



Consultation Paper on a Methodology for Determining the Benchmark Price for Prostheses in Australian Public Hospitals

September 2021

Independent Hospital Pricing Authority



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1

Introduction

1

Introduction

The Independent Hospital Pricing Authority (IHPA) is an independent government agency established under the *National Health Reform Act* (Cwth) as part of the National Health Reform Agreement.

IHPA's primary function is to calculate and deliver an annual national efficient price. The national efficient price is a major determinant of the level of Australian Government funding for public hospital services and provides a price signal or benchmark for the efficient cost of providing public hospital services. IHPA also undertakes several major areas of work designed to inform the annual determination of the national efficient price, including ongoing consultation with all Australian health departments, expert advisory committees and key stakeholders.

1.1. Budget announcement

The 2021–22 Federal Budget, released in May 2021, included a measure to modernise and improve the private health insurance Prostheses List (PL).

Under this measure the Australian Government is investing \$22 million over four years to reduce the cost of medical devices used in the private health sector and streamline access to new medical devices, which will improve the affordability and value of private health insurance for Australians.

This measure will modernise and improve the PL. This will better align the price set for medical devices on the PL for private providers with those paid for in competitive markets such as those in the public hospital system.

This will be implemented by the Department of Health in conjunction with IHPA and in consultation with key stakeholders.

The prices charged for medical devices in the private health care system, mandated by the current PL in most cases, far outweigh the costs of the same items in other competitive markets including the public hospital system. In 2019–20, some costs were up to 145 per cent higher.

The PL has grown over time in both size and complexity to include more than 11,600 items. This initiative will also better define the purpose and scope of the PL to provide greater clarity and certainty about which items are eligible for inclusion, consolidate the grouping scheme, and streamline the administration of the PL to ensure faster patient access to new, high-technology medical devices.

This reform will benefit private health insurers and their customers by lowering the prices paid by insurers for medical devices. This benefit will flow to Australians with private health insurance by keeping downward pressure on premiums. Medical device companies will also benefit from streamlined administration of the PL with new pathways for listing devices on the PL. Doctors, private hospitals and privately insured patients will benefit through continued access to a comprehensive range of medical devices and certainty about their reimbursement.

1.2. About the reforms to the Prostheses List

There are a number of elements of work to the reforms, including:

- clarifying the scope of the PL by defining which prostheses are eligible for inclusion on the PL, and removing ineligible products
- regrouping the items on the PL to better align devices with similar intended use or health outcomes
- streamlining the listing of new devices and reviewing the functions of the Prostheses List Advisory Committee
- improving the post-listing activities, including reviews and compliance activities
- updating the existing cost recovery arrangements.

Further information can be found on the Department of Health website.

IHPA has been requested to establish the benchmark price that is paid for prostheses in the public sector, in order that the gap between the public benchmark price and the prices (also referred to as PL benefits) currently mandated on the PL can be determined. IHPA will provide a report to the Department of Health on this in early 2022.

The Department of Health will then use this information to inform the prices of the PL to be implemented from 1 July 2022.

1.3. About this consultation paper

This consultation paper will assist IHPA in preparing the report to the Department of Health regarding the benchmark price for prostheses in the public sector. The key issues for consultation include:

- the data sources that could be used
- the proposed methodology for calculating the benchmark price
- any factors that should be accounted for to reflect differences between the public and private hospital sectors with respect to prostheses prices.

In undertaking this work, IHPA has not been asked to consider other aspects of the PL reforms. They remain the responsibility of the Department of Health.

Have your say

Submissions close at 5pm AEST on Friday 1 October 2021.

Submissions can be emailed to IHPA Secretariat at submissions.ihpa@ihpa.gov.au.

All submissions will be published on the [IHPA website](#) unless respondents specifically identify sections that they believe should be kept confidential due to commercial or other reasons.

IHPA will carefully consider all submissions received and will publish a final methodology document and a consultation report in November 2021.



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Prostheses purchasing arrangements in the public and private hospital sectors

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Prostheses purchasing arrangements in the public and private hospital sectors

The purchasing arrangements for prostheses in Australian public hospitals are significantly different from the purchasing arrangements in the private hospital sector.

