Healthscope submission

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

8 October 2021 (extension granted)

Contents

Executive summary

Healthscope thanks the Independent Hospital Pricing Authority (IHPA) for the opportunity to provide comment on the methodology for determining the benchmark price for prostheses in Australian public hospitals.

Healthscope supports a model based on volume weighted public reference price, underpinned by industry data. IHPA needs to establish careful data quality controls and validation to ensure the whole sector is comfortable with the data, since it is not an established and readily available national data set.

We also note the public reference price, while a good indicator price for medical devices, will need an adjustment for the private sector, to cover costs incurred in private but not in public hospitals, as well as costs funded through different means in public. These factors include:

- Funding structures
- Surgical mix
- Providing clinical choice
- Economies of scale
- Extended service levels (case support, training, education, consignment, freight)
- Prostheses management (handling, storage, administration).

Finally, as these costs are identified and incurred in private hospitals, we propose part of the difference between private sector benefit and public reference price should be retained by private hospitals. This will streamline processes and increase transparency of funding received by private hospitals.

Structure of this submission

This submission is provided in two sections;

- Section 1 sets out and explains the principles we have applied in light of the context and rationale for the proposed reforms.
- Section 2 contains our response to the consultation questions.

Section 1:
Context and principles

About Healthscope

Healthscope is one of Australia's largest private hospital operators, with 42 hospitals nationally. We employ more than 19,000 people and partner with more than 17,500 accredited medical practitioners. We place the highest priority on quality clinical outcomes, transparency of reporting and elevating the overall patient experience. We were the first private hospital operator in Australia to publicly report performance against quality and clinical outcome metrics, just one part of our program to maintain and continually improve our high standards.

Healthscope operates hospitals in all jurisdictions across Australia. These are acute, psychiatric and day hospitals, of varying size and case mix. We also won the tender to run the public-private partnership at the Northern Beaches Hospital in New South Wales.

We are working closely with the Department of Health on how to support Prostheses List reform, and we acknowledge the 2021-22 Federal Budget announcements and the work completed to date.

Healthscope provided submissions to;

- the General Miscellaneous Category review in March 2020
- Options for Prostheses List reform in February 2021, which also included commentary on the General Miscellaneous Category review
- Consultation paper 1: purpose, definition and scope in September 2021.

Context for this submission

In our February 2021 submission, we provided a number of overarching principles to reform to the private sector;

Reform principles

1. The **primacy of clinical independence** is a central tenet for any health reform proposal in this country which must be fiercely protected.
2. The **critical role of the private hospital sector in the Australian health ecosystem**. This role is significant and necessary for the effective functioning of the health system overall.
3. All private health reform needs to improve **the sustainability of the health sector as a whole**. Reform which simply transfers cost or risk between players in the sector is not addressing the long-term viability of the sector or its relationship to the cost of public health provision.
4. Increasing **out of pocket costs for patients should be avoided** where possible, because it directly undermines the desired policy outcomes of making private health more attractive/affordable.

We posit these principles remain, and make our submission within that context.

Current environment

It is impossible for us to provide this submission without acknowledging the current tumultuous operating framework for the private sector. We are living through a once-in-a-century pandemic, with the operational and financial impacts that entails. We have been feeling the impact of elective surgery stoppages acutely over the past 18 months. While as a sector, we appreciate the viability agreements the states and territories signed during 2020 (and funded by the Federal Government), the financial impact on private hospitals has nevertheless been significant.

Concurrently, the private hospital sector is facing a large number of Government reviews and reforms, including the Medicare Benefits Schedule review implementation, Private Health Insurance reform (including a review of Type C and B certification and default pricing) and the Prostheses List reform (overall, and the review of the General Miscellaneous Category). All of these reviews and reforms carry significant risk of revenue loss, and a large amount of uncertainty for the sector.

