in the closure of almost 30,000 hospital beds and 'the elimination of an entire class of hospital' (Hensher et al. 1999).

The National Health Reform Agreement attempts to narrow the application of the 'historically provided' concept by noting that a primary consideration as to whether a service is a public hospital service is whether it 'could reasonably be considered to be a public hospital service during 2010' (NHRA, clause A15). While this certainly clarifies the timeframe element, it is based on a circular definition which relies on the even more imprecise concept of 'reasonable consideration' as the litmus test.

The National Health Reform Agreement also makes explicit that the policy intent is to support the clinically appropriate transfer of public hospital services from hospitals to community-based settings as follows:

Public hospital services which attract a Commonwealth funding contribution will continue to be eligible for Commonwealth funding, even if they are subsequently provided outside a hospital in response to changes in clinical pathways (NHRA, Clause A23).

In lieu of any robust definitions, the National Health Reform Agreement outlines three possible pathways to reaching a decision on the scope of public hospital services (see Figure 5.1). These pathways are:

- The default pathway: this identifies a minimum baseline of 'included' services specified in the National Health Reform Agreement that will automatically be eligible for Commonwealth funding as comprising all admitted services and all emergency department services provided by a recognised emergency department;
- The IHPA determination pathway: this involves a consultative, multi-stage process comprising: the development of criteria by the IHPA; the provision by states of recommendations for included services; and the review by the IHPA of these recommendations against the criteria to establish a 'General List' of other services eligible for Commonwealth funding; and
- The bilateral agreement pathway: this involves an individual state and the Commonwealth choosing to enter into a bilateral agreement to negotiate and agree the scope of included services. It must at a minimum include the services specified in the default pathway, but can also include other services agreed to have been provided or purchased by a public hospital within the specific state during 2010 or by public hospitals in Australia.

These pathways are not mutually exclusive. In particular, Figure 5.1 identifies that the IHPA determination pathway is the mechanism to decide whether 'other outpatient, mental health, subacute services and other services' are included in the default pathway and are therefore eligible for Commonwealth funding.

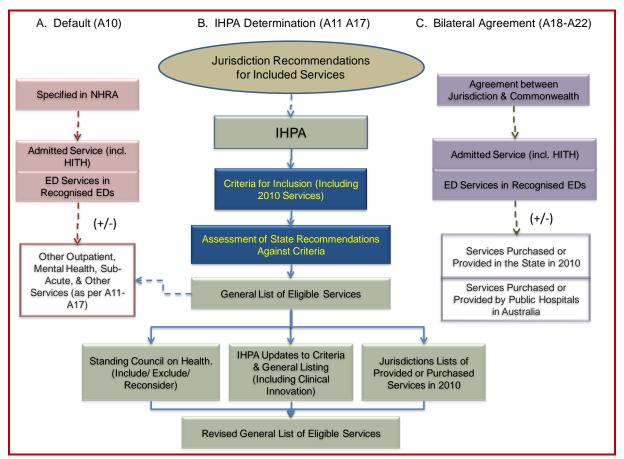


Figure 5.1: NHRA pathways to decide scope of public hospital services

Source: Based on the National Health Reform Agreement

In contrast, the National Health Reform Agreement does not specify any link between the IHPA determination pathway and the bilateral agreement pathway. In theory, governments can enter bilateral agreements on the scope of included public hospital services, without regard to the criteria and the General List developed by the IHPA. In practice, there is likely to be intense public interest in any bilateral agreements, including potential

scrutiny of the extent to which lists of bilaterally agreed public hospital services are in accordance with the criteria and the General List of eligible public hospital services that are independently determined by the IHPA.

The co-existence of the 'bilateral agreement' and the 'IHPA determination' pathways also generates a challenging dynamic across the IHPA, the Commonwealth Department of Health and Ageing and states. It is in the interest of states to have the scope of eligible public hospital services defined as broadly as possible, given that the costs of 'eligible' (included) public hospital services and their growth from 2014/15 will be partly funded by the Commonwealth. (This dynamic would have been different if the Commonwealth had assumed full funding responsibility for GP and primary health care services currently funded by state governments, as envisaged under the superseded 2010 National Health and Hospitals Network Agreement. Under this scenario, the incentive on states would have been to label community-based health services as 'primary health care services' to attract 100% Commonwealth funding, rather than as 'public hospital services' which attract Commonwealth funding of only about 40% of the national efficient price).

It is also important that there is equity between states in the types of services that are included, especially where they will be funded under ABF rather than block grant arrangements. If there is considerable divergence in types of services which are ABF funded, the distribution of costs of services within a particular classification may be bi-modal creating inequity in payment rates.

Returning to the National Health Reform Agreement and the current policy settings, a decision about whether or not to enter a bilateral agreement will be informed by a state's assessment of the relative 'generosity' or breadth of included public hospital services flowing from the application of the IHPA-determined criteria compared with the bilateral negotiations with the Commonwealth Department of Health and Ageing. Clause A21 provides the mechanism to resolve this potential impasse, through stipulating that if a bilateral agreement is not reached by 1 May 2012, the IHPA determination pathway will operate. In highlighting this complex dynamic on the scope of public hospital services, it is stressed that the IHPA's determinative role is that of an independent decision-maker. The 'positioning' that is likely to occur will involve the states and the Commonwealth Department of Health and Ageing.

Hence, the key output required for the Pricing Framework is the set of criteria that will be used by the IHPA in determining the General List of public hospital services eligible for Commonwealth funding. More specifically, the IHPA is explicitly required under Clause A10 to determine the status of 'other outpatient, mental health, subacute services and other services that could reasonably be considered to be a public hospital service'. While these services are not necessarily the only services that the IHPA must consider in its development of criteria and publication of a General List, their consideration is mandatory as part of the 'default' pathway.

A final important point is that the decision on whether services are public hospital services that are eligible for Commonwealth funding is separate to subsequent decisions about how eligible services should be classified and funded (i.e. ABF, block funding or a mix of ABF and block funding). The determination that a public hospital service is eligible for Commonwealth funding does not imply that it will automatically be funded through ABF, nor does it imply that it can, or will be, classified using currently available patient classification systems. However, as the IHPA needs to set an 'efficient price' in the case of ABF funded services will participate in the National Hospital Costs Data Collection from 2012-13 (if they are not already doing so) and report service provision using national measures of activity.

5.2 The changing nature of health care delivery

The delivery of health care services, including hospital services, is changing. In the past, it was relatively easy to identify the public hospital as the building where babies were born, surgery was performed, emergency care was provided to people injured in car accidents or experiencing a heart attack, and where many people died. However, this traditional model of a public hospital is blurring. New technology and changing consumer

expectations mean that many 'acute' services are increasingly being provided in settings outside the hospital walls as follows:

- Dialysis is now frequently provided in a person's home or in satellite clinics located outside public hospitals.
- ➤ Hospital in the Home (HITH) programs allow people to receive chemotherapy, intravenous antibiotics and antiviral therapy in their homes under the supervision of hospital outreach staff.
- New hospitals are being established that focus on providing particular services, such as dedicated elective surgery centres.
- In many rural areas hospitals have been transformed through closer integration with community health and aged care services, creating new entities that span the continuum of a community's health care needs (Duckett and Willcox 2011, pg 186).

In parallel with some services moving outside the hospital walls, there has been a proliferation of new, or reconfigured, organisational entities providing 'hospital related' services. While there is no clear-cut, mutually exclusive typology of these services (or of the agencies that provide them), they include:

- Early discharge programs (sometimes focussing on specific patient groups such as maternity care) and hospital in the home programs;
- Organisations providing services following a previous hospital admission such as cardiac rehabilitation and post-acute care;
- Hospital 'substitution' programs, such as chronic disease management services to reduce the level of unplanned hospitals admissions through active patient management of people at high risk of using hospitals; and
- Hospital 'diversion' programs that stream people into alternative care models on either a planned or emergency basis (such as transition care, mental health crisis assessment services and communitybased palliative care teams).

Some services may be provided by hospital-employed staff, while other services may be contracted out to other entities including non-government organisations (NGOs) and private health services.

With a population that is both ageing and experiencing more chronic disease, there is also increasing demand for health and social support services provided to people in their homes. This can include community nursing, other services provided under the Home and Community Care program to maintain frail, older people in their homes, and the provision of aids, equipment and other resources (such as home oxygen for people living with chronic obstructive pulmonary disease). Given that health care services are provided on a continuum of need, and in a range of different settings, the listings above highlight the challenge in defining what is or is not a public hospital service.

In this complex environment, the National Health Reform Agreement tries to balance two separate, but related, challenges:

- First, it seeks to have funding 'follow the patient' if health services move outside public hospitals 'in response to changes in clinical pathways' (Clause A23); but
- Second, it sends a strong signal that no government (either the Commonwealth or states) should 'change the management, delivery and funding of health and related services' solely for the purpose of changing existing funding responsibilities (Clause A24 & A26).

The National Health Reform Agreement identifies that the IHPA has an important role in ensuring that all governments comply with their agreed, existing roles and responsibilities to fund different parts of the health system.

In determining the scope of public hospital services eligible for Commonwealth funding, it is therefore suggested that three fundamental propositions be adopted as the starting point:

- 1. A public hospital is not the same as a public hospital service.
- 2. Public hospitals provide both public hospital services and other 'non public hospital services'.
- 3. Public hospital services are provided both in public hospitals and in, or by, other entities that are not public hospitals.

These three propositions, which flow from the earlier health service system description, set the scene for the development of criteria to be used by the IHPA in its determination of the scope of public hospital services. They indicate that location or setting is not a sufficient criterion to rule services 'in or out' as public hospital services. They also suggest that it is likely to be useful to develop criteria to define 'non public hospital services', given that public hospitals (or, in fact, Local Hospital Networks under new governance arrangements) will be funded to provide a wide range of services and functions, some of which are not public hospital services. Obvious examples are aged care assessment services and residential aged care, which are often delivered on the physical grounds of a hospital, but not generally recognised as public hospital services.

Consultation question:

Is there agreement with these three propositions as the starting point for thinking about how to develop criteria on the scope of eligible public hospital services?

5.3 Developing criteria for eligible public hospital services

There are many ways to approach and decide what is or is not a public hospital service eligible for Commonwealth funding. When faced with this task, it is tempting to begin by compiling a list of services that most people would agree are clearly hospital services (such as dialysis). The problems with this approach are that:

- It involves a high degree of subjectivity and views will differ even on supposedly clear-cut public hospital services. (The answers may differ according to the state where the respondent resides, linked to historical differences in the organisation and management of public hospital and community health services);
- A catalogue approach is administratively complex. As new types of health services (or models of service delivery) emerge, these new health services must each be assessed from square one, without the benefit of any 'rules' or guiding principles.

That is not to say that the development and use of a set of criteria (as required under Clause A12 of the NHRA) does not have its own challenges.

The preliminary set of 9 criteria that has been developed for use in assessing eligibility of services for Commonwealth funding is listed in Table 5.1. There are some important overarching assumptions that have informed the development of these criteria and that are relevant to how they might be used by the IHPA, as follows:

1. **Criteria include interpretive guidance notes**: The intention is that the criteria would include a series of 'Service Analysis Factors' and interpretive 'Guidance Notes'. These Guidance notes would form

part of the published criteria, in order to ensure the transparency of the IHPA's decision-making in assessing recommendations by states for services to be included in scope. Table 5.1 also includes some examples of services that would be ruled 'in' or 'out' as a result of applying each of the criteria. *These are included for illustrative purposes and do not constitute the entire universe of all services that are included or excluded as a result of applying the various criteria*.

- 2. Included services must satisfy at least one of the (positive) criteria: The criteria have been constructed as a series of independent tests of whether particular services will be assessed as eligible public hospital services to receive Commonwealth funding. In other words, even if a service is not assessed positively on the earlier criteria, it only requires a single positive assessment on a subsequent criterion to be ruled as eligible. Having said that, some of the individual criteria will include multiple conditions that must all be met in order for a service to be assessed as eligible for Commonwealth funding.
- 3. Positive and negative criteria: The majority of the criteria (1-8) describe attributes of services that, if present, would result in a positive assessment of the service being an eligible public hospital service. The important exception to this is criterion 9 which identifies several categories of services that would be ruled to be 'not public hospital services' and therefore excluded from eligibility for Commonwealth funding. The categories of service that would be excluded under criterion 9 were formulated in the 2010 National Health and Hospitals Network Agreement (NHHNA). Although this Agreement is now superseded, the service categories included in that Agreement still have effect in framing what is a 'public hospital service'. This is because the National Health and Hospitals Network Agreement specified particular categories of service for 'transfer' of funding responsibility to the Commonwealth, and potential future transfer or non-transfer to the Commonwealth. In broad terms, these categories comprised a range of primary, community health, population health and specialist health services that are now funded solely by states and, by implication, are outside the scope of public hospital services. These categories have therefore been used to generate the criteria and a list of 'non public hospital services' under Criterion 9.

The way in which Criterion 9 operates is that if a health service meets any of the earlier criteria (1-8), it is assessed as an included public hospital service, notwithstanding that it might have otherwise been captured as an exclusion under Criterion 9. A specific example is specialist community mental health services for people with severe mental illness that would be assessed as an included service under Criterion 7, overruling its exclusion under Criterion 9.

- 4. Criteria as dichotomous or continuous variables: An important consideration in constructing the criteria is whether they should be phrased as simple 'yes/no' (or dichotomous) variables or as continuous variables (e.g. using the language of 'to what extent is the service...?'). Dichotomous variables are easier to assess, but they imply that any instance of a service meeting the criteria merits its inclusion on the General List of services eligible for Commonwealth funding. Instead, it may be desirable to incorporate some measure of the 'materiality' or 'universality' of particular services. This goes to the difficult question of whether services can 'reasonably be considered a public hospital service' (Clause A10). The extent to which a service is provided in more than one state might, for example, be considered germane in assessing whether it can 'reasonably be considered' a public hospital service. The difference between these approaches can be considered using the example of the first criterion:
 - *a.* **Dichotomous:** Is the service currently provided (or was it provided in 2010) on an admitted patient basis? (In other words, any example is sufficient to cause this service to be included on the General List)

b. **Continuous:** To what extent is the service currently provided (or was it provided in 2010) on an admitted basis? (In other words, there has to be some assessment of the weight of evidence regarding the provision of this service for inclusion on the General List).

Expressing the criteria as continuous variables may require the inclusion of further Guidance Notes that specify potential thresholds to reach a decision on whether the criteria is satisfied or not.

- 5. Non-admitted 'specialised' services: The criteria relating to 'other' non-admitted services (as referred to in Clause A11 of the National Health Reform Agreement) have been made more specific by describing these as non-admitted specialised services. In part, this helps distinguish these services from the primary and community health services that are excluded as public hospital services under the operation of Criterion 9.
- 6. 'Funded' by a public hospital: A number of the criteria for non-admitted services that may be provided (outside the campus of a public hospital) include a specific condition that the service be 'funded by a public hospital'. (One exception to this approach is Criterion 7 that also allows for funding to have been provided by an area mental health service, not only a public hospital). It is acknowledged that identical services may be funded by other entities. However, funding by a public hospital (or under the new governance arrangements a LHN) is viewed as a prerequisite in terms of distinguishing the plethora of non-admitted services. The term 'funded by a public hospital' has been used in preference to other terms such as 'hospital auspiced' or 'hospital managed'. It is considered that whether a hospital 'funds' a service will be able to be more objectively assessed, than the governance arrangements for that service.
- 7. Consistent terminology: It is intended that the definitions of the terms used in the criteria would be those used elsewhere in National Minimum Data Sets. The criteria should not introduce new concepts or meanings that are not consistent with definitions included in the Australian Institute of Health and Welfare's Metadata Online Registry.

Consultation questions:

- > Do the draft criteria (including the Guidance Notes) provide sufficient clarity for the IHPA to make transparent and consistent determinations about eligibility of services for Commonwealth funding?
- Are there any suggested amendments to the draft criteria (including any additional criteria or examples)?
- Are there public hospital services that should be considered eligible for Commonwealth funding that would not be positively identified under these draft criteria?
- Are there services that should not be considered eligible for Commonwealth funding that would be incorrectly assessed as eligible under these draft criteria?
- Should the criteria be expressed in absolute terms or based on an assessment of the majority situation?
- Is the concept of services being 'funded by a public hospital' useful and able to be measured? Is this a better approach than 'hospital-auspiced' or 'hospital managed?

5.4 Assessing services and development of the General List by the IHPA

The set of criteria included in Table 5.1 have been developed for the purposes of public consultation. It is expected that the criteria will be refined as a result of the discussions, feedback and submissions.

It is also proposed that these criteria be subject to regular review, every two to three years, to ensure that they keep pace with changing clinical practice. This could occur with input from the IHPA's Clinical Advisory Committee.

Clause A11 of the National Health Reform Agreement requires that states provides the IHPA with their recommendations for services that they consider should be eligible for a Commonwealth funding contribution.