Most states and territories operate some level of tendering arrangement at the state level. This varies from simple 'registration' type arrangements, which allows the suppliers product to be included on the central catalogue of items available for purchase by a hospital or local hospital network in that state, through to sophisticated tendering approaches securing discounts to a standard price based either on guaranteed volumes, or achieving market shares within a particular product category. These approaches generally rely on hospitals agreeing to limit the range of products available.

In some cases hospitals with large volumes of particular types of surgery may choose to further limit the range of products available for clinicians to choose, and as a result are able to achieve further discounts over and above that available in state based tendering approach.

It is important to note that the narrowing of device choice is generally carried out with extensive clinician engagement, and there are generally mechanisms to access alternative devices when clinically necessary.

This means that in the public hospital system there is no single price for a given product across the country, and in fact there can be multiple prices for the same product within a single state, depending on the market share discounts applied at different local hospital networks.

A further confounding factor is that state tenders group items together into product categories, and any market share discount achieved for the category applies to all products within the category. This means that when prices are compared there is not always an obvious price volume relationship, as a product with a lower volume of sales may be at a lower price as a result of a market share discount being applied to a larger product category.

Table 1 below shows the range of average sale prices for one spinal device at the state level for one supplier. The comparable Prostheses List price in 2019–20 for this product was \$415.

Table 1: Average actual sales prices and volume by state

State	Volume (units)	Average Sale Price (\$)
ACT	61	298
NSW	402	328
QLD	163	343
SA	80	427
TAS	27	428
VIC	13	230
WA	224	406
National	970	356

Table 1 demonstrates that price is not a function of volume at a state level, but is more significantly driven by product category market share and volume at an institutional or health district level.

For example, lower price in the ACT than in NSW, is achieved as one institution in the ACT accounts for the majority of state volume and the product category that this item belongs to is linked to a high hospital level market share. The price in NSW is a weighted average of multiple institutions or health district level volume and market share agreements.

A number of prostheses suppliers have also emphasised that, on occasion, products may be supplied to the public system at a price that does not reflect the market price, either on compassionate grounds (where for clinical reasons a patient requires a product that would generally not be available in the public sector due to cost considerations) or for other reasons, such as training and education purposes.

In contrast, prostheses purchasing in the private hospital system is more varied. Device selection is generally the domain of the treating clinician, with hospitals having significantly less control over the range of products available. Devices are sold to the hospital at (or below) the Prostheses List benefit level and the private insurer is compelled to pay this benefit to the hospital.

Some private hospitals may receive a rebate based on the total value of products purchased from a supplier over a period, however the value and nature of these rebates are not publically available. In the 2017 Senate Committee Inquiry into Price regulation associated with the Prostheses List Framework, Ramsay Healthcare Chief Executive Officer, Chris Rex, testified that the rebates in this area were in the vicinity of 5 to 10 per cent.



3

Data sources

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Data sources

There are a number of data sources which the Independent Hospital Pricing Authority (IHPA) can utilise in the calculation of the benchmark cost for prostheses in public hospitals.

3.1. The National Hospital Cost Data Collection

The National Hospital Cost Data Collection (NHCDC) is an annual collection of public hospital cost data in Australia. The collection matches patient level activity data with the corresponding resources utilised by the hospital in administering care for the patient.

This collection was established in 1996 with the primary aim of providing Australian governments and the health care industry with a nationally consistent method of costing all types of hospital activity related to the care of patients.

The health departments of Australia's states and territories submit their cost data to IHPA. Taken together, the collection represents the primary source of information about the cost of treating patients in Australian hospitals.

Through the national health reform process, a range of developments to the NHCDC have been implemented, including data quality controls, the introduction of a submission portal and developments in the Australian Hospital Patient Costing Standards (AHPCS). These improvements have all provided increased confidence in the collection for the purpose of national reporting.

The NHCDC data is reported across a number of cost components (known as cost buckets), including a specific cost bucket for prostheses.

Significantly, costs are reported at the episode level, not at the device level, so the NHCDC data for prostheses is a summation of the costs of all of the devices implanted in the episode of care. Episodes of care are classified using the Australian Refined Diagnosis Related Groups classification (AR-DRGs), which assigns episodes of care into clinically meaningful and resource homogenous groups to enable meaningful comparisons to be made across different casemix groups.