The Department of Health has flagged there will be a number of consultation papers released on the implementation of Prostheses List reform through the latter half of 2021. This paper on purpose, definition and scope is the first, released on 23 August, and this paper on methodology was released on 6 September. Both of these papers have provided four weeks for stakeholders to submit their input. Providing meaningful commentary on these significant reforms in such short timeframes with the backdrop of the COVID-19 pandemic is a hard ask.

We are providing the following submission without knowing the content of other upcoming consultation papers. We therefore reserve the right to provide further nuance should this become necessary upon those future releases.

Section 2:

Consultation questions

Consultation questions

Data sources

Which data source should IHPA utilise as the primary data source for determining the public sector benchmark price?

Healthscope notes the availability, completeness and accuracy of data will dictate which data source is utilised by IHPA as their primary data source. None of the current established or proposed data sets are likely to be 100% complete, therefore we suggest IHPA considers this in their assessment of the various data sources.

Our preferred approach is to use industry data, acknowledging it is not an established data source, and will need scrutiny and oversight to ensure the whole industry is comfortable with its data quality.

National Hospital Cost Data Collection

The National Hospital Cost Data Collection (NHCDC) is a well-established collection, with clear collection standards and protocols, and collected separately from the prostheses reform, ensuring there are no perverse incentives to skew the prostheses data contained in the collection. However, is not our preferred method for setting a public reference price, as we do not believe the prostheses information is sufficiently granular for this exercise. The consultation paper notes:

> [...] 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. (IHPA 2021:11)

This data collection will not be able to accurately establish the price for individual devices, and the methodology will therefore need to rely on estimates, approximation, and bundling of costs, which will necessarily introduce several (and unacceptable) margins of error.

Furthermore, Healthscope disagrees with IHPA's assessment that Diagnosis Related Groupings (DRGs) are an appropriate unit for analysis to "enable meaningful comparisons to be made across different casemix groups" (IHPA 2021:11).

This is because these Australian Refined DRGs (AR-DRGs) are developed on public cost data and there is significant inhomogeneity for AR-DRG in the private sector that warrants analysis at a more granular level. This is especially true for prostheses. We provide a case study to look at this inhomogeneity under question 3; risks with implementing a DRG level information (below).

Australian Classification of Healthcare Interventions (ACHI) procedure data are more influential factors driving device use. We therefore recommend the use of underlying NHCDC data – at AR-DRG and ACHI procedure level – as an initial analysis to inform

potential areas of focus and priorities for public reference pricing, but not for setting a public reference price.

Finally, if IHPA does proceed to use the NHCDC in any capacity for this work, any analysis of the private NHCDC data will require private hospital involvement in reviewing and approving the disclosure of this information to avoid the release of commercially sensitive data.

Hospital Casemix Protocol

The Hospital Casemix Protocol (HCP) is also a well-established collection, with clear collection standards and protocols, and collected separately from the prostheses reform. It, however, also has limitations to support this reform, as it is a private health insurance-funded hospital activity data set only. It only includes activity paid for by private health insurers.

By contrast, the Prostheses List is used more broadly, also by other funders in health, such as the Department of Veteran Affairs, the Australian Defence Force, WorkSafe Victoria, the Transport Accident Commission, and others. It would therefore be inappropriate to use a sub-sample of the relevant market data to inform Prostheses List reform in private hospitals.

If IHPA wants to determine episode and device volume, it should use the Private Hospital Data Bureau (PHDB) data (or an enhanced version of that) to fully appreciate the private hospital market usage, although it too might have its own limitations around completeness and accuracy.

Sale price data from industry

Healthscope believes this to be the most appropriate data for public reference pricing, although there are some data quality issues that need to be addressed before the sector will feel confident about its use.

There is no existing established data set for industry sale price data. In fact, it is our understanding this data is only now in the process of being collected from medical device manufacturers (referred to as 'suppliers' in the consultation paper) for the specific purpose of setting a public reference price. As this is not an established data set, the collection does not have established standards and protocols, controls, and audits in place. Furthermore, this data set is being collected specifically for the purposes of Prostheses List reform, creating possible perverse incentives for the collection itself and for how this data is collected, if at all.