The National Health Reform Agreement provides that the IHPA will consider the recommendations for included services from each state against the published criteria to establish the General List of service eligible for Commonwealth funding.

| Criterion | Service Analysis Factors | Guidance Notes | Examples |
|-----------|--|--|---|
| 1 | Is the service currently provided (or was it provided in 2010) on an admitted patient basis? | This criterion is based on Clause A10 and A15 in the NHRA. In specifying that the service may have been provided on an admitted patient basis in 2010, it captures services that may have shifted from an admitted basis to another delivery model in most states. The criterion uses the term 'admitted', meaning that services can be any of the care types specified in the National Health Data Dictionary and do not have to be 'acute' services. | Surgery Obstetrics Specialist medicine Dialysis Chemotherapy Hospital in the home |
| 2 | Is the service currently provided (or was it provided in 2010) as an emergency department service through recognised emergency departments? | 1. This criterion is based on Clause A10 and A15 in the NHRA. | Emergency department attendances at recognised emergency departments |
| 3 | Was the service provided in 2010 through outpatient clinics on the campus of public hospitals? | This criterion results in all outpatient services that were provided in at least 2010 being considered as eligible public hospital services. Assessment of whether services were provided in 2010 will be determined on the basis of these services having been included in national reporting. | Outpatient clinics at public hospitals |
| 4 | Was the service a non-admitted specialised service that was: a. Causally and proximately related to an inpatient admission? AND b. Funded by a public hospital? | The concept of causality implies that the service was 'planned' as part of an episode of care that included an inpatient admission. The concept of 'proximately' implies that the service is provided within a specified time period, before or after the hospital admission. This is intended to exclude the ongoing provision of services for an indefinite period. | Pre-admission clinics Early discharge programs Medical review or after-care services Post-acute care services |
| 5 | Was the service a non-admitted specialised service that was: a. Causally and proximately related to an emergency department visit? AND b. Provided via a referral from an emergency department? AND c. Funded by a public hospital? | The concept of causality implies that the service was directly related to an emergency department visit. The concept of 'proximately' implies that the service is provided within a clinically appropriate time of attendance at the emergency department. | Fracture clinics Cardiology diagnostic testing Specialist consultation- liaison services Specialist outreach services |

Table 5.1: Draft criteria for determining scope of eligible public hospital services

| Criterion | Service Analysis Factors | Guidance Notes | Examples |
|-----------|---|---|--|
| 6 | Was the service a non-admitted subacute service (rehabilitation or palliative care) that: a. Was provided through a 'designated subacute services' facility/unit/program? AND b. Was provided to the patient at a public hospital, in a community-based setting or at home? AND c. Was funded by a public hospital? | 1. There are different approaches to 'designation' of subacute services across states (as to whether this occurs at the facility, unit or program level). This criterion is intended to identify subacute services that are specifically recognised by each state as designated services. Although the approach to designation will occur through separate processes, the intended concept is to identify the provision of multidisciplinary, time- limited and goal-oriented programs. | Specialist community based palliative care services Rehabilitation clinics Cognitive, dementia & memory services Pain management service Continence services |
| 7 | Was the service a non-admitted specialised mental health service that: a. Was delivered by a designated specialist mental health team? AND b. Provides a response primarily designed to manage high risk/crisis situations where there is high probability of admission? AND c. Was funded by a public hospital or an area mental health service (or state equivalent)? | This criterion is intended to distinguish short-term, acute specialised mental health services from other mental health services that provide long- term support for people with chronic mental illness. The specialist mental health services need to be 'designated' or recognised. Although the approach to designation will occur through separate processes, the intended concept is to identify the provision of comprehensive, multidisciplinary specialist mental health services. | Mental health crisis assessment services Emergency department mental health services |
| 8 | Was the service a non-admitted specialised service that was funded by a public hospital AND: a. Was designed to directly substitute for, or avoid, an imminent admission or emergency department visit? OR b. Was delivered as part of a planned program for a defined population with a history of high hospital utilisation to provide an alternative care delivery model for this population through the provision of a planned schedule of care over a time-limited period? | 1. This criterion is intended to capture specialised services that substitute for hospital care on either an emergency or a planned basis. The services involve patients with either a high risk of imminent hospital admission or patients with previous high utilisation of hospitals. | Outreach programs from public hospitals to residential care that manage people at imminent risk of hospitalisation Emergency department diversion programs Programs for active management of groups with high hospitalisation (such as CHF and COAD) |

| Criterion | Service Analysis Factors | Guidance Notes | Examples |
|-----------|--|---|--|
| 9 | If the service does not otherwise meet any of criteria 1-8, was it a service that: a. Was included in the listing of 'GP and primary health care services currently funded by State governments' specified in Clause B10 of the 2010 National Health and Hospitals Network Agreement? OR b. Was included in the listing of state services 'excluded from transfer to the Commonwealth' specified in Clause B9 of the 2010 National Health and Hospitals Network Agreement? OR c. Was included in the listing of state services for future 'transfer to the Commonwealth or for strong national reform' specified in Clause B34 of the 2010 National Health and Hospitals Network Agreement? | This criterion is intended to define 'non public hospital services'. Its application means that unless a service specifically meets one of Criteria 1-8, it would be considered not eligible for Commonwealth funding as a public hospital service. The interaction between Criteria 1-8 and Criteria 9 (and the relevant clauses of the 2010 National Health and Hospitals Network Agreement) would result in the following services being assessed as not eligible for Commonwealth funding as a public hospital service: Clause B10: Community health centre primary health care services such as generalist counselling, integrated care, GP and primary care coordination programs including Indigenous and rural and remote primary health care services Primary mental health care services which target the more common mild to moderate illnesses Hospital avoidance programs that do not relate specifically to patients who are predominantly being treated in acute care Primary and secondary prevention programs for early intervention and care coordination that focus on the management of patients with chronic disease in the community Screening programs for cancer delivered in a primary health care services Public dental services Public dental services Health care for prisoners School and workplace primary care programs Community health promotion and population health programs including preventive health Drug and alcohol treatment services Child and maternal health services | The following services would be assessed as included or eligible for Commonwealth funding through satisfying any of Criteria 1-8 (even though they would otherwise be ruled out under Criterion 9): Hospital avoidance programs that relate more specifically to patients who are predominantly being treated in acute care Community palliative care Specialist community mental health services for people with severe mental illness |

6. Setting the national efficient price

Having identified criteria to determine the scope of public hospital services that are eligible for Commonwealth funding, the next question is the basis on which these services should be funded. The National Health Reform Agreement makes it clear that the principal method of funding public hospital services should be on an activity basis. The use of block grants (examined in Chapter 9) is a residual method to be used only when it is not 'practicable' to implement ABF.

This chapter discusses the critical issue of how to set the national efficient price for public hospital services that will be funded on an activity basis.

6.1 What is the 'national efficient price'?

The NHRA places the issue of the definition of 'efficiency' front and centre by mandating application of 'the national efficient price' in ABF but the Agreement doesn't define what is meant by 'the national efficient price'.

The terminology of an 'efficient price' stems from the recommendations of the National Health and Hospitals Reform Commission. The Commission recommended introduction of ABF with payments set at 'the efficient cost of care' (NHHRC 2009, p150). The Commission also didn't articulate a precise definition but provided a range of estimates for the savings which would accrue from introduction of ABF: the lower estimate was predicated on bringing costs in states with higher costs down to the national average, the upper estimate of savings based on bringing costs down to costs in the least costly state.

Efficiency has a meaning in every day parlance: if something's efficient, there's no waste. This same every-day meaning can be applied to efficiency in health care, but it begs the question of what is 'waste' in this sector. In the everyday world, waste is typically considered in terms of 'too much', of misuse of resources. So too in health care: too much paper work, more staff deployed than needed, more laboratory tests done than needed, unnecessary procedures performed. Waste and its corollary, inefficiency, can be seen at two levels in the health system: at the local or operational level, and more broadly at the system level. The aphorisms 'doing things right' and 'doing the right thing' also capture some of this duality.

The development of ABF in Australia should be informed by this broader conception of efficiency. This approach will affect both the work of the IHPA and how states perform their roles as system managers. The national efficient price is only one aspect of ABF; a broader conception of efficiency might also inform and influence system governance arrangements.

It is proposed that the following definition be adopted that will be used for the outcome of the price setting process:

A hospital operating at the national efficient price will

- be able to provide episodes of care (on average, across all types of care, as measured using agreed classifications) at or below the national benchmark;
- *be able to respond to new technologies which are cost-effective from a societal point of view;*
- minimise negative consequences that fall on patients (including those attributable to poor quality) or on other parts of the service system; and
- provide services which, at the margin, lead to the same improvement in individual or community health as services provided in other parts of the health system.

6.1.1 'PROVIDE EPISODES OF CARE'

Governments have agreed three classifications which will define 'episodes of care' of inpatient, outpatient and emergency department activity in 2012/13. These classifications will be accompanied by relative values which reflect the relative costs of providing care. It is not expected that every episode of care in every hospital could be provided at or below the national benchmark. What is contemplated in this definition is that on average, the hospital will operate at benchmark; for some episodes of care its costs will be at or below benchmark, for some above. Similarly there may be some specialties for which the average episode of care is provided at below benchmark and some specialties where the average episode of care costs more than benchmark.

6.1.2 'RESPOND TO NEW TECHNOLOGIES'

Health care is dynamic with new treatments and new technologies becoming available on a regular basis. ABF must recognise this and the efficient price (or other aspects of the ABF system) make provision for regular updating of prices and classifications.

Most European applications of ABF involve some form of separate payments to ease technological innovation. In the United States, the independent Medicare Payments Advisory Commission (MedPAC) advises Congress annually on updates to prices to be paid to hospitals for treating Medicare patients. MedPAC bases its recommendations on the viability of hospitals in prior years and whether hospitals, for example, can afford to acquire the capital necessary to modernise their facilities and otherwise keep up to date (Medicare Payment Advisory Commission 2011, see p44). MedPAC has also explicitly considered the need to ensure the health system has a capacity to innovate and has identified three approaches to funding innovation: using reference prices, innovation risk sharing and providing interim coverage for new technologies with a requirement to collect information to inform longer term decisions (Medicare Payment Advisory Commission 2010, see Chapter 1).

One of the issues with introduction of new technologies is that payment weights lag behind cost weight changes. Victoria has established a separate process to fund new technologies pending incorporation of the costs of these technologies into the payment weights. Similar arrangements are in place in other countries (Busse et al., 2011).

In summary, this element of the definition highlights the potential requirement for alternative funding arrangements to support the introduction of new technology on a transitional basis, prior to the costs of new technology being included into ABF payments.

6.1.3 'MINIMISE NEGATIVE CONSEQUENCES'

Health service providers may have an incentive to shift costs onto other parts of the health system. Shifting costs onto community agencies can be addressed through expanding the scope of the funded 'episode of care', for example making hospitals responsible for immediate costs post-discharge. The original implementation of ABF in Victoria responded to concerns that length of maternity stay might be reduced too far by assigning to hospitals responsibility for the costs of post-partum care for the first seven days after a delivery. In a similar vein and more generally, in some countries hospitals are penalised if their patients are more likely to experience an unplanned readmission at some interval following their initial discharge.

There can also be negative outcomes for patients arising from poor quality care, with costs in this instance falling on the patient. Across the whole system, hospital acquired conditions lead to considerable extra costs, estimated to add 17% to cost per case, and an estimated \$0.5 billion annually to hospital costs in the two states studied (Queensland and Victoria) (Jackson et al. 2011). Potential strategies to incorporate consideration of quality of care in the Australian implementation of ABF are discussed further in Section 7.5.

6.1.4 'THE SAME IMPROVEMENT'

Although the efficient price applies to hospitals, it needs to be set at a level which would be consistent with efficiency across the whole health system. Setting too high a price could distort overall funding allocation and concomitantly lead to an underinvestment in non-hospital services.

This element of the definition therefore incorporates the notion of 'allocative efficiency'. The implementation of ABF and the determination of the national efficient price have to move beyond 'technical efficiency' in hospitals (paying for services at the 'right price') to considering the value associated with paying for different types of services. The broader framing of efficiency in this definition suggests that the goal should be 'right price for the right product that leads to the right outcomes'. This concept is challenging in the Australian context of multiple funding sources for different types of health services. Moreover, the National Health Reform Agreement also makes it clear that states are the system managers with responsibility for planning public hospital services is association with LHNs and local communities. Nonetheless, the definition indicates that price-setting for public hospital services should have regard to the impact and interaction with prices set for other types of health services the whole health system.

Consultation question:

> Do you agree with the proposed definition for a hospital operating at the national efficient price?

6.2 What is the price for?

Price-setting requires that there be clear specification of the product or health service, the issue discussed in this section.

6.2.1 WHAT SHOULD BE THE UNIT(S) OF ACTIVITY?

Hospitals provide a range of different services. So different are the different types of hospital services that separate classification systems have been developed to describe the different types of services: DRGs can only describe inpatient activity, Urgency Related Groups can only describe emergency department activity and so on. There are two approaches that are taken internationally to address price setting in a multi-product context:

- a. To segment the separate products with different payment schedules (and separate targets) for different product types; or
- b. To develop a single, 'global' measure of hospital activity.

Early applications of ABF adopted the segmented approach: payment weights for inpatients and outpatient activity, for example, were on different scales, and different targets were established for different types of activity. Victoria has followed the segmented approach with different nomenclature for different types of service for example:

- > Weighted Inlier Equivalent Separations (version 18) for acute admitted patients (WIES)
- Rehabilitation weighted units (RWUs)
- Weighted activity units for non-admitted patient radiotherapy (WAUs)
- Weighted encounters for non-admitted activity classified in the Victorian Ambulatory Classification System.

The National Health Reform Agreement contemplated this approach. The 'national efficient price' in the Agreement is defined as:

the base price(s) which will be determined by the IHPA and applied to those services funded on the basis of activity for the purpose of determining the amount of Commonwealth funding to be provided to Local Hospital Networks. The IHPA may determine that there are different base prices for discrete categories of treatment, for example admitted care, sub-acute care, non-admitted emergency department care and outpatient care. In the event that there are multiple national efficient prices, the IHPA will determine which national efficient price applies (NHRA pp68-9).

However, the Agreement might also be read as contemplating a global measure of hospital activity. Clause B73 indicates that:

States will provide ... a confidential estimate of weighted service volumes for a financial year, as an aggregated total, by the end of March in the preceding financial year.

The use of the definite article 'an' in relation to the 'aggregated total' suggests a single number will be provided.

Later applications of ABF tended to follow this alternative approach where payment weights from the different classification systems are harmonised into a single care pathway. Queensland, for example, has a single measurement unit, Weighted Activity Units across all types of hospital services funded under ABF. Similarly, the English have attempted to do the same by setting prices for 'bundled' packages of care.

6.2.2 PROPOSED APPROACH TO THE UNIT OF ACTIVITY

One of the system design principles advanced in Chapter 4 effectively determines this issue:

Single unit of measure and price equivalence: ABF pricing should support dynamic efficiency and changes to models of care with the ready transferability of funds between different care types and service streams through a single unit of measure and relative weights.

In reality if there were to be multiple separate prices related to each of the separate service types, they could easily be converted into a unified measure by a simple arithmetic calculation.

The IHPA has no role in target setting and so this reason for separate prices and nomenclatures serves no useful purpose. If states wish to set separate targets for different service types they could still do so whether or not a single national unit of measure has been adopted.

There are a number of downsides of a single unit of measure:

- There may be merit for priority setting to distinguish and highlight activity in the separate service streams;
- A single unit of measure may suggest that casemix classifications for all of the service streams are equally robust; and
- The relative weights for outpatient activity will become very small fractions (although the reality is that these will commonly be expressed in the funding level for each unit of activity).

In terms of the first of these weaknesses, regardless of whether a single unit of measurement is adopted, it would still be possible to report on service stream activity separately. The other weaknesses can only be addressed by education.

Consistent with the principle we have advanced, we believe that using a single national unit of activity will send desirable signals about local service-mix flexibility.

It is therefore proposed that activity in all service types be described in terms of a single measurement unit, proposed to be called the National Weighted Activity Unit (NWAU). As this unit will be updated annually, it is further proposed that the unit be designated according to the year of its operation. This means that in 2012/13, the unit of activity will be described as NWAU (2012).

Consultation question:

Is a single unified measure the right approach at this stage of development of ABF?

6.2.3 WHAT SHOULD THE UNIT OF ACTIVITY COVER?

The National Weighted Activity Unit as its name implies is a measure of activity or output of services. The responsibility of the hospital is to combine inputs (such as time of staff, pharmaceuticals) into intermediate products (like days of stay) which are then used in the treatment or care of patients. Similar patients are grouped together through classification systems. The costs of the inputs/intermediate products are used to determine payment relativities for the classification system groups. The 'inputs' included in the National Weighted Activity Unit cover the recurrent cost of public hospital services; responsibility for funding capital remains a state responsibility under the National Health Reform Agreement, and this has been interpreted as extending to depreciation. While teaching is sometimes considered a 'joint product' that is associated with clinical care, the Agreement identifies that teaching, training and research will be funded separately (initially as a block grant) and hence these functions are also not part of the unit of activity.

In most cases, what should be encompassed in the costs of care is straightforward. But a key area where uncertainty can arise relates to the boundaries of care: for example, to what extent should care outside the hospital be bundled with care inside the hospital? The more boundaries along the care pathway, the greater is the potential for cost shifting. In the initial implementation of ABF in Victoria, there was concern that women might be discharged too early from hospital after delivering a baby, thus transferring costs from the hospital to the woman and her family. The definition of the service was thus changed to include both the hospital stay and care provided by home nursing services for the first few days after the delivery. As proposed in Section 6.1, ABF design should ensure that

A hospital operating at the national efficient price will

- be able to provide episodes of care ... at or below the national benchmark; ...
- minimise negative consequences that fall on patients (including attributable to poor quality) or on other parts of the service system;

Development of new product definitions should be guided by what is best for the patient and carers. It is important that desirable developments in care are not stymied by ABF product-definition incentives.

It is proposed that ABF implementation in 2012/13 should not involve any changes to traditional product definitions. However, the IHPA Clinical Advisory Committee could play an important role in proactively identifying and examining any potential impacts on patient care arising from product specification.

Consultation question:

- Should the future design of ABF involve any non-traditional product definitions to minimise cost shifting externalities?
- If so, in what areas should they be considered?

6.3 What should be the level at which the price is set?

Having identified what the national efficient price is meant to do (canvassed in Section 6.1) and what is the unit of currency (Section 6.2), the next step is to set a price, the core task of the IHPA.

There are three broad options for establishing the national efficient price: normative or 'best practice' prices; prices in the middle of a distribution of observed costs; and use of a price lower than average cost to provide for a greater emphasis on efficiency improvement.

The first approach to pricing can be thought of as akin to 'best practice' pricing (sometimes also referred to as normative pricing), based on an assessment of the health benefit derived from the service. The latter two approaches are forms of 'cost based' pricing, where the prices are based on observed costs. The degree to which cost-based prices incentivise efficiency depends on the point along the distribution of observed costs at which the price is set.

6.3.1 BEST PRACTICE PRICING

Most ABF implementations involve empirically-based price and weight setting, derived from cost data. In contrast, 'best practice' pricing is normative, based on 'best practice' care paths for specific conditions. Best practice weights/prices can lead to payments which may be above or below a measure of 'central tendency'⁹.

The English Payment by Results scheme (the program of activity-based funding for hospital services) has recently introduced best practice pricing in a number of areas. The aim of best practice pricing is improved quality of service and patient experience, with the prices/weights built on widely accepted clinical evidence. The program of best practice pricing started with four areas in 2010/11: cholecystectomy; cataract pathway; fragility hip fracture care; and acute stroke care. Introduction of an additional six areas occurred in 2011/12: interventional radiology; incentivising higher daycase rates; primary total hip and knee replacements; adult renal dialysis; transient ischaemic attack; and paediatric diabetic medicine.

Normative pricing relies on agreement on what constitutes 'best practice' and, in the English case, were implemented some eight years after the Payment by Results implementation commenced. Another example of 'best practice' prices is to structure prices/weights to encourage same-day alternatives to overnight stays where this is clinically appropriate; the implementation of 'patient focussed funding' in British Columbia adopts this model and involves a substantial premium for same day care (British Columbia Health Services Purchasing Organization 2010).

The need to develop agreed best practice paths is a critical factor in slowing adoption of best practice pricing.

6.3.2 AVERAGE COST PRICING

The National Health Reform Agreement implicitly prioritises consideration of a 'cost-based' approach to pricing, mandating, in Clause B12 (b), that the IHPA 'consider the actual cost of delivery of public hospital services in as wide a range of hospitals as practicable' when setting the price.

Basing prices on average costs has the attraction of being straightforward but has two limitations. First, it is not very demanding, simply incentivising hospitals to become 'average' – even those that are currently efficient might be encouraged to 'slacken off'. Second, it is policy neutral, pretty much taking existing practice as given. But this may be not desirable if policy makers wish to place greater incentives on certain types of activity e.g. conditions with long waiting lists.

⁹ In statistics, 'central tendency' refers to the centre or middle of a distribution of how a variable is measured. There are many measures of central tendency including the mean, median, mode, trimmed mean, geometric mean etc.