The most recently available data held by IHPA is for the 2019–20 financial year

More information on the NHCDC is available on IHPA's [website](#).

3.2. The Hospital Casemix Protocol

The Hospital Casemix Protocol (HCP) data set is a valuable source of information for the private health industry. The collection includes clinical, demographic and financial information for privately insured admitted patient services.

The collection has episodic, benefit and charge data for privately insured admitted patient episodes nationally. It also includes information on which Prostheses List devices were used in each episode of care. More information on the HCP can be found on the Department of Health [website](#).

Significant improvements have been made in recent years to improve the quality and completeness of the HCP collection, and the Department of Health has committed to improving the timeliness of the collection.

Furthermore, the HCP contains the information required to assign an AR-DRG each patient record for their episode of care, so could be used for reimbursement at the AR-DRG level if this option were to be chosen.

IHPA will use this data set as a source of device volume data for the private sector.

3.3. Sale price data from industry

The Medical Technology Association of Australia's (MTAA) response to the December 2020 consultation paper released by the Department of Health proposed that the public benchmark price should be calculated using data collected from suppliers, either by an independent third party, or by the MTAA.

The MTAA response states:

'Public price benchmarking using billing code level data is easily achievable as MTAA has shown in the two sets of data it has collected in the last four years. If data is collected from suppliers retrospective audits can ensure data integrity or a third party can collect the data directly from state health systems.'

IHPA has requested that MTAA coordinate the supply of data to IHPA. Data relating to the actual price of sales (not, for example, nominal book price or recommended retail price) will need to be provided by each supplier at the billing code level, disaggregated by state and cover the 2020–21 financial year. This data will need to be provided to IHPA no later than 31 October 2021 if it is to be used to inform IHPA's benchmarking report.

MTAA has also agreed to coordinate the collection of data from non-members.

In the event that supplier data is unable to be provided to IHPA in the required timeframe, then an alternative approach to determining the benchmark cost of prostheses in the public sector would need to be adopted. The most easily achieved approach would be the adoption of a benchmark price based on NHCDC data, at the DRG level.

3.4. Purchase price data from states and territories

Most state and territories in Australia have some form of centralised purchasing arrangements including for many consumables used in public hospitals. For example, in NSW, HealthShare NSW Procurement 'is NSW Health's central point for goods and services tendering and contracting. It creates a central hub for procurement activity and helps lower purchasing costs...'

On 3 June 2021, the Minister for Health, the Hon Greg Hunt, wrote to state and territory health ministers seeking their assistance in the Prostheses List reforms by providing access to prostheses purchase prices for the public sector. At this time a number of states have agreed to assist where they are able to, subject to confidentiality clauses that may be included in contracts with prostheses suppliers. IHPA will continue to work with states and territories to obtain this data.



Consultation questions

- Which data source should IHPA utilise as the primary data source for determining the public sector benchmark price?
- Are there any other sources of data IHPA should consider for determining the public sector benchmark price?
- What risks should IHPA consider if DRG level information were to be utilised? Are there alternative approaches IHPA should consider?



4

Methodology for calculating the benchmark price

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Methodology for calculating the benchmark price

4.1. Data cleansing

It is important that the benchmarking methodology uses representative data. Where there are device costs that are exceptionally low or high compared to the average price, these would be removed through an outlier trimming process, where possible. The amount of data cleansing required, and possible, will depend to some extent on the data source utilised.

For example, if the public hospital National Hospital Cost Data Collection (NHCDC) data were to form the basis for establishing the benchmark price, the Independent Hospital Pricing Authority (IHPA) would undertake a rigorous data cleansing process at the individual patient level to ensure that any abnormally high or low costs were removed prior to determining the benchmark. IHPA's patient level data cleansing methodology is described in detail in the [National Pricing Model Technical Specifications 2021–22](#) (page 9).

If data is supplied by industry or states and territories in aggregate form then data cleansing will not be possible.