Healthscope notes one of the outcomes of Prostheses List reform (through public reference pricing) is likely to be savings for private health insurers, largely through lower revenue for device manufacturers. Therefore, medical device manufacturers may either not wish to supply these data, or, may seek to present data aligned with their commercial interests. We believe IHPA would need to make assurances there are no issues with the data supplied. IHPA will also need to be clear as to what price they are using for the

public reference price, as all products are likely to have more than one price. Healthscope therefore believes IHPA needs to validate the quality of the data underpinning such important reform prior to its use.

Despite these drawbacks, Healthscope believes this data set, if it can be obtained in the most accurate and complete state possible, validated, cleansed and audited, to be the best option for public reference pricing as the data are available and collected by industry.

Purchase price data from states and territories

State and territory data collections are well-established, have clear collection standards and protocols, and are collected separately from the prostheses reform. Logically speaking, this would be the least biased, best established source of data.

However, Healthscope would be hesitant to utilise these data sets due to variances in collection methodologies and presentation between states and territories. Each jurisdiction has different standards relating to how product codes, descriptions and units of measure are formatted, which will be challenging to compare, validate and cleanse. We therefore encourage IHPA to carefully assess the data limitations prior to relying on these data for public reference pricing.

Are there any other sources of data IHPA should consider for determining the public sector benchmark price?

As mentioned, Healthscope believes the PHDB is a better data set to understand private volume data than the HCP collection. These data may also have limitations, including quality of coding and data entry, whether validation and data quality improvement notes have made their way back to the original hospital providing the admissions, and whether these notes have been acted upon. However, Healthscope believes these data should also be considered by IHPA.

What risks should IHPA consider if DRG level information were to be utilised? Are there alternative approaches IHPA should consider?

As noted above, Healthscope has several reservations with DRG-level information for the calculation of prostheses prices in public hospitals. While we agree the DRG data collection is well-established and ultimately a good funding mechanism for hospital activity, to utilise this data for prostheses price setting has significant limitations, including the lack of granularity in the data. We therefore do not believe the DRG data should be used for establishing a public reference price, and not be used separately from ACHI data.

The main limitations we have identified of using DRGs for the funding of prostheses are:

- The development of DRGs are based on public episode and cost data which differ significantly from the private sector. In private hospitals, there is significant

variation with respects to prostheses costs within adjacent DRGs (see below case study for examples).

- The development of DRGs does not consider the cost of prostheses specifically, and in some circumstances the clinical indication/relevance of the episode would take precedence before assessing the costs of the episode. As it does not consider the prostheses costs in determining DRGs, DRGs cannot be used to determine prostheses costs.

Data variation

The private and public sectors in Australia are different, as they treat a different case mix of patients and use different funding structures. There are also different drivers in costs and episodes in private and public. This is why the AR-DRGs, which were developed on public episode and cost data only, will not necessarily translate well for use in the private sector.

Healthscope data have shown significant variation in prostheses costs even within adjacent DRGs. We have presented a number examples of this in the below case study.

Case study: Resource inhomogeneity in the private sector

Below, we have provided some examples of the variation in prostheses costs for procedures grouping to the same adjacent DRG in AR-DRG version 9.0 using Healthscope activity.

This only includes variation in average prostheses costs and there is much greater variation Healthscope would be accepting risk on if this model was implemented.