Most pricing strategies based on observed costs will exhibit some instability. In the case of average cost pricing, publication of 'the national efficient price' will lead to identification of some hospitals as being inefficient with subsequent pressure on them from states, as the system managers, to improve their efficiency. Assuming they are successful in that regard and hospitals identified as being efficient don't increase their cost structures, then the average costs of care should reduce and with it 'the efficient price'. The positive side of this is that it produces an automatic driver for efficiency improvement, phased in over time. Average cost pricing is particularly vulnerable to shifts in performance of the most expensive hospitals: price instability can therefore be mitigated (but not eliminated) by using an alternative measure of central tendency, such as the median cost.

6.3.3 BELOW-AVERAGE COST PRICING

Street and Maynard (2007) describe below-average cost pricing as setting a 'more challenging benchmark', and use the Victorian example where implementation of ABF was accompanied by an emphasis on achieving major improvements in efficiency (Duckett 1995).

A variety of other points along the observed distribution of costs can be used to establish benchmark, belowaverage cost pricing, in order of parsimony:

- a. Lowest quartile
- b. Low outlier trim
- c. Low extreme trim
- d. Antepenultimate ('third lowest')
- e. Minimum

The Victorian implementation of ABF set the price around the third lowest cost: this was in the context of a significant budget reduction but also the desire to show that these challenging targets were realistic in the local context.

As was shown with the implementation of ABF in Victoria, if significant budget reductions are implemented simultaneously to ABF, there can be confusion in stakeholder and public perception about the merit of ABF as a funding approach and the consequences of the budget reductions.

6.3.4 CONSIDERATION OF THE OPTIONS

The principles developed in Chapter 4 can help inform where the price is set, with the following four principles being most relevant to this question:

- Efficiency: ABF should improve the value of public investment in hospital care and ensure a sustainable and efficient network of hospital services.
- **Fairness**: ABF payments should be fair and equitable.
- > Price harmonisation: Pricing should facilitate best practice provision of appropriate site of care
- **Stability**: The payment relativities are consistent over time.

The **price harmonisation** principle would guide toward best practice pricing. However, as was indicated above, this relies on agreed best practice pathways, which are not available in Australia at this stage. Two possible exceptions to this are:

- where different states have adopted different ways of classifying the same patient (renal dialysis and chemotherapy being the most obvious examples); and
- > where care can be provided safely either on a day stay or overnight basis.

In the first case, evidence-based weights for the two examples should be harmonised so hospitals are remunerated equally, regardless of how a patient is classified. In the second case, low trims or other mechanisms should be used to discourage overnight admissions for conditions where day stay has become a widely accepted practice. Best practice pricing should be on the development path for the IHPA, and this should involve co-operative action with other national bodies such as the Australian Commission on Quality and Safety in Healthcare. However, other than for the limited exceptions noted above, **it is proposed that weights and pricing in 2012/13 should be based on observed costs not best-practice paths.**

Consultation question:

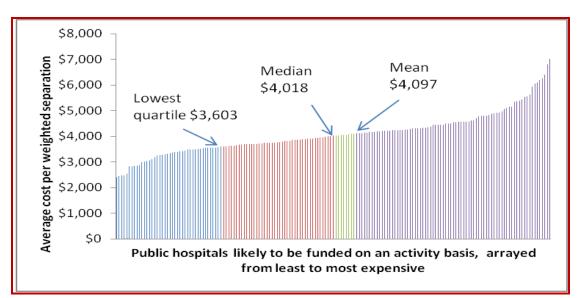
Do you agree that it is too early in the development path of activity based funding in Australia to adopt best practice pricing as the standard approach?

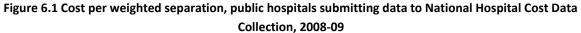
The first objective in the National Health Reform Agreement is to 'improve patient access to services and public hospital efficiency through the use of activity based funding (ABF) based on a national efficient price' and this is reflected in the proposed **efficiency principle**. But this begs the question of how much improvement in efficiency should be driven in the first years of ABF? All the pricing options outlined above will potentially lead to efficiency improvement with pricing set below average or median leading to larger efficiency gains.

Average-cost based ABF will identify some hospitals as relatively efficient and others not so. Governance arrangements can be used to ensure that efficient hospitals use their ABF surplus in a way which does not increase on-going operating costs e.g. for research grants or equipment modernisation. This will be a critical role of states as system managers. The National Health Reform Agreement gives significant autonomy to states in this regard including providing that:

There will be no requirement for Local Hospital Networks to be paid the full national efficient price if the State considers that a lower payment is appropriate, having regard to the actual cost of service delivery and the Local Hospital Network's capacity to generate revenue from other sources (Clause A65).

Costs of public hospital care vary significantly across hospitals, even after adjusting for the case mix of the hospital. Figure 6.1 provides an illustration of this variation in costs: it is preliminary and is based on a sample of hospitals that can report costing data at the patient level.





There are two main data sources for information on costs of public hospital care in Australia, one collated by the Australian Institute of Health and Welfare (from a 'hospital establishments collection' and the other by the Commonwealth Department of Health and Ageing known as the National Hospital Costs Data Collection (NHCDC). The latter collection is more detailed and includes estimates of costs of individual (unidentified) patients, which can be aggregated to the hospital level. It is this data set which is used to establish relativities for cost weight purposes.

About two thirds of all public hospitals submit costing data to the NHCDC. Figure 6.1 is based on data drawn from the most recent NHCDC, 2008-09¹⁰: excluding all hospitals likely to be block funded and three other smaller hospitals with aberrant data, 171 hospitals remain¹¹. This data set shows the typical very wide distribution of costs of care before introduction of ABF, with a range from \$2,408 per weighted patient treated (separation) to \$7,010, an almost three-fold variation. There appears to be no consistent pattern with hospital size, suggesting that taking account of case mix has addressed this issue (figure not shown but r² for number of weighted separations and cost per weighted separation = 0.02).

The average (arithmetic mean) of the hospital average costs is \$4,097 per weighted separation, the median slightly lower as \$4,018. The cost per weighted separation for one quarter of the hospitals is below \$3,603.

Both the **stability principle** and the requirement in the National Health Reform Agreement for the IHPA to 'have regard to the need for continuity and predictability in prices' (Clause B12 d) would lead to a pricing strategy where the median was preferred over the mean, where an average cost approach was adopted. The essential point is that any updating of prices should not be reduced to a mechanistic exercise of re-calculating average costs from another year's worth of data and simply converting these into prices. Rather, consideration will have to be given to ensuring that updated prices continue to advance the overarching principles of the payment policy.

The **fairness principle** is also relevant to setting the price in these early stages of ABF. Although Australia has a proud track record, going back to the 1980s, of development of an inpatient classification system, there has been no similar development to cover other types of hospital services. Different states have adopted different

¹⁰ Data for 2009-10 will be available shortly.

¹¹ More precisely, there are 171 hospital campuses, some hospitals report data for separate constituent units.

classification systems to pay for these services, or have funded them on a block grant or other basis. There has also been little national attention to costing other than inpatient services.

Addressing the costs associated with teaching, training and research creates another complexity. The larger hospitals have a major role in providing clinical education to undergraduate students and postgraduate trainees, and the time of senior staff is given to professional organisations, governments, and the community. Research and development also occurs in hospitals, sometimes fully funded by industry or research organisations, sometimes not. Some hospitals provide regional services, and telephone advisory services, either to callers from the community or as consultations to other providers. Even smaller hospitals will provide some of these functions. To the extent that the output (and associated costs) of these other services have not been well recorded, then the associated costs will be recorded as falling on the measured services: inpatients, outpatients and emergency care. The contribution to 'unmeasured services' will vary across hospitals and, for a given hospital, over time: this will affect measured efficiency.

There needs to be a relationship between the level at which the price is set (i.e. the extent of benchmarking) and the robustness of the underlying data. Setting a relatively low price should only be contemplated if there is a high degree of confidence in the measurement of activity and efficiency. While ABF is well-established in some states (particularly Victoria and South Australia), it is relatively new elsewhere; consistent national cost allocation processes are still being developed and some of the classifications to describe activity are new to all states. This suggests that there may be some uncertainty about efficiency estimation, at least for the first few years of national ABF implementation in Australia.

Given the potential uncertainty surrounding efficiency estimation and the potential weakness of costing data, it seems unreasonable to adopt an aggressive strategy for setting the national efficient price which may turn out to be based on volatile data. Although the underlying classification systems and costing data are robust enough to set a reasonable price, setting a very low price may go beyond the existing reliability of the data. In the short-term, the preferred option is to set the national efficient price based on a measure of central tendency.

However, over time, with improvements in data input, better understanding of best practice pathways and cost structures, with further clinical and other input and/or in the light of changing economic circumstances, a more robust approach to pricing can be pursued. In the medium and long term, it is proposed that lower than average or normative pricing could be adopted.

Consultation questions:

- Do you support a pricing strategy in the short-term based around the middle of the cost distribution? If so, should it be mean or median?
- What might be the indicators that could used to identify when a move away from such a strategy is appropriate?

6.3.5 INDEXATION

Price-setting must take account of the reality that costing data is not current, but usually reflects the cost experience of several years ago. The most recent (shortly available) hospital cost data from the NHCDC will be for 2009/10, three years behind the price that will need to be set for 2012/13.

Moving from costs to prices, therefore, requires estimates of inflation. These can range from broad, economywide measures (such as the consumer price index), industry-specific indices (relating to cost growth in the health sector) or even, potentially, location or hospital type-specific cost indices. It is important to remember that the nature of indexation arrangements under ABF is quite different to those required under the previous Australian Health Care Agreements (AHCA) that were based on a specific purpose payment. In particular, the AHCA payments included three indices:

- Population growth and ageing;
- > A non-demographic or utilisation growth factor; and
- Cost indexation.

Under ABF there is no longer a requirement for funding to be indexed for demographic changes: instead, hospitals will receive additional funding for extra patients treated. The non-demographic or utilisation growth factor in the AHCA was intended to compensate states for the difficult to measure costs associated with changes such as higher intensity of services provided due to technology and changing consumer expectations. Again, most of these cost drivers should over time be incorporated in cost weights and therefore flow through to the prices set (assuming a cost-based approach to pricing is the principal approach used for most hospital services). It was noted earlier that there may need to be supplementary funding arrangements for new technology prior to its uptake into ABF payments.

Cost indexation is, therefore, the common element required for funding either on a block grant basis or an activity basis. The Australian Bureau of Statistics (ABS) produces a wide range of measures of inflation. In general, output cost indices are preferred to input cost indices. Output cost indices reflect both changes in the costs of inputs as well as capturing changes in the efficiency with which services are delivered.

In its regular report on health expenditure, the Australian Institute of Health and Welfare (AIHW) has identified the types of deflators or indices that it uses for specific areas of health expenditure. The index used by the AIHW for public hospitals and public hospital services is an index produced by the ABS called the Government Final Consumption Expenditure (GFCE) hospitals and nursing home deflator. Subject to further review, it is proposed that this index be used as the basis of adjusting NHCDC costs in price-setting by the IHPA in 2012/13.

In addition to this technical issue about converting past costs into current prices, there is a more substantive question about the approach that the IHPA should take in developing projections of the national efficient price. Under Clause B3 (h) of the National Health Reform Agreement, the IHPA is required to develop four year projections of the national efficient price and provide these as confidential reports to the Commonwealth and states. An approach based on simply projecting forwards historical expenditure levels assumes no change to policy settings. An issue for exploration is the extent to which factors such as productivity improvement might be incorporated in these projections.

Consultation questions:

- Do you agree that the IHPA should use an output cost index to adjust cost data in setting the national efficient price?
- > Are there other factors that should be considered in undertaking price indexation?
- What factors should be considered in developing four year projections of the national efficient price?

6.4 What is the role of states and territories in pricing?

The National Health Reform Agreement makes clear that the states have an important and continuing role as 'system managers'. In particular, the Agreement describes how funding will flow from states to Local Hospital Networks:

A63. State funding paid on an activity basis to Local Hospital Networks will be based for each service category on:

a. the price set by that State (which will be reported in Service Agreements); and b. the volume of weighted services as set out in Service Agreements.

A64. It is expected that these arrangements will create incentives for Local Hospital Network efficiency. If a Local Hospital Network is able to operate more efficiently than the level of funding set by the State under the Local Hospital Network Service Agreement, the Local Hospital Network will be able to retain and reinvest the benefits accruing from efficiency in service delivery and in accordance with State policy and practice, as guided by the Service Agreement.

A65. There will be no requirement for Local Hospital Networks to be paid the full national efficient price if the State considers that a lower payment is appropriate, having regard to the actual cost of service delivery and the Local Hospital Network's capacity to generate revenue from other sources.

In 2012/13 and 2013/14, Commonwealth payments are fixed but for 2014/15 and beyond, the Commonwealth will make an incremental payment for incremental activity. The interaction of the Commonwealth incremental payment and state incremental payments needs to be carefully considered to avoid creating incentives that cause an undesirable overinvestment in hospital care relative to other parts of the health care system.

If the combined effect of state and Commonwealth funding is incremental pricing above marginal cost, this will place an incentive on hospitals to expand services to create additional organisational capacity. The implicit assumption of all public pricing strategies is that the price represents the value to society of the service. However, public pricing (and funding) is highly segmented with multiple funders and multiple funding streams for each funder. Paying average price for marginal activity will almost certainly result in allocative inefficiency relative to some other services.

The converse effects of the relativity of incremental pricing and marginal costs are also important. If the combined effect of state and Commonwealth funding is incremental pricing below marginal cost, this will place a disincentive on hospitals to expand services in what might be priority areas (e.g. hip replacements).

Finally, it is also important to recognise that not all hospitals in Australia, not even all major public hospitals, have access to robust information on their fixed and variable costs. This has important implications for the ability of hospitals to respond effectively to the incentives enshrined in ABF.

7. Adjusting the national efficient price

The overarching principle that ABF payments should be fair and equitable may mean that adjustments to the national efficient price are required. The National Health Reform Agreement recognised this by giving the IHPA the role of:

determining adjustments ('loadings') to the national efficient price required to take account of legitimate and unavoidable variations in the costs of service delivery, including those driven by hospital size, type and location (Clause B3 (g));

Another section of the Agreement referred to loadings 'in respect of patient characteristics, and service location' (Clause A56).

The Agreement provides that

In determining adjustments to the national efficient price, the IHPA must have regard to legitimate and unavoidable variations in wage costs and other inputs which affect the costs of service delivery, including:

- a. hospital type and size;
- b. hospital location, including regional and remote status; and
- c. patient complexity, including Indigenous status (Clause B13).

There are a host of factors which might lead to 'legitimate and unavoidable' variations in costs. Prices might also be structured so as to incentivise quality. Reflecting this, the discussion of these factors (see Sections 7.2 to 7.5) is organised under four broad headings:

- 1. Patient-related factors that are not adequately captured by the classification system (e.g. patient complexity);
- 2. Unavoidable hospital-related and environmental factors that place constraints on the extent to which hospitals can reduce their costs (e.g. remoteness);
- 3. Factors related to the provision of hospital outputs in addition to, but related to, patient care (e.g. teaching, research); and
- 4. Quality-related aspects of the care process.

Many of these have been recognised by the Commonwealth Grants Commission in its review of the factors which impact costs of service provision. Grants Commission factors are determined to take account of both utilisation and cost per service impacts. ABF only needs to take into account the latter effect. The Agreement, however, specifically directs the IHPA not to be all encompassing in its consideration of suitable loadings:

While ... adjustments to the national efficient price should provide a relevant price signal to States and Local Hospital Networks, the IHPA should not seek to duplicate the work of the Commonwealth Grants Commission in determining relativities (Clause B14).

7.1 Approach to price adjustments

The casemix classifications used in ABF ideally would fully account for all patient-related characteristics which have a demonstrable effect on resource use. However, in practice this is not the case, primarily because of the rules governing casemix development; over the years casemix developers have developed these rules to ensure the robustness of classifications. Amongst other criteria, the rules specify that new groups should not be created unless the new group has a specified number of cases or weighted separations (the criterion has

varied over time). Casemix development has also tended to prioritise the use of clinical descriptors (diagnoses) to explain variations in resource use and eschew use of demographic variables.

The effect of this approach is that DRGs cannot fully take into account the additional costs of associated with treatment of some population groups. Adjusting for patient characteristics which demonstrably impact on resource use thus needs to occur outside the classification system, potentially through a loading on the price.

Patient classification systems are also frequently subject to challenge by health providers who do not believe that the classification (and associated funding) system adequately recognises differences in their care model, the level of complexity of their patients, or the highly specialised nature of their services. This debate is healthy, expected, and serves as a continuous quality improvement mechanism to undertake ongoing refinement of classification and funding models. But, there are, and should be, important limits to how much provider characteristics are incorporated in pricing health services.

The entire premise of ABF implementation is that payment should not be driven by the historical cost structures of individual hospitals. The economic theory of 'yardstick competition' is that efficiency gains are maximised when pricing is independent of an individual hospital's particular costs. Instead, setting prices at the 'efficient level' is designed to encourage movement of hospitals towards a benchmark level of efficiency, achieved or able to be achieved by comparable hospitals doing similar things.

The question faced by countries implementing ABF then becomes: how broad or how narrow is the group of comparable hospitals to which the efficient price applies? And, are there particular characteristics of types of hospitals (rather than individual hospitals) that should be recognised in setting the efficient price?

The reality is that these questions have tended to be tackled through a balance of political pressure (the 'squeaky wheel' approach), historical inertia (e.g. 'there should be peer groups because there have always been peer groups' argument) and, infrequently, empirical evidence (i.e. are there legitimate differences in costs outside expected efficiency gains?). Introduction of national ABF with an **Independent** Hospital Pricing Authority provides the opportunity to cleanse the Stygian stables of accumulated negotiated arrangements, often developed with little transparency or evidence base.

7.1.1 THE BASIS FOR AND ORDERING OF ADJUSTMENTS

Two of the principles that have proposed in Chapter 4 are particularly relevant to creation of loadings:

- > Evidence based: ABF should be based on best available information
- > **Patient-based:** Adjustments to the standard price should be, as far as is practicable, based on patient-related rather than provider-related characteristics.

The **evidence-based** principle is an important one: adjustments should only be made to the national efficient price if they are based on available evidence. The words of the National Health Reform Agreement are instructive. Clause B3 (g) provides for:

adjustments ('loadings') to the national efficient price **required** to take account of **legitimate and unavoidable** variations in the costs of service delivery (emphasis added).

So the wording focuses only on those loadings which are both legitimate and unavoidable. There is thus a two stage test for agreeing loadings:

- > That a difference in costs (between patient or provider groups) can be demonstrated and
- > Those differences in costs are unavoidable.

Mere demonstration of costs differences is thus not enough to support a loading. The difference in costs must not have been created by the service itself. Nor should the difference be attributable to state policies; after all the whole approach of the National Health Reform Agreement is a national efficient price, not a set of state efficient prices. The latter criterion (of 'unavoidability') thus parallels the Grants Commission approach of excluding state policy factors from its assessments.

Ideally the evidence for demonstration of cost differences will come from an analysis of the national casemix data sets. Unfortunately these data sets will not always produce reliable measures of cost differences:

- In some cases patient level data are not available e.g. outpatient activity;
- In some cases attribution of costs to the relevant patient groups will not be accurate e.g. costs of hospital aboriginal liaison officers may not be attributed to Aboriginal patients, in which case the costs of those patients will be underestimated.

The phrasing of the **evidence-based** principle is helpful here: decisions are not proposed to be made based on perfect information, rather 'ABF should be based on **best available** information' (emphasis added).