4.2. Calculation methodology

Determining the approach for establishing the benchmark price for prostheses in the public sector, there are a number of options that could be adopted

Volume weighted average price

This approach aligns most closely to IHPA's approach to determining the national efficient price each year.

In undertaking pricing work for public hospitals, IHPA has adopted the volume weighted average price as the basis for determining the National Efficient Price. Using this approach ensures that the National Efficient Price is not unduly influenced by small numbers of high or low cost episodes of care.

As the name suggests, this method weights each price according to the volume of sales. This means that a price with a higher volume of sales will have more influence on the result than a price with a low-volume of sales.

This method is arguably more representative of the public price as it ensures that the full range of prices in the public sector are taken into account.

If the data from Table 1 above were utilised using this methodology, then the volume weighted average price for that item would be \$356, compared to the Prostheses List price of \$415.

Lowest available public sector price

One possible option would be to utilise the lowest available public sector price at the state level regardless of the volume of product sold.

If this approach was applied to the data in Table 1, then the benchmark price would be \$230, 36 per cent lower than the volume weighted average and 45 per cent lower than the Prostheses List price.

This approach would result in a lower public benchmark price being established, and would lead to larger reductions in the Prostheses List prices compared to the volume weighted public sector price described above.

However, it could be argued that the lowest available public sector price is not a fair comparator, as the lowest public sector prices arise when significant market share guarantees are achieved — often in the vicinity of 80 to 90 per cent market share at the hospital or local hospital network level.

For this reason, IHPA does not propose to adopt this approach.

AR-DRG Price

In the event that suppliers are unwilling or unable to provide data to IHPA, then an alternative approach to determining the benchmark cost of prostheses in the public sector would need to be adopted. The most easily achieved approach would be the adoption of a benchmark price based on NHCDC data, at the AR-DRG level.



Consultation questions

- Do you support IHPA's proposal to establish the public sector benchmark price using a volume weighted average approach? Please provide rationale.
- Are there any alternative approaches that IHPA should consider? Please provide rationale.



5

Appropriate adjustments to account for legitimate differences between the public and private hospital sectors

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Appropriate adjustments to account for legitimate differences between the public and private hospital sectors

A number of stakeholders, including device suppliers and private hospitals have asserted that there are differences between the public and private sector with respect to prostheses which mean that the gap between prostheses prices cannot reasonably be eliminated.

In undertaking public hospital pricing work, the Independent Hospital Pricing Authority (IHPA) refers to these as legitimate and unavoidable cost differences. These are defined in the National Health Reform Agreement and include factors such as:

- hospital type and size
- hospital location, including regional and remote status
- patient complexity, including Indigenous status.

With respect to prostheses, stakeholders have cited differences between the public and private sectors that should be accounted for including:

- freight costs
- additional services, such as operating room support and other support services
- the impact of tendering and market share discounts on public prices, which are not replicated in the private sector.

Whilst the Prostheses List is only intended to cover the cost of the device that is implanted, the manufacturers of some cardiac implanted electronic devices claim that the current Prostheses List benefit has also included the cost of technical support during the implantation of the device, as well as ongoing technical advice and servicing for the life of the device.

It is widely accepted that these ongoing services are critical to patient outcomes, but there is a range of views on how these should be funded in the future, given that the Prostheses List was not intended to cover the costs of ongoing services related to technical support for devices.

IHPA seeks advice from stakeholders on what, if any, allowance should be made, to account for any legitimate and unavoidable cost difference between the public and private hospital sectors with respect to prostheses pricing.

By way of guidance, advice should seek to quantify the extent that an issue impacts on pricing to as great an extent as possible. For example, if a stakeholder asserts that there are additional costs due to additional services not provided in the public sector, the stakeholder should quantify the full extent of this additional cost — such as, the number of staff hours and associated salary costs over a year. In IHPA's experience claims that are unsubstantiated or qualitative in nature are very difficult to incorporate into analytical models.

IHPA has developed a [framework](#) for assessing claims in the public hospital system which stakeholder may find helpful in developing their submissions.



Consultation questions

- What factors, if any, should be considered as legitimate and unavoidable difference between the private and public hospital systems with respect to prostheses pricing?
- How should the extent of any such differences be quantified?



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