Table 1: Cardiac valve procedures with cardiopulmonary bypass pump without invasive cardiac invest

	% adjacent DRG volume	% Average prostheses cost for adjacent DRG
Transcatheter aortic valve implantation (TAVI)	27%	181%
Valve replacement with bioprosthesis or mechanical prosthesis	20%	56%
Coronary artery bypass with valve replacement	14%	59%
Repair/replacement of ascending thoracic aorta	11%	86%
Valve repair (1 or 2 or more leaflets)	7%	41%
Other	20%	92%

Source: Healthscope data

Table 2: Major procedures for breast disorders

	% adjacent DRG volume	% Average prostheses cost for adjacent DRG
With Breast Reconstruction MBS Item	11%	569%
Removal of and replacement with another prosthesis	7%	97%
Other	82%	35%

Source: Healthscope data

Table 3: Interventional coronary procedures

	% adjacent DRG volume	% Average prostheses cost for adjacent DRG
Stents	60%	87%
Ablation	40%	120%

Source: Healthscope data

Prostheses costs not considered in DRG development

Within the development of new AR-DRG versions the clinical indication/relevance takes precedence over cost of the episode (episode cost is used as a proxy for clinical complexity). This is reflected within IHPA's public consultation for the development of admitted care classifications (May 2021) for neurostimulators (Section 4.2.1).

The DRG specifically for neurostimulation intervention was removed from the pre-major diagnostic category due to the following:

- The neurostimulator episodes have very different clinical indications (based on public episodes) and groupings should be determined based on the principal diagnosis instead of the neurostimulator intervention.
- The cost profile demonstrated that prosthesis costs contribute to over half the total cost for neurostimluator episodes, which is much higher compared to the average across all episodes.
- Neurostimulator episodes have lower average cost and length of stay relative to other episodes after excluding the prosthesis costs.

Although neurostimulator episodes attract higher costs relative to other episodes with a similar clinical indication, the DRG would still group them based on the clinical indication, disregarding the cost of the neurostimulator prostheses. As the classification does not consider the prostheses costs in determining DRGs, DRGs cannot be used to determine prostheses costs.

Methodology for calculating the benchmark price

Do you support IHPAs proposal to establish the public sector benchmark price using a volume weighted average approach? Please provide rationale.

Yes, Healthscope supports the volume weighted approach. IHPA identified a number of reasons why the weighted average may be the best option, such as:

- This approach ensures the outcome is not unduly influenced by small numbers of high or low cost episodes of care.
- As there is not one price in the public sector across Australia, this method is more representative of a "public price" as it ensures the full range of prices in the public sector are taken into account.

Healthscope acknowledges this methodology also avoids cherry picking a price which may not be representative. If the lowest price obtained anywhere in the public sector were to be used, it will mean the public price used to reference the private benefit payable is so low, hospitals may end up paying a gap between the benefit listed and the price for the device. This gap will mean the hospital runs at a loss for every procedure requiring that medical device. The consequence will either be hospitals will stop offering the service, putting further pressure on public hospitals, or will have to charge out of pockets, however undesirable that may be, to patients.

In fact, Healthscope notes a public reference price system needs to ensure suppliers will be compelled to not set prices at a higher level than the new benefits payable. There are already a few gap prostheses on the Prostheses List where the benefit does not cover the cost of the device. If the public reference price is pushed too low, say by picking the lowest price in any public setting, more and more gap scenarios will occur, and hospitals and patients will start wearing the cost of the gap, further diminishing the value proposition of private health insurance to consumers. This would be an unacceptable outcome of this reform.

The volume weighted average approach also ensures loss leaders are not overrepresented in the data. A medical device company may strategically offer a very low price (below cost) on a product within their range to a public hospital to establish a relationship or reputation, hoping to thereby attract more sales in other parts of their range. This might be an entirely appropriate pricing strategy on the part of the manufacturer, yet the public reference price for that product would consequently be below actual cost if it relied on loss leaders across the Australian public health system. The volume weighted average would adjust this risk by incorporating, but not relying on, the outliers.

Are there any alternative approaches that IHPA should consider? Please provide rationale.

Healthscope believes IHPA's proposed way forward (volume weighted average) underpinned by data which have undergone quality assurance and validation is the best approach to public reference pricing.

Instead of offering an alternative approach to consider, we wish to make a rebuttal to a possible alternative which we believe may be offered by other stakeholders.