The **patient-based** principle is also important here for a number of reasons. The more a loading is based on patient characteristics, the more it can be seen as outside the control of a particular service or type of provider. Related to that, patient-based loadings do not run the same risk as provider-based loadings of enshrining existing provider-related inefficiencies, even though those inefficiencies may be shared across all providers of a particular type.

Although there are a host of factors which can be used as the basis for loadings, it is proposed that only those bases explicitly mentioned in the National Health Reform Agreement be considered for loadings onto the 2012/13 national efficient price. The effect of this proposal is that the IHPA should only consider loadings for indigenous status and hospital size, type and location. In subsequent years other factors might be considered. The IHPA should develop a process and template for submissions for consideration for new loadings.

In summary, it is proposed that loadings only be approved if there is demonstrable evidence to support them, that the cost differences cannot be said to be created by affected providers and that, when assessing the data for identification of cost differences, all patient-related factors are considered and addressed before any provider-related factors.

Consultation questions:

- Do you agree that patient-related factors should always have pre-eminence?
- Do you agree with the proposed approach to dealing with loadings?

7.2 Adjusting for patient related factors

Two factors are examined: Indigenous status and specialist services for children.

7.2.1 INDIGENOUS STATUS

The three states with the strongest history of ABF (Victoria, South Australia and Queensland) all incorporate a 30% loading for the additional costs of treatment of Aboriginal and Torres Strait Islanders. Additional treatment costs for Aboriginal and Torres Strait Islanders is also a factor recognised in Grants Commission assessments.

Calculating an evidence-based loading for the costs of treatment of Aboriginal and Torres Strait Islanders is hampered by significant data quality issues. On the one hand, there is probably significant under-reporting of Indigenous status in the hospital datasets (see, for example, Appendix A in Commonwealth Grants Commission 2008). The effect of under-enumeration is difficult to estimate but could plausibly lead to inflating of the additional costs of treatment of Aboriginal and Torres Strait Islanders as the full costs of Indigenous-specific services are allocated over a smaller population. On the other hand, not all costs of Indigenous-specific services are captured in all data sets and allocated to Aboriginal and Torres Strait Islander patients, potentially underestimating the costs of their treatment.

The Northern Territory has undertaken a detailed costing study of the incremental costs of treatment of Aboriginal and Torres Strait Islanders and presented the results at the 2011 Australian Casemix Conference (Malyon 2011). This study showed that costs per separation for Aboriginal people who live in remote locations were 18% higher than the urban non-Indigenous population.

Consultation questions:

- Do you think there is a case for a loading for the additional costs of treating Aboriginal and Torres Strait Islander people?
- If so, what should be the evidence used for the loading?

7.2.2 SPECIALIST SERVICES FOR CHILDREN

A comprehensive review of the costs of the Royal Children's Hospital in Melbourne undertaken in 2004 identified that there were legitimate reasons for a loading to be applied for cases treated in that hospital (Duckett 2004). The review also recommended that the size of the loading be re-evaluated every three years.

Ideally any loading for *specialist* services for children ought to be incorporated in the classification system with a split in relevant DRGs at low ages, the adjustment would thus truly be a patient-level one. In the absence of such splits, an alternative approach is to make an adjustment at the hospital or specialist service level where appropriate.

Prima facie, specialisation ought to reduce costs. As Daidone and Street (2011) point out:

It is not immediately apparent why specialist hospitals should claim higher payments at all: by specialising in specific types of activity, providers should have lower costs than those providers that undertake a more diverse range of activities. These lower costs are derived from two primary, though not exclusive, sources:

- *Economies of scale, whereby the unit cost of treatment falls as volume increases, and*
- Economies of scope or specialisation, where it is cheaper to concentrate on providing a limited rather than diverse range of activities.

Most sectors of the economy have witnessed a move toward greater specialisation as providers have sought comparative advantage.

The alternative proposition might also be true: that patients receiving specialised care might have higher costs not captured in DRG¹² assignment i.e. compared to general hospitals, specialist hospitals are treating different types of patients. If so, cost-reducing gains from specialisation might be offset because specialist hospitals attract patients with more complex care requirements.

¹² The original text refers to the English classification system HRGs but the point is the same.

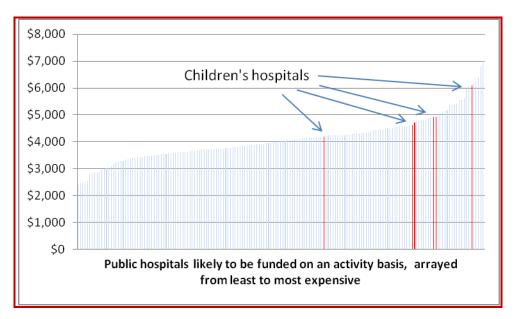
This potential problem arises because DRGs are imperfect measures of casemix: any system of categorisation will inevitably combine patients with below and above average costs. This is not problematic if there is little variation around the average and if the variation is random. But it would be problematic if particular types of patients have significantly higher costs than other patients allocated to the same DRG. These particular patients may be those that require more expensive specialised care.

If DRGs fail to account for systematic differences between patients, the national efficient price attached to the DRG will be imperfect. Moreover, because patients receiving specialised care are more likely to be treated in specialist hospitals, the payment system would systematically disadvantage these hospitals.

The justification for specialist 'top-up' payments, then, would be to correct potential imperfections in the DRG classification system. It would be necessary to determine whether, and the extent to which, patients who receive specialised care are more expensive than those allocated to the same DRG who do not require specialised care.

Figure 7.1 (which uses the same data as Figure 6.1) highlights the specialist children's hospitals in the costing data set.

Figure 7.1 Cost per weighted separation with children's hospitals highlighted, public hospitals submitting data to National Hospital Cost Data Collection, 2008-09



It can be seen that the cost per weighted separation in specialist children's hospitals is skewed to the right: even the most efficient children's hospital in the data set has a cost about 4% more than the median for all hospitals. The mean of the specialist children's teaching hospitals is about 20% more than the mean for all hospitals, as is the median. All this suggests that a loading for specialist children's hospitals will probably be supported using updated data from 2009/10.

This analysis simply examined hospitals which specialise in children's services. It did not analyse tertiary children's units embedded within general teaching hospitals¹³, the unit at Monash Medical Centre being an example. Subject to provision of relevant data to enable comparison of these units with the specialist

¹³ The focus here is on quaternary (and some tertiary) services for children, not on all services provided in children's units in general hospitals, even if medical care in those units is provided by specialist paediatricians or paediatric surgeons.

children's hospital, and an appropriate way of defining such units (e.g. presence of paediatric intensive care unit), the specialist units may also warrant a loading.

Consultation questions:

- Do you think there is a case for a loading for the additional costs in specialist children's hospitals and units?
- If so, what should be the evidence used for the loading?

7.3 Adjusting for unavoidable hospital related factors: location

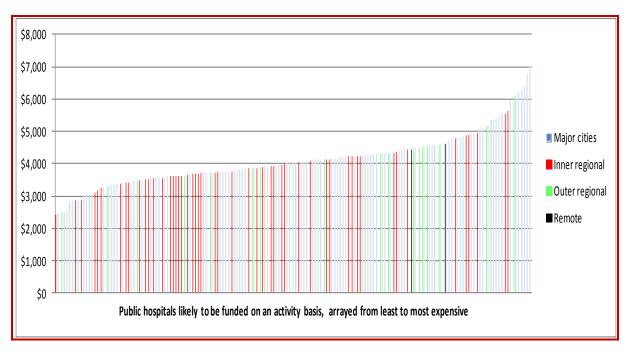
The National Health Reform Agreement directs the IHPA to consider potential loadings for hospital 'type and size' and location. ABF policies in Victoria, South Australia and Queensland have incorporated loadings for some types of hospitals.

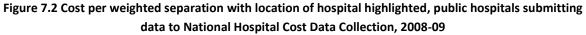
Organisations often appeal to their location as a reason why their costs might be different from similar organisations located elsewhere, without giving precise reasons as to what it is about their location that places them at a disadvantage. If prices are to include location-related modifiers, the reasons need to be set out clearly and their cost implications evaluated carefully as Street et al. (2010) note:.

In some contexts rural hospitals might have higher costs than urban hospitals. For example, when DRG funding was first introduced in Victoria rural hospitals received additional payments (Duckett 1995). There were two reasons for this. First, they faced higher ambulance and patient transport costs simply because they were transporting patients over longer distances. Second, because they were serving small communities rural hospitals were less likely to treat sufficient number of patients to achieve economies of scale. The payment, then, was justified to ensure access to health services for isolated communities. The national implementation of ABF addresses the second of these reasons by funding smaller rural and remote hospitals using a block grant.

In other contexts urban hospitals might appear to have higher costs than their rural counterparts. This might be because either they attract patients of above-average complexity and this is inadequately reflected by the DRG system or they face higher input prices (e.g. wages). It is difficult, though, to see why 'urban' status per se drives higher costs. Rather the variable is likely to capture measurement error in other variables, particularly patient casemix, hospital size and scope, and geographical variation in input prices.

Figure 7.2 shows cost data for hospitals classified by location.





It can be seen that there is substantial overlap in the distribution of costs by region. Table 7.1 summarises these data.

Table 7.1 Measures of central tendency of cost per weighted separation by location of hospital, public hospitals submitting data to National Hospital Cost Data Collection, 2008-09

| | Major cities | Inner regional | Outer regional | Remote | All hospitals |
|---|--------------|----------------|----------------|---------|---------------|
| Mean | \$4,189 | \$3,877 | \$4,165 | \$4,524 | \$4,097 |
| Mean as ratio of all hospital mean | 1.02 | 0.95 | 1.02 | 1.10 | |
| Median | \$4,102 | \$3,741 | \$4,301 | \$4,524 | \$4,018 |
| Median as ratio of all hospital mean | 1.02 | 0.93 | 1.07 | 1.13 | |

The differences between the groups are not statistically significant (Kruskal Wallis H= 6.2, p=.103, df=3), nor do any of the pairwise differences reach statistical significance (using Mann Whitney U). The average cost per weighted separation in major city hospitals and hospitals in outer regional areas are only marginally above that of all hospitals, inner regional hospitals have costs below the all hospital average. The evidence (in the 2008/09 data) thus does not support a loading for these groups of hospitals.

With a difference in cost per weighted separation about 10% higher that the all hospital mean, there may be a case for a loading for remote hospitals. However, the data used in this analysis has not had any loading applied for the additional costs of treating Aboriginal and Torres Strait Islander people. Adjusting for this may mitigate or dampen other cost effects.

Consultation questions:

- > Do you think there is a case for a loading for the differences in costs for hospitals in different locations?
- If so, what should be the evidence used for the loading?

7.4 Adjusting patient-related payments for provision of other hospital services: teaching

As Street et al (2010) point out, 'teaching hospitals' are more expensive than other hospitals for two main reasons.

The first reason is not to do with the teaching function of the hospital per se, but to perceived inadequacies in the DRG system. Teaching hospitals are thought to treat patients of a greater severity than non-teaching hospitals. In theory, the DRG system should be able to account for these differences. In practice, the classification may be imperfect. If teaching hospitals systematically attract more severe patients within each DRG, their costs will be higher. So the teaching hospitals may have higher costs because of uncompensated patient complexity, rather than because of anything to do with the teaching function itself.

The second reason is due to how teaching is funded. In the case of medical education, for example, as part of their training medical students are required to accompany specialist staff around the hospital in order to observe and treat patients. Thus the provision of teaching may introduce delays to the treatment process if, say, specialists spend longer reviewing each patient prior to surgery or prior to discharge so that the medical students can learn from the review process. In essence, the provision of patient care and medical education is a joint and complementary process and it is not straightforward to disentangle these two components.

If teaching, training and research block grants and other sources of funding for health professional education fails to determine accurately the costs of teaching, patient-related hospital costs will also be subject to error. Again quoting Street et al., (2010):

In contexts where teaching, training and research is underfunded relative to patient care, teaching hospitals will have higher costs than non-teaching hospitals. In other contexts, funding for health professional education might be more generous, to the extent that it subsidises the provision of patient care. In such circumstances, costs of treatment in teaching hospitals will appear lower than in non-teaching hospitals.

As shown in Table 7.1, hospitals in major cities are marginally more expensive than the all hospital average, larger major city hospitals are marginally more expensive than smaller hospitals (mean cost per weighted separation for hospitals below median size is \$4,103 vs \$4,273 for those hospitals above median size). There are a number of potential reasons for this difference:

- Diseconomies of scale;
- Adverse selection of patients, that is larger hospitals attract more complex patients within each DRG; and/or
- > Effect of teaching, training and research.

The 2009/10 data will be better quality than the 2008/09 data used in this analysis (e.g. better identification of teaching, training and research costs with block grants for these services). Even using the poorer quality 2008/09 data, the difference in costs is small. Developing an additional loading for 'teaching hospitals' is quite complex. Despite the label being applied to many hospitals, 'teachingness' is not a dichotomous variable: most hospitals provide clinical education, with some providing more than others. In the absence of any way of quantifying the different teaching effort, the additional costs of teaching, training and research should be fully covered in block grants rather than attract a supplemental loading on patient activity.

Analysis of the effect of adverse selection may show an effect, and this should be undertaken when 2009/10 data are available.

Consultation questions:

- > Do you think there is a case for a loading for the potential differences in costs for 'teaching hospitals'?
- If so, what should be the evidence used for the loading?
- How should 'teachingness' be defined?

7.5 Adjusting for quality

A critical issue in ABF implementation relates to the interaction of the new payment system and provision of high quality care: if the payment rate is set too low, care may be compromised; and secondly, incentives to reduce length of stay may lead to an increased risk of readmissions. There has been increased attention internationally to a third interaction: the extent to which financial incentives might encourage good quality care ('pay for performance', P4P) or, alternatively, ABF might perversely reward poor quality care.

Almost all contemporary implementations of funding reform involve a blend of efficiency and P4P aspects. Pay for (quality) performance relies on good measurement. The routine hospital data sets used for activity based funding in many countries now distinguish pre-existing co-morbidities present on admission and hospital-acquired complications. This has allowed the development of a particular form of P4P, non-payment for non-performance. The United States' Medicare payment system has recently been modified to exclude a set of hospital acquired conditions from being used in assigning cases in the casemix classification and thus from impacting activity-based payment.

There are several options within the general rubric of 'non-payment for non-performance': these can be arrayed along a spectrum of increasing scope of potential complications (in the index admission or through readmissions), and a second dimension of the financial impact (see Figure 7.3).

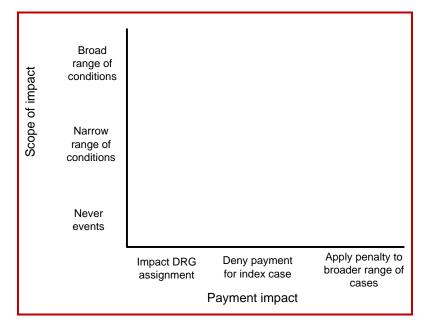


Figure 7.3: Array of potential approaches to 'non payment for non performance'

The various options all relate to modifying the Diagnosis Related Groups classification system in some way.

The narrowest scope is those complications which are clearly preventable and should never occur ('never events'), wrong site surgery being the best exemplar. The United States' Medicare system goes further to focus on a subset of complications which 'could reasonably have been prevented through the application of evidence-based guidelines'. The polar opposite of a narrow scope is to identify all hospital acquired conditions or readmissions as within scope.

The softest form of payment impact is simply to exclude hospital acquired complications from consideration in DRG assignment. Most DRGs involve a distinction in terms of whether 'CCs' (co-morbidities and complications) are involved, with more CCs being associated with greater expected costs and a higher payment weight. At present the DRG algorithm treats hospital acquired complications and diagnoses present on admission ('co-morbidities') equally. This is, in a sense, perverse as a hospital potentially receives a higher payment for a complication acquired while the patient was under its care. However, including complications in DRG assignment (the current approach) could also be argued to be fair to the hospital, as complications require additional resources to treat and some are not preventable with current medical knowledge. By removing not-present-on-admission diagnoses from DRG assignment, weights are assigned purely on the basis of pre-existing risks, with the costs of complications still contributing to the estimation of relative weights, but not influencing the DRG into which patient episodes are assigned.

The United States' Medicare system has adopted this softer payment impact approach for its narrow list of conditions (see Box 7.1). A variant of this approach is to identify a risk-adjusted rate of complications for each hospital and then impose a penalty on those hospitals with a higher than expected rate of complications, after risk-adjustment.

Box 7.1: The United States' Medicare list of Hospital Acquired Conditions

The US Medicare system has adopted a list of hospital acquired conditions which it believes are preventable with contemporary knowledge. The list is updated annually following extensive consultation. The 2012 list is published in the Medicare rules and in a 'hospital acquired conditions fact sheet' (<u>http://www.cms.gov/HospitalAcqCond/downloads/HACFactsheet.pdf</u>) which also includes the detailed International Classification of Diseases Codes.

If a condition is included in the list, and it was not present on admission, then that code is not taken into account in the Diagnosis Related Group (DRG) assignment algorithm. Essentially that means that a hospital will be paid for the relevant case as if that condition had not occurred i.e. if the presence of the code would have meant that the case would otherwise have been assigned to a higher weighted DRG, then the case won't be so assigned and it will be assigned to a lower weighted DRG. The 2012 list is:

- Foreign Object Retained After Surgery
- Air Embolism
- Blood Incompatibility
- Pressure Ulcer Stages III & IV
- Specific Falls and Trauma (Fracture; Dislocation; Intracranial Injury; Crushing Injury; Burn)
- Catheter-Associated Urinary Tract Infection
- Vascular Catheter-Associated Infection
- Manifestations of Poor Glycemic Control
- Surgical Site Infection following Coronary Artery Bypass Graft
- Surgical Site Infection Following Certain Orthopedic Procedures
- Surgical Site Infection Following Bariatric Surgery for Obesity
- Deep Vein Thrombosis and Pulmonary Embolism Following Certain Orthopedic Procedures

A stronger payment impact is to deny payment for a hospital acquired condition; this approach is generally limited to lists of 'never events' e.g. cases of wrong site surgery would attract a zero payment weight under this strategy. Payment might also be denied for readmissions.

The toughest payment impact is to apply penalties for rates of poor performance. From 2013 the United States' Medicare program will impose penalties on hospitals (phased in, of up to 3% of payments in 2015) for excess rates of readmission for (initially) acute myocardial infarction, heart failure and pneumonia

7.5.1 EVALUATING THE CHOICES FOR QUALITY ADJUSTMENTS

Without any adjustment to AR-DRGs, the status quo means that hospitals will, in many cases, receive a higher level of payment for treating patients who experience harm while in their care.

Across the whole system, hospital acquired conditions lead to considerable extra costs, estimated to add 17% to cost per case (Ehsani et al. 2006), and an estimated \$0.5 Billion annually to hospital costs in the two states (Queensland and Victoria) studied (Jackson et al. 2011). Adjusting payment for some or all hospital acquired conditions would create a strong incentive for managers to work with clinicians to reduce hospital acquired conditions; the greater the payment impact and the greater the scope of the policy (i.e. moving toward the north east corner of Figure 7.3), the greater the incentive.

There are risks that need to be taken into account in a 'non-payment for non-performance' policy. Scope will be measured by what is recorded in the patient record. Coding guidelines for some conditions in the narrowly defined United States list have been challenged, as has the degree of 'preventability' for some of the included conditions.

The broader the scope, the greater the incentive for hospitals to address hospital acquired conditions or readmissions, but also the greater the risk that, if the financial impact is disclosed publicly, these hospitals will be unfairly labelled and stigmatised. A narrower range of conditions, all deemed preventable, minimises this risk but also limits the policy impact, and may promote 'teaching to the test' regardless of local quality problems.

Strategies with tough financial impacts may lead to under-recording of diagnoses and hence require more audits of coding. Strategies which exclude hospital acquired conditions from consideration in DRG assignment will be neutral from a coding incentive perspective (although the 'present on admission flag' will need to be audited nationally). Strategies which involve risk-adjustment of complications might even encourage better coding.

Adopting the United States list of hospital acquired conditions in Australia would represent a safe and modest start to linking payment policy and quality issues, but would only shift a trivial proportion of payments.

Alternatively, the DRG classification would not take hospital acquired complications into account in DRG assignment. Where a patient had a hospital acquired complication, the care for that patient would be funded as if they had not had those complications. Because of the way payment weights are calculated, the payment for that case would effectively incorporate the costs of the average hospital acquired complication rate. Hospitals with the average rate of hospital acquired complications would thus not be affected by this policy, hospitals with a lower rate rewarded and those with a higher rate adversely impacted.

Chapter 4 included a principle relating to **minimising undesirable and inadvertent consequences**: that ABF design should minimise susceptibility to gaming, inappropriate rewards and perverse incentives. Paying for hospital acquired conditions, especially if they are generally regarded as preventable, would create an inappropriate reward and a perverse consequence.

However, pay for performance is a relatively new idea and so it is proposed that taking quality and safety considerations into account in ABF should be phased in, minimising transition risks, with limited impact in early years of ABF implementation.

In line with the minimising undesirable and inadvertent consequences principle, it is proposed that in 2013/14 the IHPA adopt the United States Medicare list of Hospital Acquired Conditions and exclude these from consideration in Diagnosis Related Group assignment. This timeframe has been chosen to allow for resolution of some technical issues and to ensure that the necessary data can be collected by all states.

Consultation questions:

- > Do you think that some form of pay for performance incentives should be introduced with national implementation of ABF?
- If so, do you think the United States approach (and listing of hospital acquired conditions) is a reasonable place to start?

8. Pricing private patients in public hospitals

While public hospitals provide all eligible patients (irrespective of private insurance status) the choice to be treated free of charge as public patients, some patients choose to be treated as private patients.

This chapter explores the options regarding the pricing of these private patients under the national implementation of ABF in public hospitals. It does not consider pricing for 'compensable patients' (those eligible to be covered under other third-party arrangements such as transport or accident compensation schemes) or Veterans. The National Health Reform Agreement continues the policy settings of previous Australian Health Care Agreements (AHCAs) in specifying that states are free to determine the level of fees payable by compensable patients, while funding arrangements for Veterans are subject to separate agreements. As Commonwealth funding of public hospitals will now be directly linked to activity for public and private patients only, the implicit assumption under the National Health Reform Agreement is that states would be charging all other patients to achieve full cost recovery.

8.1 Current status of private patients in public hospitals

Private patients¹⁴ represent a relatively small share of patients treated in public hospitals, with this share having declined over the past two decades. Some key measures of the magnitude of this issue are as follows:

- In 2009/10 there were about half a million separations of privately insured patients in public hospitals across Australia. Privately insured patients comprised 9.9% of total public hospital separations in 2009/10 (AIHW 2011a, Table 7.1).
- Another perspective is to examine the relative use of public and private hospitals by privately insured patients. In 2009/10 there were 3.3 million hospital separations for privately insured patients, of which 85% were treated in private hospitals and 15% were treated in public hospitals (AIHW 2011a, Table 7.1).
- > There is varying use across Australia by privately insured patients of public hospitals.
- NSW public hospitals had a higher share of privately insured patient separations than the other states. One-half (49%) of all privately insured patient separations in public hospitals in 2009/10 occurred in NSW. Privately insured patients comprised 16.0% of NSW public hospital separations in 2009/10, compared to the national average of 9.9% (AIHW 2011a, Table S7.2).
- The share of privately insured patients in public hospitals in other states in 2009/10 was as follows: Victoria at 9.2%, Queensland at 4.3%, Western Australia at 6.4%, South Australia at 7.9%, Tasmania at 14.3%, the Australian Capital Territory at 6.2% and the Northern Territory at 0.5% (AIHW 2011a, Table, S7.2)
- The national share of private patients in public hospitals has declined significantly over time¹⁵. The earliest Australian Hospital Statistics report identified that in 1993/94, 17.6% of public hospital separations were private patients, almost twice the current level of utilisation of public hospitals by privately insured patients (AIHW 1997, Table 3.1).

Patients who elect to be treated as private patients on admission to public hospitals will face charges for services including: accommodation, private specialist medical costs (including anaesthetists), pathology,

¹⁴ The analysis in the dot points provides information on privately insured patients and does not include self-insured private patients who meet their own costs.

¹⁵ AIHW reporting does not support disaggregation of types of private patients (privately insured, self-insured, compensable) in earlier editions of *Australian Hospital Statistics*.

diagnostic imaging and prostheses. However, there is no charging against the Pharmaceutical Benefits Scheme (PBS) for the costs of any pharmaceuticals provided to private admitted patients in public hospitals.

Private patients may have some of their costs met through private health insurance, as well as benefits paid under the Medicare Benefits Schedule (MBS). Some private patients will be 'self-insured'; that is, they have no private health insurance but elect to be treated by a doctor of their choice and face the same charges as privately insured patients who have also elected private patient status.

Governments are another major funding source for private patients in public hospitals, as the legislated default benefits payable by private health insurers are significantly below the actual costs incurred by public hospitals in treating these patients. For example, in 2008/09 the average cost of private patients in NSW public hospitals (based on NHCDC data) was \$4,606. Over the same period, the default benefit applying to private patients in NSW public hospitals was \$287/day; this is equivalent to a payment by private health insurers of \$1,033/private patient admission, given that the average length of stay of these patients was 3.6 days. While private health insurers also make other payments (including prostheses and some of the costs of medical services), this example illustrates that the majority of the costs of private patients in public hospitals are met by governments.

8.2 The NHRA requirements and policy objectives relating to private patients

The National Health Reform Agreement specifies that the IHPA has the determinative role in setting the national efficient price for private patients receiving public hospital services (Clause B3(I)). The application of the national efficient price for private patients is similar to that for public patients. That is, Commonwealth funding for private patients will be expressed as a share of the national efficient price, while states have autonomy as to their level of funding contribution for private patients.

The Agreement also acknowledges that states have autonomy regarding the level of fees charged to private patients (Clause G3). This is identical to the situation in previous agreements (e.g. Clause 49 in the 2003-2008 AHCA). While states have always been free to charge private patients in public hospitals at whatever level they determine, in practice, the level of fees has usually been set at equivalent to the default benefits specified in Commonwealth regulations under the *Private Health Insurance Act 2007*.

The policy intent underpinning the National Health Reform Agreement does not differ from previous agreements. The implicit assumption is that the determination of the national efficient price will not create new incentives in public hospitals to treat preferentially public or private patients. While states are required to comply with business rules that specify the patient election process, they have complete discretion as to the level of fees charged to private patients, including whether to charge fees at higher than default benefits or to discount fees for certain types of private patients.

The Agreement recognises that there are multiple funding sources for private patients including governments, private health insurers and patients. It acknowledges this in specifying that payments for private patients should be calculated in such a way as to 'exclude' or 'reduce' these other funding sources. More specifically, Clause A41 stipulates as follows:

ABF payments for eligible private patients must utilise the same ABF classification system as for public patients with the cost weights for private patients being calculated by excluding or reducing, as appropriate, the components of the service for that patient which are covered by:

- a) Commonwealth funding sources other than ABF;
- b) Patient charges including:

- *i) prostheses; and*
- *ii)* accommodation and nursing related components/charge equivalent to the private health insurance default bed day rate (or other equivalent payment)

In other words, the concept specified in the National Health Reform Agreement is that of a discounted payment by governments for private patients that supplements the revenue from these other funding sources. This is consistent with previous AHCAs, where the Commonwealth block grant included a funding contribution for both public and private patients. The difference is that under ABF, the Commonwealth funding contribution is transformed from a 'black box', block grant to a transparent payment for each patient treated, whether public or private. The actual level of Commonwealth funding is unchanged in 2012/13 and 2013/14 from the funding that would otherwise have been payable to states under a block grant. Instead, the Commonwealth funding is converted into activity-based payments for both public and private patients treated in public hospitals. From 2014/15 onwards, the Commonwealth payments for activity will be open-ended and the Commonwealth will pay a higher share of the NEP (45% from July 2014 and 50% from July 2017).¹⁶

Finally, the Agreement specifies that the IHPA's determination of the national efficient price will be informed:

By advice from Heads of Treasuries, produced in cooperation with health departments, regarding current funding arrangements and incentives for private patients in public hospitals. Heads of Treasuries will provide this advice by the end of calendar year 2011 (Clause B3(I)).

Accordingly, this Discussion Paper provides an analysis of the current funding arrangements and the potential options for the determination by the IHPA of a discounted price for private patients in public hospitals. This will form one of the inputs, together with the above advice from Heads of Treasuries, to the IHPA's determination of the national efficient price for private patients in public hospitals.

8.3 Revenue streams and costs for private patients in public hospitals

In addition to payments made under the 2011 National Healthcare Agreement and flowing through state budgets, the existing revenue streams for private patients in public hospitals comprise:

- MBS services: the Commonwealth, through Medicare Australia, pays benefits equal to 75% of the schedule fee for inpatient services; private health insurers pay at least 25% of the MBS fee and may also pay benefits under 'gap cover' arrangements if doctors charge above the schedule fee. MBS payments cover medical services and diagnostic services such as pathology and diagnostic imaging. (Patients may also make co-payments, depending upon the level of the fee charged and the nature of gap cover arrangements).
- > **Prostheses**: Private health insurers pay benefits for surgically implanted prostheses.
- Accommodation: Private health insurers pay per diem benefits towards accommodation costs. In general terms, these accommodation payments can be viewed as a payment towards all the non-medical, non-prostheses costs incurred by private patients (such as 'hotel' services including meals, clinical care provided by nurses and allied health staff, different types of accommodation and clinical care including treatment in a ward, an operating theatre or an ICU). There is no separate charging by public hospitals for many of the cost inputs that may be charged separately in private hospitals (such as the operating theatre and ICU).

¹⁶ This description simplifies the payment changes occurring in 2014 and 2017. Further details are specified in Clauses A34 –A38 of the NHRA.

An important overarching issue to consider in setting the national efficient price for private patients is that revenue will not necessarily equate with costs for the different components of care provided to private patients in public hospitals. Particular issues with each of the inputs to private patient care are examined below.

8.3.1 MEDICAL SERVICES

An important distinction across these payments is that MBS-related revenue may flow directly to private specialists, rather than to public hospitals. Indeed, there are many different private practice models, varying both across and within individual states, that may involve: some fee-sharing between the medical practitioner and the public hospital; the raising of 'facility fees' or 'management fees' payable by the medical practitioner to the hospital; and/or the inclusion of other offsetting requirements on medical practitioners including the provision of on-call care. It is neither possible, nor necessary, to describe the plethora of private practice arrangements in public hospitals across Australia. For the purposes of considering how to determine the national efficient price for private patients, the relevant assumption is that the public hospital and/or the medical practitioner has access to MBS revenue, that is an offset on the costs of medical services that would otherwise have to be met through the public hospital's budget.

In considering medical costs, and the funding sources that support the provision of medical services for private patients in public hospitals, the second important issue is that MBS revenue only covers some of the costs of medical care for private patients. Other medical staff (including registrars, interns and residents) may be involved in the care of public hospital patients, with their costs not remunerated under MBS payments.

8.3.2 PROSTHESES

Private health insurers are required to pay mandatory benefits for a range of surgically implanted prostheses that are part of an episode of hospital treatment (or hospital substitute treatment), where a Medicare benefit is payable for the associated professional service (surgery). The Prostheses List is determined through a regulatory process under the *Private Health Insurance Act 2007*, with two updates or releases of the list annually. Currently, there are more than 9, 000 items on the Prostheses List including cardiac pacemakers, defibrillators and stents, hip and knee replacements, intraocular lenses and human tissues including human heart valves, corneas, bones and muscle tissue.

The Prostheses List includes:

- No-gap prostheses, with the list specifying a single benefit that must be paid by private health insurers; and
- > Gap-permitted prostheses, with the list specifying a minimum and a maximum benefit payable.

The same benefit levels included in the Prostheses List are payable, regardless of whether the private patient is treated in a public or a private hospital. It is important to recognise that the benefits payable by private health insurers may be higher or lower than the actual costs incurred by public and private hospitals for these prostheses. The regulated level of benefits included on the Prostheses List is determined through a centralised benefit negotiation process, so that all private health insurers pay the same level of benefits (within the parameters described above for no gap and gap-permitted prostheses). However, procurement arrangements for the purchase of prostheses may vary between and within states, and between and within public and private hospitals (and, in some cases, purchase by specialists). Hence, revenue is not necessarily equal to costs for prostheses.

8.3.3 ACCOMMODATION SERVICES

Accommodation services-related revenue introduces a further complication, in that regulated default benefits payable by private health insurers are state-specific. Moreover, the patient classification used to describe inpatient services also varies across states, introducing another layer of complexity to the determination of a national efficient price for private patients in public hospitals.

Table 8.1 provides a high-level summary of the default benefit arrangements for private inpatients in public hospitals for each state. (Full details are included in the Private Health Insurance (Benefit Requirements) Rules 2011). The simplest classification structure is used by WA which has only two payment rates (overnight and same day), while Victoria and Tasmania classify patients into 16 categories based on type of care received and length of stay. The 'patient classification' system used in Victoria for private patients was introduced in 1987, preceding the 1993 introduction of casemix in Victorian public hospitals. This system classifies patients into categories such as advanced surgery or surgery based on the associated MBS items, while the psychiatric and rehabilitation categories are intended to cover specific treatment programs. Table 8.1 demonstrates the considerable variation across states in payment arrangements for the accommodation services for private patients in public hospitals, with most of this variation arising from historical circumstances. This table covers shared ward accommodation only, with states able to charge higher fees for single room accommodation.

The variation in classification systems and rates across states is essentially a historical artefact that reflects the outcome of state-level negotiations with health insurers and/or annual price indexation of rates. There is no cost data, for example, that supports the 44% difference in the default benefit for Band 4 same-day patients between Victoria and Western Australia.

| Туре | Patient | Length of stay | VIC | TAS | NSW & | QLD | SA | WA | NT |
|-----------|-------------------|----------------|-----|-----|-------|--------|-----|-----|-----|
| | classification | | | | ACT | | | | |
| Overnight | Advanced surgical | First 14 days | 378 | 378 | 313 | 320 | 313 | 313 | 313 |
| | | > 14 days | 262 | 262 | | | | | |
| | Surgical or | First-14 days | 350 | 350 | | | | | |
| | obstetric | > 14 days | 262 | 262 | | | | | |
| | Psychiatric | First 42 days | 350 | 350 | | | | | |
| | patient | 43-65 days | 304 | 304 | | | | | |
| | | > 65 days | 262 | 262 | | | | | |
| | Rehabilitation | First 49 days | 350 | 350 | | | | | |
| | patient | 50-65 days | 304 | 304 | | | | | |
| | | > 65 days | 262 | 262 | | | | | |
| | Other patients | First 14 days | 304 | 304 | | | | | |
| | | > 14 days | 262 | 262 | | | | | |
| Same day | Band 1 | | 221 | 219 | 226 | 233.50 | 226 | 243 | 226 |
| | Band 2 | | 262 | 261 | 253 | 261 | 258 | 243 | 258 |
| | Band 3 | | 305 | 303 | 279 | 287 | 285 | 243 | 300 |
| | Band 4 | | 350 | 350 | 313 | 320 | 313 | 243 | 313 |

Table 8.1: Minimum benefit payable for private patients in public hospitals, 2011

Source: Based on: Private Health Insurance (Benefit Requirements) Rules 2011

8.3.4 'OTHER' COMMONWEALTH SERVICES

A final issue is that the clear policy intention behind Clause A41 is that there should be no double-payment by governments for private patients in public hospitals. More specifically, Clause A41 states that the costs of

components of the service covered by 'Commonwealth funding sources other than ABF' should be excluded or reduced. This is commonly interpreted as referring to MBS payments.

However, the AIHW notes that Commonwealth Government expenditure on public hospitals in 2009/10 (the most recent published data) comprised:

- \$34.5 billion of grants to states (including the health care specific purpose payment, public hospitalrelated National Partnership payments, highly specialised drugs and PET scanner grants);
- > \$2.2 billion through the Department of Veterans' Affairs;
- \$2.1 billion through 'other Australian Government' payments (including Department of Health direct expenditure on public hospitals such as for blood sector payments and hepatitis C funding); and
- ▶ \$0.9 billion through rebates of private health insurance premiums (AIHW 2011b, see Table 4.6).

The first issue is that the AIHW does not actually record spending by the Commonwealth Government through the MBS for private patients in public or private hospitals under the 'hospital expenditure' category, but reports this instead under the 'medical services' category. It does, however, provide a detailed disaggregation of expenditure on medical services including whether it was provided in a public or private hospital or out of hospital (with a further disaggregation for out of hospital services by type of medical practitioner and service).

The second issue is that there are many Commonwealth programs (other than the health agreement grants and the MBS) that constitute funding sources for public hospitals. For some Commonwealth programs, it is relatively simple to establish that the entire budget for that program was exclusively related to the provision of hospital services (for example, PET scanners). However, there are multiple Commonwealth programs where the funding may be allocated to many types of health services (not only public hospitals), as well as other functions such as public education. Commonwealth funding also flows through many agencies in addition to the Department of Health and Ageing (such as the Australian Commission on Safety and Quality in Health Care), with some of this funding supporting activities in public hospitals.

8.4 Options for determining the national efficient price for private patients in public hospitals

The national efficient price is the price that will be used as the anchor point for Commonwealth and state government funding of private patients; it is not the price charged to private patients in public hospitals, nor does it directly impact the level of default benefits payable by private health insurers.

The calculation of the national efficient price for private patients in public hospitals has been developed with a view to retention of the status quo relating to the current incentives for public and private patient treatment in public hospitals. That is, the intention is to replicate, as far as possible, the existing arrangements in terms of the revenue streams available to public hospitals, so as to neither incentivise an increase, nor a decrease, in the privately insured patient share in public hospitals. This is in accordance with the system design principle of public-private neutrality.

The question of the optimal share of private patients in public hospitals is a policy matter that is outside the scope of this Discussion Paper. Previous policy debates on a move to 'equivalence' (where private health insurers pay equivalent levels of benefits for private patients in public and private hospitals) have been predicated on a funding 'clawback' by the Commonwealth from state governments to ensure there is no net impact on private health insurance premiums. However, these issues did not form part of the final intergovernmental agreements for reform of public hospital funding arrangements. Hence, the policy

objective behind the determination of the national efficient price for private patients is to replicate the existing incentive arrangements for private patients in public hospitals.