We do not believe international reference pricing should be considered for reform in Australia for a number of reasons. International pricing does not take into account the Australian market and we therefore do not think it appropriate for setting benchmarks within this healthcare system. Workforce costs, such as nursing, will be different from other markets, as will rents and other costs private hospitals incur. Furthermore, freight from overseas is costlier due to Australia generally being a long distance from the point of manufacture.

And finally, Australia, with only 25 million people nationally, (and only about 45% of those who hold hospital cover private health insurance) is globally a small market, which will necessarily affect the ability of hospitals to purchase medical technology at a globally competitive price.

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

What factors, if any, should be considered as legitimate and unavoidable difference between the private and public hospital systems with respect to prostheses pricing?

There are a number of differences between public and private hospital systems in prostheses management, delivery and implantation, including

- Funding structures
- Surgical mix
- Providing clinical choice
- Economies of scale
- Extended service levels (case support, training and education)
- Prostheses management (handling, storage, administration, consignment, and freight).

We have sought to provide more detail on these issues below. It is worth noting Healthscope only has a view of costs incurred by private hospitals, and we are not necessarily aware of the full range of costs incurred by suppliers.

Funding structures

As we explored in our submission to the Department of Health on the definition and scope of the Prostheses List, funding models in private hospitals differ significantly from the public sector.

Activity-based funding, used in public hospitals, pays hospitals for the number and mix of patients they treat. Public hospitals also have two main funders (federal and state government). In private, however, private health insurers provide the bulk of the funding, however, there are currently around 35 companies providing health insurance in Australia.

Most private hospital funders rely on different funding models to pay for hospital services. Some use Diagnosis-Related Groupings (DRG) case payments, others use the Medicare Benefit Schedule (MBS) underpinned by theatre banding, either though case payments or *per diem* payments. All have created their own versions of funding arrangements based on those two main methodologies. As a result, all funders pay differently for the same services at different hospitals.

These differences in funding models directly affect how medical technology is remunerated. The price public hospitals pay for medical devices does not account for the costs incurred of bringing this medical technology to the patient in private hospitals, as these costs are covered via separate cost buckets. Private hospitals, however, also incur

management costs, yet these are not covered by payers through other payments – these have been included in the Prostheses List benefit listed, and should continue to be.

Surgical mix

The public and private hospital sectors in Australia are different yet complement each other. The private hospital sector provides two in three elective surgeries (AIHW 2021), many of which require prostheses. The public provides more emergency and overnight care. This difference in surgical mix in public and private will also contribute to cost differentials between the two sectors.

Clinical independence and choice

Public hospital procurement is generally managed at state level, and to reduce costs, many jurisdictions will, where clinical substitution or approximate substitution allows, limit the range of devices available for use within their hospitals. Limiting the range ensures public hospitals can guarantee volume and thereby achieve significant volume and/or loyalty discounts.

By contrast, one of the value propositions in private hospitals is clinical independence and choice. As IHPA identifies in the consultation paper (IHPA 2021:9), private hospitals do not (and should not) choose which technology should be used for a procedure. Appropriate medical technology is chosen by the treating clinician, based on the individual characteristics of the patient in front of them.

Some devices will require significant time and training by the clinician to become proficient in implantation. Clinicians have different preferences and experience, and will make different clinical assessments appropriate for their patient. Therefore, different clinicians may use different devices.

Unlike the public sector, we do not employ our specialists. Instead, we partner with clinicians and they are credentialed to admit patients to our hospitals. We partner with more than 17,000 clinicians across all specialties, and because clinician choice and preference will vary, private hospitals need to provide the full range of devices within the case mix of each hospital.

Healthscope being a large organisation is able to purchase larger amounts than a smaller, independent hospital, however, we still need to purchase a far wider range of products than the public sector. This ability to provide clinical independence and choice in private results in a wider range of devices purchased, meaning we cannot achieve the same level of volume and/or loyalty discounts as the public sector.