8.4.1 'Excluding' or 'reducing'

The National Health Reform Agreement allows for adjustments to the national efficient price for private patients through 'excluding' or 'reducing' the components of services covered by other revenue streams. The mechanism by which these options would operate is as follows:

- Exclusion: some components of the service could be totally excluded in setting the cost weights for private patients. This would apply if the costs of these service components were fully met through other funding streams. In other words, the exclusion approach essentially implies that the 'private patient product' (for which the national efficient price must be determined) varies from the 'public patient product', as some of the components of the former product are fully funded through other sources. The end result is that the cost weights will vary between public and private patients, as costs for some of the components or inputs to private patient care have been excluded from the 'product' that is being costed and then priced.
- Reduction: the reduction option has some similarities, but the important difference is that adjustments are made at the pricing stage, rather than at the cost weight stage. This option would apply if the costs of some service components were partly funded by governments and partly funded through other sources. In other words, the reduction approach implies that the private patient product is identical to the public patient product. However, it involves a reduction in the national efficient price set for private patients to recognise that there are complementary revenue streams for some components of the service.

In terms of considering whether exclusion or reduction is preferred, the relevant pricing principles that might inform this decision include:

- Transparency: In general, adjustments to price are more transparent than adjustments to the underlying weights. This principle would tend to favour adjustments that are based on price reductions, rather than exclusions to the weights.
- Stability: Another principle is to ensure consistency or stability in the payment weights over time. If there is volatility in the costs associated with some of the components of private patient care, this might suggest that it is preferable to use an exclusion approach where these components are removed from the calculation of the cost weights at the outset, rather than having to make annual adjustments.
- Evidence-based: Pricing should be based on robust data. This goes to the question of whether the cost buckets in the NHCDC costing study will support adjustments to weights for some components (such as pathology and imaging) and/or whether there is more accurate data available on revenue streams that can be used to make adjustments to the price through the reduction method.
- Public-private neutrality: Pricing should not affect the existing incentives and choices of all public hospital patients to elect to be treated as either public or private patients. This does not directly influence whether the exclusion or the reduction approach is preferred.

It can be seen that there is no clear-cut 'correct' answer to whether exclusion or reduction should be used, with the outcome needing to balance the above principles. In Section 8.4.3, we outline our proposal for a blended approach with some adjustments undertaken through exclusion and some through reduction.

8.4.2 IDENTIFYING THE 'BASE' FROM WHICH ADJUSTMENTS WILL BE MADE

The second (and closely related) issue for resolution in price determination is the 'base' from which adjustments will be made. There are three options for the base used:

- All patients in public hospitals;
- Public patients in public hospitals;
- Private patients in public hospitals.

At first glance, it might seem self-evident that the starting point for price-setting for private patients should be the subset of private patients in public hospitals. The benefits of this approach would be that price-setting would most closely reflect the costs associated with this population of public hospital patients. However, the relatively small size of the private patient population in public hospitals may preclude this approach, as there may be insufficient numbers of patients in some DRGs to determine cost weights with the necessary accuracy. Another potential concern with this approach is that it implies there are legitimate differences in practice patterns and/or cost weights between private and public patients treated in public hospitals. This would not necessarily be consistent with a policy setting of pricing neutrality across public and private patients.

The option of using 'all patients in public hospitals' as the base from which adjustments are made to calculate the national efficient price for private patients is most consistent with generating the price for a single product, namely, a public hospital patient (irrespective of funding source). However, this option would imply that the price for public patients was also generated through analysis of costing data for all patients in public hospitals, rather than public patients only. If the latter scenario is adopted, this would lend support to setting the base price based on the costs of private patients only, depending upon the robustness of the costing data for this subset of patients.

The least preferred option would be to use 'public patient' cost data as the base for price-setting for private patients in public hospitals.

In the discussion on adjustments below, we are assuming that the base from which adjustments will be made is the 'all patients in public hospitals' costing data.

8.4.3 MAKING ADJUSTMENTS TO THE BASE

The draft proposal for making adjustments to the 'all patients in public hospitals' base to inform pricesetting for private patients is as follows:

- Prostheses/pathology/diagnostic imaging: It is proposed that the costs of these services be fully excluded (100%) from the weights. The rationale is that these services are able to be fully billed against the MBS and/or private health insurers. These services are therefore not costs that need to be met through the government funding contribution.
- Medical services: The same argument could be applied to the costs of medical services that are billable against the MBS and private health insurance. However, this ignores the reality that there will be a range of medical practitioners involved in the care of private patients in public hospitals. Only the costs of medical specialists will be met through the MBS and private health insurance, not the costs of other medical practitioners (such as interns, registrars and residents). If 100% of the medical services cost bucket was excluded in the derivation of weights, this would leave only teaching, training and research block grants to cover the full costs of these other medical practitioners. Accordingly, it is proposed that a share of the medical services costs (related to private medical

specialists) be excluded, rather than all medical services costs. Further work will be required to identify how to determine the relevant share of medical costs for exclusion.

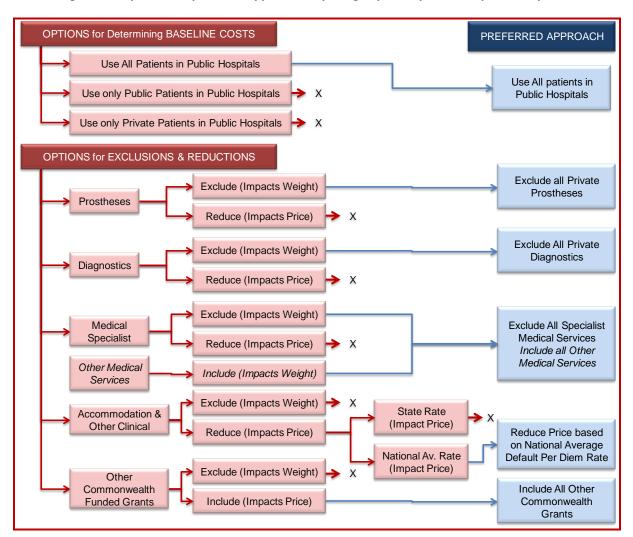
- Accommodation services: Given that the costs of accommodation services are met through multiple funding sources, the cleanest, most transparent approach for this component is to use the 'reduction' approach. This means that the national efficient price would be adjusted through deducting the revenue that is equivalent to the private health insurance default benefits. This is transparent because it would show the 'total' price for private patients in public hospitals, the contribution by private health insurers and the self-insured (specified in terms of the adjustment to the price that is equivalent to the default benefit) and the residual funding contribution by governments. However, there are some important choices sitting under this preferred approach of adjusting the national efficient price for the private patient default benefit. Table 8.1 shows that the default benefit is heterogeneous across states: not only does the benefit level differ, but so too does the 'product' or classification system that is used as the basis for setting the default benefit. In highly simplified terms, there are two broad sub-options:
 - Assume an 'average' default benefit across all states: The argument for this approach is that the approach to setting the national efficient price across the board is not to factor in statespecific differences in costs. To do so with private patient default benefits would be inconsistent with this general approach.
 - Use 'actual' state-specific default benefits in adjusting the national efficient price: The alternative argument is that the use of state-specific revenue adjustments may be necessary to avoid perverse incentives. In particular, the use of 'average' default benefits would advantage those states that currently have higher than average default benefits and would disadvantage those states with lower than average default benefits.

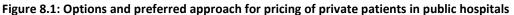
In reaching a preferred position on these two sub-options, it is important to note that these options are not about changing the actual default benefit level in any state, only about how to make adjustments to the national efficient price. Regardless of which approach to adjusting for default benefits is used, the assumption is that the adjustment will need to be DRG-specific to allow for differences in length of stay across DRGs. It should be noted that the length of stay used in these calculations needs to be aligned with the patient group (all patients or private patients) that is being used as the basis of the price.

Other Commonwealth programs: It is not proposed to make adjustments for other Commonwealth programs or funding streams (than those outlined above) in 2012 to the national efficient price for private patients. In part, it is incumbent on the Commonwealth to identify the 'materiality' or magnitude of funding from other programs that might be contributing to meeting the costs of private patients in public hospitals. Another factor for consideration by the IHPA is the need to have a relatively simple and transparent model for pricing private patients.

8.4.4 SUMMARY OF PREFERRED APPROACH

A summary of the options and preferred approach is schematically outlined in Figure 8.1.





The proposal that is being released for discussion and testing through the public consultation process is that the national efficient price for private patients in public hospitals would:

- Use as its starting point, or base, the costs of all patients in public hospitals;
- Involve 'exclusion' of the costs of prostheses, pathology and diagnostic imaging from the calculation of the cost weights;
- > Involve 'exclusion' of the costs of medical specialist services from the cost weights;
- Involve a 'reduction' to the price to deduct off revenue for accommodation services, equivalent to the private health insurance default benefits. The preliminary view is that this should be based on a calculated national average default benefit rate;
- Not involve any other adjustments for other Commonwealth programs that might partially contribute towards the costs of public hospitals.

8.5 Phasing issues for private patient pricing

This section seeks to identify what needs to occur for the 1 July 2012 implementation and what additional reforms might be phased in over an extended period.

For 1 July 2012, there must be a national efficient price that includes suitable adjustments for private patients in public hospitals as outlined above.

Beyond 1 July 2012, there is merit in examining how to harmonise default benefits across states for private patients in public hospitals. The National Health Reform Agreement explicitly requires that the payments for private patients should use 'the same ABF classification' as for public patients. Table 9.1 indicates that this is clearly not the case, with default benefits for private patients currently expressed using a basic patient classification approach that is largely based on per diem payments, rather than DRGs. This is not consistent with the overarching objective of the national implementation of ABF to all patients in public hospitals.

It is therefore proposed that work commence on how to transition from the existing per diem default benefits to an approach using the same ABF classification as applies to public patients. The underpinning assumption is that this would occur on a revenue neutral basis, with no change to the aggregate quantum of revenue flowing through private health insurance default benefits.

A related issue that may warrant future discussion is the basis of the annual indexation of default benefits. This is not in the remit of the IHPA and is, instead, an issue for the Commonwealth in its regulatory role of declaring default benefits and for state governments and insurers in negotiating benefit levels. However, it could be assumed that there might be some alignment of approaches in the determination of price indexation by the IHPA in setting the national efficient price for private patients in public hospitals and the Commonwealth declaration of default benefits that also involve an annual price indexation.

Consultation questions:

- Do you agree with the principles (transparency, evidence-based, stability and public-private neutrality) identified as most important in determining the national efficient price for private patients in public hospitals? Or, are there other factors that should be considered?
- Are there particular issues relating to the identification of costs and/or revenue for the components of services (accommodation, medical costs, pathology and diagnostic imaging, prostheses) provided to private patients?
- Is there support for the proposed approach to adjusting the costs of various components in calculating the national efficient price for private patients in public hospitals?
- > Will the proposed approach achieve the aim of ensuring public-private neutrality?
- Are alternative approaches preferred? If so, what specific alternative is preferred and what are the criteria or principles driving support for this alternative approach?
- Is there support for future work on harmonising default benefits to achieve consistency across classification systems used for public and private patients in public hospitals?

9. Block grant funding

While most public hospital services will be funded on an activity basis, there is recognition in the National Health Reform Agreement that some services will be 'better funded' through block grants. This chapter first outlines the guidance included in the Agreement on the use of block grants and the different pathways to determine which services should be funded through block grants. The most significant point is that the approach to identifying block grants is very different in 2012/13 (essentially bilateral agreements) than in subsequent years (involving IHPA-determined criteria and transparent assessment). Although Block Funding Criteria do not take effect until 2013/14, this chapter begins the work of identifying potential criteria that could be used to decide which public hospital services should be funded through block grants, or a mix of block grants and ABF. Finally, it examines a range of implementation and timing issues for different types of services that are likely to be funded through block grants including small rural and regional hospitals.

9.1 The NHRA and block grants

The National Health Reform Agreement makes specific provision for the development of block grants. Key reference points in the Agreement include:

- ABF is the basis for funding 'wherever practicable' (Clause A2);
- However, public hospital services may be funded through block grants, including for 'rural & regional communities (Clause A1 (c)) and other relevant eligible services determined by the IHPA (Clause A29);
- There is a requirement to develop 'Block Funding Criteria' (Clauses A27 (a) and B3(j)), together with a 'process' for the application of block grants (Clauses A27 and A28);
- Block grant funding is to be developed on the basis of 'efficient costs', with the level of those efficient costs of block grant services to be 'determined annually by the IHPA' (Clauses A4 andB3(e)) with reference to changes in utilisation, scope of services provided and cost;
- Block grants are provided to ensure LHNs have the appropriate 'capacity' to deliver the expected 'services and functions' (Clause A4);
- Block grants funded by the Commonwealth will be on the same 45% and 50% conditions as ABF funded services, as it relates to growth in the efficient cost of these services (Clauses A4, A50 and A51); and
- The determination of services to be funded using block grants can be made via alternative pathways, including in 2012/13 bilateral agreement between the Commonwealth and states (Clause A32) and from 2013/14 onwards, a determinative pathway by the IHPA (Clauses A27-A31).

While the Agreement therefore provides some direction on block grants, it would not be unfair to say that block grants have been the 'poor cousin' of ABF: there has been very little work undertaken to date on the 'why, what and how' of funding on a block grant basis. In part, this reflects the view that block grants are to be used as a last resort, when ABF is 'not practicable'. The benefits of national implementation of ABF are readily articulated (see Chapter 2), whereas the benefits of block grant funding are less clear cut. And, the reality is that since governments signed up to the original National Healthcare Agreement in late 2008, there have been hundreds of meetings on ABF implementation, but little discussion on how best to implement block grants.

Moving forward with block grants is complex due to factors including:

- The different pathways to block grant identification in 2012/13 and 2013/14: it is possible that the services identified for block grant funding in 2012/13 may differ across states, whereas a national approach to block grants is probably envisaged from 2013/14;
- Uncertainty regarding specific services: the delayed implementation of ABF for some important health services (namely, mental health and subacute care) has resulted in uncertainty about how these services will be funded in the short term; and
- The impact of governance arrangements on block grants: The reforms to public hospital funding are occurring in the context of the establishment of LHNs, with states retaining responsibility as 'system managers' of public hospitals. Yet, the identification of services and functions suitable for block grants may need to occur 'below' the level of LHNs, raising some difficult issues about accountability for block grants.

These challenges go to the core of implementing block grants and are discussed in the remainder of this chapter.

9.2 Pathways to block grant funding

Understanding the pathways to block grant funding is necessary to consider early in the discussion as it helps to better define the parameters for the application of block grants.

There are two main pathways for the application of block grants under the Agreement:

- 1. **Bilateral agreement pathway 2012/13** (Clause A32(b)): This involves individual states and the Commonwealth agreeing to the proportion of services to be block grant funded (having first determined the scope of public hospital services eligible for Commonwealth funding).
- 2. IHPA determination pathway 2013/14 onwards (Clauses A27-A31): This involves a consultative multistaged process comprising: the development of Block Funding Criteria by the IHPA: review by states of the impact of the criteria; consideration by COAG of the criteria; and a determinative application of the criteria by the IHPA to reach a decision on services to be funded under block grants. There are also periodic review timelines of the services eligible to be block funded.

It is evident from the above that the pathways to block grants are in two distinct stages and this is shown diagrammatically in Figure 9.1.

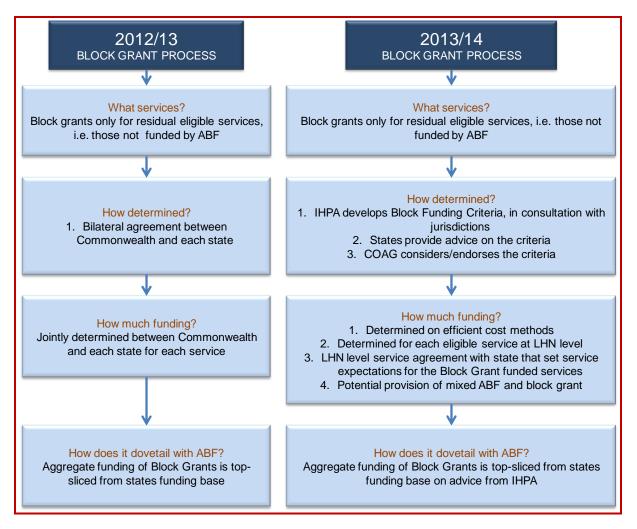


Figure 9.1: Staging of block grant pathways

9.3 Operation of block grant funding in 2012/13

Figure 9.1 illustrates that in 2012/13 the application of block grant funding is via bilateral agreements between each state and the Commonwealth. It is also clear that public hospital services eligible for block grants in the first year are those services that are not funded by ABF.

Determining the quantum of block grant funds is also bilaterally agreed between each State and the Commonwealth with no particular restrictions/parameters or methods specified in the Agreement for determining the level of the grants, either at State, service type, or LHN level. Under Clause A32 the level of Commonwealth funding for block grant services is 'top-sliced' in 2012/13 from the fixed funding level for each state (equivalent to the funding otherwise payable under the National Healthcare specific purpose payment), leaving the residual funding available to fund all ABF services in the State. As for ABF, states have discretion as to the level of funding they allocate to block funded services.

While the IHPA has no role (either determinative or advisory) in regard to block grants for 2012/13, there are important implications for the IHPA flowing from the bilateral agreements by the Commonwealth and states on block grants. Total spending on block grants in 2012/13 will impact on the total recorded spending on services funded through ABF in turn impacting on the recorded cost per national unit of weighted activity and the national efficient price.

The National Health Reform Agreement assumes that more types of services will be funded by block grant in the 2012/13 year than in subsequent years, based on the progressive implementation of ABF. In particular, the Agreement identifies a planned program of transition to ABF for the following services:

- Mental health, sub-acute services and other non-admitted services commencing on 1 July 2013 (Clause 14e (ii)); and
- > Consideration of teaching, training and research by no later than 30 June 2018 (Clause A49).

In contrast, the Agreement refers to 'services in rural and regional communities' as being 'better funded through block grants', implying that these services will not necessarily transition to ABF.

At the time of writing this report (mid December 2011), there are still unresolved issues relating to the services that will be block grant funded in 2012/13;particularly in regard to mental health and subacute services. (Nevertheless, it is anticipated that where services including mental health and subacute services are able to be classified under existing ABF classifications, this will occur from July 2012). Section 9.5 includes more detailed discussion on issues and options for specific services that are likely to be block funded.

9.4 Operation of block grant funding in 2013/14 and beyond

For 2013/14 and beyond, there is a much more transparent process for determining block grant funding. As outlined in Figure 9.1, the process will include:

- The development of Block Funding Criteria by the IHPA. This will be undertaken in consultation with states, and followed by
- A process of assessment by states of their services against the criteria. States may provide advice back to IHPA on the impact of the criteria; followed by
- IHPA forwarding the Block Funding Criteria to COAG for consideration and endorsement, with the option by COAG to request that the criteria are refined.
- Following endorsement by COAG, the criteria can then be used by the IHPA to establish eligibility of particular 'hospital services and functions' for block grant funding (NHRA, Clauses 27-29).

There is also a formal process for providing regular (annual) advice by states to the IHPA as to the impact of the criteria, and for COAG to reconsider and revise the criteria every three years.

9.4.1 DRAFT CRITERIA FOR THE DETERMINATION OF BLOCK GRANTS

The National Health Reform Agreement recognises that block grants are a default funding option in circumstances where ABF is 'impractical'. This concept has been incorporated as one of the system design principles developed in Chapter 4, namely, the principle of ABF pre-eminence. Nonetheless, block grants should not be equated with 'black box' arrangements: the provision of block grants will still need to be underpinned by transparency in terms of the type and level of activity funded and reported.

The Block Grant Criteria that the IHPA is required to develop and apply occur in a context where decisions will have already been made that certain services are eligible for Commonwealth funding. Hence, the purpose of the criteria is to answer the second-order question on whether eligible public hospital services should be funded through ABF, block grants or a mix of ABF and block grants.

The following draft Block Funding Criteria have been developed for the purposes of public consultation, as a preliminary input into the IHPA-determined process that needs to occur prior to 2013/14. The criteria identify the factors that could be used in assessing services that are 'better funded' through block grants (NHRA, Clause A32(b)).

1. The technical requirements for applying ABF are not able to be satisfied.

This is one of the outworkings of the National Health Reform Agreement statement that ABF may be 'impracticable'. The circumstances in which ABF may be technically impractical include where there is:

- No or poor product specification/classification, meaning that there is no basis for differentiating/describing the 'product' that is to be priced; and/or
- No or poor costs associated with any product classification, or where there is no cost homogeneity of the product classification; and/or
- No suitable 'unit of output' for counting and funding the product, such as a well defined occasion of service, episode of care, or bed-day, amongst others.

There will be many circumstances where any one of these three precursors are not perfect, or indeed have recognised flaws. This does not necessarily invalidate an ABF approach: the implementation of ABF is likely to result in improvements in the ability of health services to satisfy these technical requirements. The Agreement gives responsibility to the IHPA to determine the suitability of classifications including specifying data requirements and for 'classifying, costing and paying for public hospital functions' (Clause B3 (b)(ii)). As developmental work is undertaken on improving classifications/costing data/specification of outputs, some services are likely to be able to shift from a block funding basis to an activity funding basis.

2. There is an absence of economies of scale that mean some services would not be financially viable under ABF.

Block grants may also be the preferred approach to funding if there are economies of scale issues such that the financial viability of a service is threatened. Economies of scale measures the relationship between changes in the 'inputs' of a business (such as staffing) and the outputs or services able to be generated (patients treated). At an individual hospital level, hospital efficiency depends on the scale under which the business is operating. The most frequently acknowledged example is that activity based funding is seen as unsuitable for small hospitals.

In thinking about how the economies of scale issue operates, several factors may come into play including:

- There may be a quite low volume of services, with an outcome being that the costs of keeping the health service open and 'available' exceed the funding that would be able to be achieved under ABF payments;
- There may be instability or unpredictability in service volumes, accompanied by an inability to manage input costs in accordance with changing service patterns (for example, seasonal peaks in demand); and
- There may be a skewed profile of services and/or costs. For example, a hospital that has very low volumes of admissions in most of its DRGs may not be able to cope with 'adverse selection' or the inter- and intra-DRG variability (the 'swings and roundabouts' argument that hospitals will be more efficient in providing care to some patients and less efficient with other types of patients) that is implicit in activity based funding.

The 'economies of scale' criterion is frequently used as the basis for justifying block grants for particular services (including small rural hospitals or highly specialised services such as burns units). However, there is an unstated assumption that should be made explicit and tested in determining the applicability of block grant funding, namely that:

The extra funding arising as a result of the application of block grants instead of ABF is warranted in terms of a measurable policy objective. This could include, for example, a proportionate improvement in access to health services in rural areas or the required provision of a specialised

service in a remote area (such as a burns unit at Royal Darwin Hospital), where the population needs could not be met through other arrangements.

Specifying and assessing the additional 'value' attained through block grants is likely to be highly contested, with different interpretations of the relative costs and benefits of achieving certain levels of access. Importantly, this criterion makes it possible to have the discussion of the 'value' that enhanced access may have in any given circumstance as there is a transparent 'funding premium' paid.

While there may be economies of scale issues that make ABF impracticable, the resulting block grant funded services need to operate as efficiently as possible. Operational efficiency is a necessary part of block grant funding and this requirement is given effect through the IHPA's role in determining the efficient cost of block grant funded services.

Consultation questions:

- When is ABF 'impractical' to apply?
- Are the proposed criteria for block grant funding suitable? Are there other factors (that are separate to the technical requirements and the economies of scale criteria) that may require consideration of the use of block grants?
- Should the criteria make transparent the 'funding premium' incorporated in block grants?

9.4.2 EFFICIENT COST OF BLOCK GRANT FUNDED SERVICES

The National Health Reform Agreement makes it clear that block grants are not equivalent to a 'blank cheque'. The IHPA is required under Clause B3 to determine:

The national efficient cost of services provided on a block funded basis in public hospitals through empirical analysis of data on actual activity and costs in public hospitals.

The approach to determining the national efficient cost may require identification of different groups of hospitals (or services) which are providing similar services and so face similar costs. The annual determination by the IHPA of the 'efficient cost' of block funded services is required to take:

Account of changes in utilisation, the scope of services provided and the cost of those services to ensure the Local Hospital Network has the appropriate capacity to deliver the relevant block funded services and functions (Clause A4).

The efficient cost method(s) developed by the IHPA will be applied to particular services at the LHN level or within LHNs. This indicates that the methods for applying 'efficient costs' needs to be sufficiently broad to cover a significant array of services and yet sufficiently clear as to be simple to understand and administer. This will provide considerable transparency at the LHN and state level.

As efficient costs determine the **level** of funding for a specific service, there is an implicit assumption that determining different levels of block grant funding comes with particular service expectations. However, under the governance arrangements for health funding, this would be the role of states to determine through the mechanism of service agreements with LHNs.

In the context of transition arrangements, the application of efficient costs from July 2013 requires the development of efficient cost methods, trialling and consultation during 2012/13. This timeline is also necessary in order to apply the Commonwealth's additional funding of '45% of the growth in the efficient cost in providing services and functions from 1 July 2014' (Clause A4).

Consultation question:

What are your views on how to determine the efficient cost of block grant funded services?

9.4.3 MIX OF ABF AND BLOCK GRANTS

The National Health Reform Agreement makes explicit reference to having funding that includes a mix of ABF and block grants. In the circumstances where a mixed funding system applies, it will be necessary to clearly differentiate the level and type of services 'purchased' under ABF and under block grants respectively, and that the funding from the two instruments dovetail, so that there no perverse incentives as a result of a 'mixed' approach to funding.

The mixed application of ABF and block grants may be particularly relevant to recognise:

- For most large LHNs, it is likely that there will be some services or 'campuses' funded on an ABF basis and some services (such as teaching, training and research) or 'campuses' funded on a block grant basis (such as small rural hospitals within the LHN).
- Smaller rural/regional hospitals may be on the cusp between ABF and block grant funding. ABF may be encouraged, but there may also be supporting agreements that look to 'floor price' funding arrangement where volumes fall below expectations.
- Small rural/regional hospitals may provide some services such as 'urgent care' that are funded on a block grant basis (i.e. equivalent to funding on the basis of availability) while providing other acute inpatients services at a sufficient volume to warrant funding under ABF.
- Some services within a larger service stream are able to be funded through ABF, even though other elements are not. For example, this could apply to selected elements of mental health services whilst in transition to full ABF.
- Within services that are predominantly block grant funded, there may be access to some ABF where there are increases in service volume above that specified in service expectations under service level agreements between the state and LHN (e.g. dialysis or chemotherapy). (The question of how to recognise 'growth' in activity for block funded services is an issue that the IHPA will need to consider in determining 'growth' in the efficient cost of block funded services).

Consultation question:

- What factors might warrant the mixed use of ABF and block grant funding?
- Should specific criteria be developed that the IHPA can use to make determinations on a mixed approach to funding?

9.5 Services potentially eligible for block grant funding

As already noted, the Agreement identifies particular services that are eligible for block grant funding in either the short-term or an ongoing basis:

- Mental health, subacute and other non-admitted services are identified as transitioning to ABF from 1 July 2013, implying they will be block grant funded in 2012/13;
- Teaching, training and research is identified as being block grant funded in 2012/13, with a transition to ABF or other appropriate arrangements by no later than 30 June 2018;
- Relevant services in rural and regional communities (with small rural and small regional hospitals specifically identified) are described as 'better funded' through block grants, with no reference to any future transition to ABF; and
- There are general references to 'hospital services and functions' and 'hospital services to patients in public hospitals better funded through block grants', suggesting that there may be other services or

functions that could meet the Block Funding Criteria, in addition to those specifically nominated in the Agreement (and identified in the first three dot points).

Each of these categories of services is now examined, identifying issues that will need to be resolved in the application of block grants and/or work that is required to allow some of these services to transition to ABF.

9.5.1 MENTAL HEALTH SERVICES

Service classification and costing: There is no national consistency of product classification/ definition for mental health services. Importantly, there is no imminent agreement to such a classification system. This is despite a significant investment over the years in a national Mental Health Casemix and Service Classification (MH-CASC).

The only part of the mental health service delivery system where there is an acceptable national classification is for inpatient separations in general and specialist acute hospitals (using the national ICD-10-AM classification for mental and behavioural disorders, and AR-MDC 19, Mental Diseases and Disorders including AR-DRGs U40Z to U68Z). While this may not be ideal, it provides one approach to measuring and funding mental health activity on an inpatient basis.

In addition, the development of the Tier 2 classification for outpatient services involved the creation of a 'placeholder' category, 'community mental health services', that could be used as the basis for counting eligible non-admitted mental health services. Similarly, activity for patients experiencing a mental health problem could be captured in emergency departments under Urgency Related Groups or Urgency Diagnosis Groups.

There are two key considerations for 2012/13:

- The potential to update MH-CASC in light of contemporary practice and recognising that data are now routinely available to support this classification; and
- The extent to which acute mental health services should be incorporated into ABF in 2012/13, versus funded through block grants for all mental health services determined through bilateral agreements between the Commonwealth and states. (This is specifically envisaged under Clause A33c (iv) that recognises that some mental health services will be able to be funded using ABF).

The two possible approaches may be complementary, as the MH-CASC system is built up from specific episodes of care, some of which would have a national efficient price in the mainstream health services.

To date, the modelling undertaken by the IHPA to develop cost weights for ABF services has included acute mental health services on the assumption that these services will be counted under the classifications applying to inpatients, outpatients and emergency department services for 2012/13. This would be on a transitional basis, pending the development of more suitable classifications for mental health services.

The bilateral agreement process has the potential to fund elements of mental health differently across the country. To ensure consistency of approach, and to support Clause A2 of the National Health Reform Agreement about ABF being used wherever practicable, it is proposed that those mental health services that can be funded through ABF as part of acute hospital services, should be funded through ABF in 2012/13.

Appropriateness: One of the objectives of the National Mental Health Strategy is to promote continuity of care across inpatient and community settings with flexibility for substitution of admitted patient care for community based care. A range of strategies are used by states to promote integrated care and substitution. The ABF for mental health will need to reinforce the national strategy and ensure that, even on an interim basis, a 'classification and counting' system incorporates the principles articulated in Chapter 4 of price harmonisation and price equivalence.

Block funding level: It is essential that the basis for block grant funding for mental health is determined on an agreed and consistent basis across all states. As the aggregate level of funding for all bilaterally agreed block grants is to be 'top-sliced' off total funding in 2012/13, the basis for determining mental health block grants will have an impact on the level of residual funds available for funding ABF services.

In summary, the timing of implementation of ABF for mental health services remains a key challenge. In every respect, the implementation needs to be seen as progressive, with broad acceptance of:

- > The evolution of workable interim measures that relate to product classification;
- > The identification of service costs that relate to these interim measures; and
- > The determination of a uniform price per weighted unit of activity;

albeit using a basic classification approach in the first year, using both clinical and patient-level variables that are well accepted by clinicians and not subject to gaming/perverse incentives.

9.5.2 SUBACUTE SERVICES

There are identical issues in relation to the planned implementation of ABF for subacute services, albeit they may be somewhat less challenging than for mental health.

Service classification and costing: There is a nationally agreed classification for subacute services; AN-SNAP. The classification system has recognised shortcomings that will need to be progressed over 2012/13 for implementation in 2013/14. A core issue is that AN-SNAP is not a comprehensive product classification system for the identified subacute services funded under ABF¹⁷. Other issues include inconsistent patient counting of 'output units' for ambulatory subacute services, and differentiating patient complexity within 'classes', across States.

Costing data for subacute services appears to be problematic in that unit costs are not comparing like services across states. Greater consistency in measurement that reflects a fair unit cost will also be an important consideration before implementation in 2013/14.

As with mental health, there are some subacute services, such as rehabilitation that are provided in an acute hospital setting in many states that can be funded by ABF from 2012/13. For non-admitted services, the Tier 2 classification includes several relevant clinic categories, namely, rehabilitation, subacute care, psychogeriatric care, and geriatric evaluation and maintenance. (Emergency department classifications are, by definition, not relevant to subacute services). Once again, the bilateral agreement process has the potential to fund elements of subacute care differently across the country. To ensure consistency of approach, and to support the intent of Clause A2 of the National Health Reform Agreement, it is proposed that those subacute services that can be funded through ABF as part of acute hospital services, should be funded through ABF in 2012/13.

Appropriateness: Provision of care continuity across care settings and across service streams is particularly relevant to subacute services. Flexibility for service integration and substitution of admitted patient care for community-based care options means that ABF will need to reinforce the policy objectives and ensure that, even on an interim basis, a 'classification and counting' system incorporates the principles of price harmonisation and price equivalence.

Block funding level. Once again, there is potential for variation across states in the determination of block grant arrangements for 2012/13 to flow into the level of funding available for ABF and the determination of the national efficient price.

¹⁷ The revised (2008) AN-SNAP does not include classifications relating to in-reach, or home based services, and limited classification (and validation) relating to some specialist ambulatory services (such as Cognitive & Dementia Memory clinics) due to changing models of care.

Like mental health, 2012/13 will need to see substantial progress made to enable full ABF implementation by 2013/14. This is likely to mean acceptance of some form of interim solution to product classification, costing, measurement and weighted output unit, and that any deficiencies, particularly in relation to specialist ambulatory services, will be addressed over time.

Consultation questions:

- Although the treatment of mental health and subacute services in 2012/13 may be determined through bilateral agreements, do you have any views on factors that should be taken into consideration in decisions on how to count and fund these services in the future?
- > For each of mental health and subacute services:
 - > Are the service classification and costing tasks that have been identified the most important priorities?
 - Or, are there other priority tasks that need to occur in order to allow the transition of mental health and subacute services to ABF?
 - Are there specific types of services within these two broad categories that should be identified for earlier transition to ABF? If so, what are the criteria supporting this view?

9.5.3 OTHER NON-ADMITTED SERVICES

There can be no meaningful discussion on block funding of 'other non-admitted services' (or their transition to ABF) until there is resolution on the question of the scope of these services that are determined to be 'eligible' public hospital services to attract Commonwealth funding. In theory, some 'other non-admitted services' might be suitable to count and report under the Tier 2 classification, but it is too early to ascertain whether this classification will be suitable.

Chapter 5 included a set of draft criteria that could be used by the IHPA in determining whether certain services are eligible for Commonwealth funding as 'public hospital services'. It also noted that the question of the scope of eligible public hospital services may well be resolved through bilateral agreements, rather than through a determination of the IHPA for 2012/13.

9.5.4 TEACHING, TRAINING AND RESEARCH

Service classification and costing: The development of ABF for teaching, training and research remains at a rudimentary stage. There is considerable formative developmental effort required across all of the elements of teaching, training and research, namely product classification, scope, a unit of output, and costing, prior to it being able to be funded through ABF.

For 2012/13, the specification of the block grants is entirely subject to the best available cost information that will input into the bilateral agreements. There is expected to be considerable variability in identified costs across states.

Appropriateness: There are key policy drivers for progressing the development of ABF for teaching, training and research. Unless clinical education in public hospitals is explicitly funded, it runs the risk of being squeezed out. This prompted the recommendation by the National Health and Hospitals Reform Commission (2009) that the cost of clinical education should be specifically funded in all relevant payment streams, including under ABF for clinical education provided through public hospitals. Clause A32 (b) of the National Health Reform Agreement identifies that it is only the teaching, training and research 'functions funded by States undertaken in public hospitals' that will be subject to new funding arrangements – initially as block grants with a subsequent transition to ABF.

Block funding level: The determination of the level of block grant funding for teaching, training and research relies on the ability to accurately identify these costs. Preliminary review by the IHPA of these costs in the

2008/09 NHCDC has indicated considerable variability across states. In part, this may derive from different approaches across states to the funding of teaching, training and research in public hospitals. Existing approaches may include: block grants based on various teaching inputs or outputs (such as the number of graduate students); inpatient 'teaching loadings' for services provided across all hospitals or 'designated' teaching hospitals; or no specific teaching, training and research funding, but instead this is absorbed into general payments.

Consultation questions:

- What priority should be given to implementing ABF for teaching, training and research in public hospitals?
- How should the developmental work for funding teaching, training and research under ABF be undertaken?
- Are there particular tasks that can be undertaken early to improve the transparency of funding for teaching, training and research?

9.5.5 SMALL RURAL AND SMALL REGIONAL HOSPITALS

Determination of services eligible for block grant funding: The National Health Reform Agreement identifies small rural and small regional hospitals (SRSRHs) as providing relevant services that may be potentially eligible for block grant funding. The Agreement provides no guidance, however, as to the threshold(s) defining when a service is 'better funded' through block grants versus ABF, nor does it indicate whether block funding should apply to the whole SRSRH or only some of the services that it provides.

In 2012/13 the question of 'eligible' SRSRHs is likely to be determined through bilateral agreements that involve the application of a 'low volume' threshold related to the number of acute inpatient weighted separations. The threshold that has been discussed by the Commonwealth and state governments is that SRSRHs would be eligible for block grant funding if they provided \leq 1800 acute inpatient weighted separations in inner regional or outer regional SLAs, or \leq 2,500 acute inpatient weighted separations in remote or very remote SLAs. (The application of this threshold would result in about 460 hospitals being potentially eligible for block grant funding). This is obviously a transparent, but very simple, approach and further work would be required in 2012/13 in order for the IHPA to take on its determinative role with regard to block grants from 2013/14.

Using the Block Funding Criteria as the starting point, it will be necessary to measure when there are 'lack of economies of scale' for SRSRHs. Simply being small and in a rural or regional location does not automatically result in being excluded from activity based funding. It is likely that a composite measure of activity will need to be determined that captures the full range of **eligible** public hospital services provided by SRSRHs and assesses the revenue that these services would receive under ABF relative to their existing funding levels.

This raises a challenging issue. Government funding under the Agreement (and the determination of the national efficient price) is only directed towards 'eligible public hospital services'. However, SRSRHs often provide other services such as residential aged care, community and primary care services, and HACC services that are not 'in scope' for funding as public hospital services. The challenge is whether it is possible (or desirable) to construct block grant arrangements that relate only to eligible public hospital services in SRSRHs, when the community service obligation is generally interpreted as a broader obligation to provide access to a range of primary, health and aged care services in rural and regional communities. It is technically difficult to identify economies of scale issues that apply to only part of a SRSRH, when the viability of the SRSRH is related to the balance between its critical mass and funding across all services provided.

One effective policy response to this challenge has been the establishment of multi-purpose services across Australia. There are currently about 130 MPSs nationally with access to flexible funding across health and

aged care programs. The process of reviewing eligibility of SRSRHs for block grant funding may involve identifying whether some non-MPS small rural or small regional hospitals should be funded as MPSs in the future. While not specifically identified in the National Health Reform Agreement, it has also been assumed that funding arrangements for existing MPSs would continue.

Block grants, SRSRHs and funding to LHNs: Under the Agreement funding flows from the National Health Funding Pool to Local Hospital Networks including both activity based funding and block grants. The funding transparency is about the 'line of sight' from funding provided by the Commonwealth and state governments to LHNs. The specification of the services that will be provided under either ABF or block grant funding is included in service level agreements between states and LHNs. For services funded under ABF, the clear implication is that there is local autonomy (to the extent allowed for in the service level agreement) about where particular services will be delivered (e.g. at a small rural hospital 'campus' or at large regional hospital, both of which are part of the legal entity that is the LHN). The situation is less clear cut with regard to block grants is based on specifying that funding will be provided for a specific service, and in the case of SRSRHs, at a specific location.

Efficient cost of block funded SRSRHs: The IHPA's role is limited to price-setting for block funded SRSRHs, not deciding service expectations for particular communities. A block grant for a SRSRH is effectively 'tied' to the provision of service expectations that will be specified in the service level agreement between the state and the LHN. This will need to be factored into how the IHPA approaches its task of determining the 'efficient cost' for block funded SRSRHs. In 2012/13, it is likely that the bilateral agreement process will involve governments agreeing to pay the historical costs of SRSRH block funded services. However, the IHPA will need to develop an approach by 2013/14 to provide greater transparency in the determination of the efficient cost of these services, related to the range and level of services provided by individual SRSRHs. This could be based on a cost modelling approach and/or include the identification of 'tiers' or categories of the range and level of service types provided by block funded SRSRHs.

Consultation questions:

- What factors should be considered in determining which small rural and small regional hospitals are best funded through block grants?
- Are additional criteria or specifications required under the Draft Block Funding Criteria to provide transparency on when small rural and small regional hospitals will be block funded?
- Should the IHPA take service expectations included in Service Agreements in determining the level of block grant funding for eligible small rural and small regional hospitals?
- What factors should be considered in determining the 'efficient cost' of block funded services provided by small rural and small regional hospitals?

9.5.6 OTHER HOSPITAL SERVICES AND FUNCTIONS

Finally, the National Health Reform Agreement indicates that other 'hospital services and functions' may be eligible for block funding if they meet the Block Funding Criteria developed by the IHPA. For example, the Commonwealth Department of Health and Ageing's submission to the Senate inquiry into the enabling legislation for the IHPA indicated that the IHPA:

Will also ensure funding for specialised units such as bone banks for which activity based funding is not appropriate.

It is the responsibility of the IHPA, in consultation with both the Commonwealth and state governments, to identify other services (potentially including some specialised services) that meet the Block Funding Criteria. It should be noted that the draft Block Funding Criteria included in Section 9.4.1. do not include 'specialisation'

as a criterion of potential eligibility for block funding. Instead, it may be that some specialised services are block funded, because they meet at least one of the Block Funding Criteria (e.g. inability to classify these services, economies of scale issues).

Clause A98 of the National Health Reform Agreement also indicates that funding arrangements for 'nationally funded centres' (a particular class of specialised services) will need to be considered further by the Standing Council on Health.

In summary, the Agreement allows for particular services or functions (not only types of agencies such as small rural hospitals) to be funded on a block grant basis. These block funded services or functions may be provided in public hospitals that are otherwise funded under ABF, resulting in a mix of ABF and block funding.

Consultation questions:

- > Are there 'hospital services and functions' that should be eligible for block funding, in addition to those already identified?
- If yes, what is the evidence for how these hospital services and functions would meet the Draft Block Funding Criteria?

10. Phasing: a sustainable implementation of ABF

Introduction of ABF is complex. In those states without a strong tradition of ABF, it requires new skills in state health authorities in using the new levers and designing how the state will fund the new local hospital networks, and new skills in the networks in managing in the new environment. In states with a tradition of ABF, it will mean adjusting to new national classifications, prices and comparisons.

There are also complexities at the national level including identifying precisely which services will be block funded and how to determine the efficient cost in those services.

Another complexity at the national level relates to the design of ABF arrangements in those services which will be funded on the basis of activity. Principal amongst these complexities will be determining how services are to be funded. Although Australia has a long tradition in terms of the design of a casemix classification for inpatient activity, and is internationally recognised for this, classifications to describe other aspects of hospital activity are not so well developed. Put simply, without acceptable classifications to describe relevant hospital activity, ABF cannot occur. Classification development is not a quick process: it relies on good costing data, preferably at patient level, and in enough hospitals to yield a representative sample. As hospitals adapt to ABF, their management and boards will recognise the need for good costing data for local decision making and national costing data sets will be populated as a by-product of these hospital efforts.

The inevitable result of the factors described above is that ABF implementation in Australia will be a phased process: ABF as implemented in 2012/13 will evolve and be enhanced with improved data and classifications. Although ABF in subsequent years will be seen as the linear descendent of the 2012/13 version, there will be enhancements and changes over time.

Some of these changes are known already: 2012/13 only sees ABF for inpatient, emergency department and outpatient services. Other services will be funded through block grants. Even in the case of the 2012/13 ABF services, changes are to be expected in future years with a new DRG classification under development in the case of inpatient services. In the other two 2012/13 ABF areas changes will follow from more robust costing occurring and potentially acquisition of patient level costing data.

An important consideration in the design of the 2012/13 Pricing Framework is thus to ensure a robust baseline that does not preclude the development of more sophisticated approaches to pricing, as classifications, costing data and other tools are developed.

The Commonwealth government's role will also change over the first few years of ABF implementation. The National Health Reform Agreement provides for different Commonwealth government funding arrangements between 2012/13 and 2017/18 which create three phases of implementation:

- The 'transparency' phase (2012/13 and 2013/14): In this period, the national implementation of ABF is primarily about introducing transparency as to the relative contributions of all governments and the relative efficiency of public hospitals. States may act to moderate (or intensify) the impact of the national efficient price in their role of system-managers. Hospitals operating above the efficient price could respond through improvements to recording, arguing for separate additional payments from the state and/or addressing inefficiencies.
- The 'transparency plus growth' phase (2014/15, 2015/16 and 2016/17): The commencement and early years of 'uncapping' of Commonwealth government funding is likely to create a new dynamic, particularly for hospitals that can provide additional services at marginal revenue.

The 'transparency plus allocative efficiency phase (2017/18 onwards): As the Commonwealth funding share increases to 50% of the growth in the efficient cost of providing public hospital services, there is likely to be a stronger focus on addressing allocative efficiency. All governments are likely to be interested in identifying whether the 'right' services are being produced in the 'right' settings for the 'right' patients. The transparency in costing, activity and pricing will support a more refined approach to purchasing health services.

A particularly important shift will occur in 2014/15 with the move into the 'transparency plus growth' phase when the nature of Commonwealth government funding changes. From 2014/15, Commonwealth growth funding will be based not only on movements in costs per service but changes in the number of services provided (as measured by the National Unit of Weighted Activity). This means that robust measures of activity must be in place for all types of services by 2013/14 to provide a baseline against which to measure growth.

Enhancement to ABF in subsequent years will obviously require work in 2012/13 and beyond. A number of development tasks have been identified in this report and others are already on the agenda.

10.1 Classification system development

The basis for ABF is robust classification systems. Agreement on a national classification is required for mental health and sub-acute services, and, potentially, non-acute patients. The classifications for emergency department activity and outpatients adopted for 2012/13 were not preceded by national patient-level costing work and outlier policies (to the extent necessary) have not been developed alongside these classifications.

A number of other hospital services have been advanced for inclusion within the scope of the national hospital funding arrangements. Typically, these services don't fit neatly into any of the established categories. Each of the services agreed to fall within the scope of hospital funding will need to contribute data to the National Hospital Costs Data Collection and, over time, measures of their activity and classification systems to describe the activity will need to be developed.

The DRG classification for inpatients is currently under revision. That revision should address two specific issues implicitly raised in this paper:

- Identification of those DRGs where the costs of paediatric care are different from the costs of adult care and, where there are sufficient cases, splitting those DRGs by age; and
- Consideration of whether hospital acquired complications should be taken into account in the DRG classification system at all. In the current version of DRGs, hospital acquired complications and pre-existing co-morbidities are treated alike in determining DRG assignment. There is no reason why the next generation of DRG development should be hamstrung by the decisions of the past in this regard, decisions partly driven by the contemporary inability to distinguish between complications and co-morbidities. Treating the two differently would help to advance the quality agenda in Australia.

Only when classifications have been developed can the necessary step of deriving relative weights for each of the relevant service types be undertaken.

10.2 Loadings

Loadings have the potential to re-distribute significant funding and so should be established on a very sound basis. The quality of costing data is improving over time and so better estimates of legitimate incremental costs for particular patient groups will be possible in the future. The extent of necessary loadings will also be

informed by the developments in casemix classifications. Work should proceed in 2012/13 on verification of loadings adopted in 2012/13 including, potentially, indigenous and paediatric loadings.

10.3 Block grants – small rural hospitals

The National Health Reform Agreement requires the IHPA to develop criteria for determining eligibility for block grants. These criteria are to be revised in 2015/16 and every three years thereafter.

The IHPA is also to identify the 'efficient cost' of providing services in block grant funded hospitals. Work will need to be undertaken to establish **a method(s)** of determining the efficient base cost so equivalent hospitals are funded on the same basis.

This efficient cost of groups of block funded services will need to be **adjusted annually**. Clause A4 of the National Health Reform Agreement provides that:

The efficient cost will be determined annually by the IHPA, taking account of changes in utilisation, the scope of services provided and the cost of those services to ensure the Local Hospital Network has the appropriate capacity to deliver the relevant block funded services and functions.

Again, a consistent approach to adjustments will be required. Where an adjustment is made for activity variation or utilisation within block funded services an approach to measuring activity and how increases in activity impact on the efficient cost will need to be developed.

10.4 Block grants – teaching, training and research

The National Health Reform Agreement provides that the initial allocation of funding for teaching, training and research will be based on state advice and that the block grant will be adjusted on an annual basis in line with movement in the 'efficient cost' of providing these services (consistent with the approach for other block grant funded services).

Identifying the 'efficient cost' of teaching, training and research activities is extremely complex for a range of reasons:

- Teaching and training is often a 'joint product' alongside other activities (see discussion in section 7.4) and separation of teaching from patient-related costs is often difficult;
- Measurement of the teaching and training contribution of individual hospitals may be difficult given secondment and other relationships in training, and disentangling the nature of university contributions to the cost of teaching;
- Measurement of research activity is confounded partly because this may also be a joint product in the same way as teaching, partly because of the need to separate out research funded through universities and research institutes, and partly because of the difficulties of measuring research performance generally.

In the longer term, the Agreement signalled an intention to consider whether it is possible to move the teaching, training and research block grants to an activity basis. The IHPA was specifically charged in clause A49 with providing

advice to the Standing Council on Health on the feasibility of transitioning funding for teaching, training and research to ABF or other appropriate arrangements reflecting the volumes of activities carried out under these functions by no later than 30 June 2018.

10.5 Private patients

The National Health Reform Agreement provides in clause A41 that 'ABF payments for eligible private patients must utilise the same ABF classification system as for public patients'. As was shown in Table 8.1, there is no national consistency in the current payment arrangements from private health insurance funds against the costs of care provided to their members admitted as private patients. Further, these payments are not made on a casemix basis in any state. The IHPA does not have responsibility for designing or approving default benefit arrangements but this is an issue which needs to be addressed.

10.6 Concluding comments on phasing

As was argued earlier, ABF in Australia will evolve over time. What is important for 2012/13 though is:

- That the pricing framework adopted for 2012/13 recognises the evolutionary nature of ABF and provides a solid basis for further development; and
- That a work program be developed that will facilitate such development. The work program should be informed by the issues identified above.

Consultation question:

> Are these the main issues which need to be worked on in 2012/13 and beyond?

Appendix 1: Team members

Health Policy Solutions, in association with Casemix Consulting and Aspex Consulting, has been appointed to develop a comprehensive pricing framework. The team comprises:

- Dr Sharon Willcox, Director, Health Policy Solutions: Sharon has over 30 years experience working in health public policy and was a Commissioner on the National Health and Hospitals Reform Commission that recommended the national implementation of activity based funding.
- Professor Stephen Duckett, Professor of Health Policy, La Trobe University and Director, Casemix Consulting: Stephen led the first Australian implementation of ABF in Victoria in the early 1990s, is a former Secretary of the Commonwealth Department of Health and Ageing and was a Commissioner on the National Health and Hospitals Reform Commission.
- Mr Peter Axten, Director, Aspex Consulting: Peter has been consulting to the health sector for over twelve years and has managed the identification and evaluation of approaches to block funding of health services that are not suitable for activity based funding in Victoria.
- Professor Andrew Street, Centre for Health Economics, University of York, England: Andrew's research includes measurement of health system productivity and evaluation of activity based funding mechanisms. He is currently advising the English Department of Health on ABF implementation, as well as working with colleagues across Europe on the EuroDRGs project.
- Mrs Helen Owens, Health Policy Consultant: Helen is a health economist, a former Commissioner on the Productivity Commission and the Commonwealth Grants Commission, and co-author of the seminal report on Case Payment in Australian Hospitals.
- Ms Sabrina Stow, Consultant, Aspex Consulting: Sabrina Stow has over 25 years experience in health policy and project management including health department and central agency experience.

References

Australian Institute of Health and Welfare. (1997). Australian hospital statistics 1995-96, Canberra: AIHW.

Australian Institute of Health and Welfare. (2011a). Australian hospital statistics 2009-10, Canberra: AIHW.

Australian Institute of Health and Welfare. (2011b). Health expenditure Australia 2009-10, Canberra: AIHW.

British Columbia Health Services Purchasing Organization. (2010). *Patient focused funding: Better enabling health providers to do what is best for patients,* at: <u>http://www.bcpsqc.ca/about/documents/meetings/HQN-Nov102010HSPO.pdf</u>

Busse, R., Geissler, A., Quentin, W., & Wiley, M. (Eds.). (2011). *Diagnosis-Related Groups in Europe: Moving towards transparency, efficiency and quality in hospitals*. Maidenhead: Open University Press.

Commonwealth Grants Commission. (2008). 2010 Review: Admitted patient services, Commission Position Paper, CGC 2008/18, at: <u>http://www.cgc.gov.au/ data/assets/file/0020/16049/2008 18 Admitted patient services.pdf</u>

Commonwealth of Australia. (2010). A national health and hospitals network for Australia's future, Canberra: Commonwealth of Australia.

Daidone, S., and Street, A. (2011). *Estimating the costs of specialised care*, Centre for Health Economics, University of York; CHE Research Paper 61.

Duckett, S. (1995). Hospital payment arrangements to encourage efficiency: The case of Victoria, Australia. *Health Policy*, *34*, 113-134.

Duckett, S. J. (1998). Casemix funding for acute hospital inpatient services in Australia, *Medical Journal of Australia*, 169 (Supplement): S17-S21.

Duckett, S. and Willcox, S. (2011). The Australian health care system, Edition 4, Melbourne: Oxford University Press.

Ehsani, J., Jackson, T., and Duckett, S. J. (2006). The incidence and cost of adverse events in Victorian hospitals 2003-04. *Medical Journal of Australia*, 184(11): 551-555.

Erlandsen, E. (2007). *Improving the efficiency of health care spending: selected evidence on hospital performance*, OECD Economics Department Working Paper No. 555, Paris: OECD.

Fetter, R. B. (1991). The DRG Patient Classification System: background. In R. B. Fetter, D. A. Brand & D. Gamache (Eds.), *DRGs: Their design and development* (First ed., pp. 3-27). Ann Arbor: Health Administration Press.

Gabbitas, O., and Jeffs, C. (2007). Assessing productivity in the delivery of health systems in Australia: some experimental estimates, *Paper presented to the ABS-PC Productivity Perspectives 2007 Conference*, <u>http://www.pc.gov.au/research/conference-papers/health-service-productivity</u>

Goss, J. (2008). *Projection of Australian health care expenditure by disease, 2003-2033,* Cat. No. HWE 43, Canberra: Australian Institute of Health and Welfare.

Hensher, M., Fulop, N., Coast, J., and Jefferys, E. (1999). The hospital of the future: Better out than in? Alternatives to acute hospital care. *British Medical Journal*, 319(7217), 1127-1131.

Jackson, T., Nghiem, H. S., Rowell, D., Jorm, C., & Wakefield, J. (2011). Marginal costs of hospital-acquired conditions: Information for priority-setting for patient safety programmes and research. *Journal of Health Services Research and Policy*, *16*(3), 141-146. Malyon, R. (2011). Taking account of remoteness and Aboriginality in setting prices: Differentials in the cost of admitted patient care, Plenary presentation at the National Casemix and Activity Based Funding Conference 2011, available under Plenary Sessions at: <u>http://casemixconference2011.com.au/proceedings</u>

Medicare Payment Advisory Commission. (2010). *Report to the Congress: Aligning incentives in Medicare* (June 2010), at: http://www.medpac.gov/documents/Jun10 EntireReport.pdf

Medicare Payment Advisory Commission. (2011). *Report to the Congress: Medicare Payment Policy* (March 2011), at: http://www.medpac.gov/documents/Mar11_EntireReport.pdf

National Health and Hospitals Reform Commission. (2008). *A healthier future for all Australians: Interim Report*, Canberra: Commonwealth of Australia.

National Health and Hospitals Reform Commission. (2009). *A healthier future for all Australians: Final Report*, Canberra: Commonwealth of Australia.

Novak, J., and Judah, A. (2011). *Towards a health productivity reform agenda for Australia*, South Melbourne: Australian Centre for Health Research.

Productivity Commission. (2006). Potential benefits of the National Reform Agenda, Report to the Council of Australian Governments, Canberra: Commonwealth of Australia.

Scotton, R. B., and Owens, H. J. (1990). *Case payment in Australian hospitals: Issues and options*, Melbourne: Public Sector Management Institute, Monash University.

Street, A., & Maynard, A. (2007). Activity based financing in England: the need for continual refinement of payment by results. *Health Economics, Policy and Law, 2*(4), 419-427.

Street, A., Scheller-Kreinsen, D., Geissler, A., and Busse, R. (2010). Determinants of hospital costs and performance variation: Methods, models and variables for the EuroDRG project. Working Papers in Health Policy and Management, Vol.3 May: Berlin: Universitätsverlag der TU Berlin, at: <u>http://eurodrg.projects.tu-berlin.de/publications/10-04-</u>27%20WPplaintext MiG Band3 mgx.pdf