Providing a higher variety of clinical choice also means private hospitals must hold stock for a larger range of products. As the majority of stock is produced on consignment, suppliers need to wear this capital outlay.

More product variety means the reliance on case-support and education in private is significantly higher than in the public, as it is not possible for theatre staff to have the

same level of product knowledge across all available products. There are a number of costs in storage, service, education, consignment, specialist advice and workforce incurred for providing the higher variety in clinical choice in private hospitals not incurred in public.

Economies of scale in public hospitals

Centralised procurement functions in each jurisdiction are able to consolidate usage across the public healthcare sector and therefore commit significant volumes to suppliers in return for a more competitive price. In fact, even with our 42 hospitals, Healthscope still runs fewer hospitals than New South Wales, Victoria, Queensland, Western Australia and South Australia operates each. State-level tendering ensures significant volume to successful suppliers. These purchasing practices allow for economies of scale, where the higher volume provides the ability to purchase at a lower unit price.

The private sector is fragmented, into either hospital groups such as ours, which operate several hospitals under one company (but even hospital groups will vary in size and number of hospitals), or individual unaffiliated hospitals (which again vary in size and case mix). Private hospitals procure medical technology in smaller quantities, more variety and more frequently. Just-in-time models of stock management are more commonly used in private than in public.

Lower volume means the private sector cannot obtain the same pricing as the public hospital sector in Australia.

Extended service levels

Due to the higher product variety in the private sector, there is also a necessity of extended service levels provided by device manufacturers. This increased service level is included in the private sector price of prostheses, and not in the public price.

Increased service levels include clinical case support, education and training for clinicians and their support team (including perioperative nurses) and device maintenance. These costs should also be considered when setting the private benefit of medical technologies.

Prostheses management

Private hospitals incur a number of costs in prostheses management, including handling, storage, administration, consignment, and freight. To fully understand the cost differences and structures in public and private, IHPA will need to ensure it understands whether these costs are or are not included in the public price. In other words, IHPA will need to gain an understanding of whether the public price includes or excludes handling, storage, administration, consignment, and freight.

Generally, all of these costs (handling, storage, administration, consignment, and freight) have been factored into the benefit set in private. All these factors will contribute to the

price, and will need to be teased out before a private benefit relative to a public reference price can be established.

How should the extent of any such differences be quantified?

Changes in benefits for the Prostheses List will mean Healthscope's total spend on prostheses will go down. This spend is largely a pass through (private health insurers will continue to pay for technology on the Prostheses List), and the spend on actual medical technology on the List is not likely to affect Healthscope directly[1], nor will it provide savings for us. Although total spend will decrease, volume will largely remain the same or increase (due to increased utilisation of private health insurance by policy holders).

Service costs

Both medical technology suppliers and private hospitals will incur costs in bringing medical technology to the patient, and we have not sought to quantify the costs suppliers incur. However, service and clinical training should be regarded as supplier costs.

Management costs

Healthscope incurs both fixed and variable costs in providing medical technology to the patient. Fixed costs, by definition, remain unchanged even when the total spend goes down, thus as a proportion of total spend fixed costs increase. Variable costs rely on volume, and will change based on the number of transactions or episodes.

Whilst we have been unable to quantify the differences between public and private hospitals, we have sought to itemise some of the costs we have identified above.

Cost	Description	Type
Labour/workforce	Prostheses management and handling (procurement, inventory management, catalogue management)	Fixed
IT systems	Prostheses tracking and tracing in storage and onsite	Fixed
Storage	For consignment stock	Fixed
Transaction costs	Processing invoices, coding, billing private health insurers	Variable
Wastage, explants and loss	Implants opened and not used (currently borne by the hospital)	Variable
Sterilisation costs	Cost of sterilising technology and implantation equipment	Variable

Based on the mix of costs above, Healthscope estimates we will incur about 5% of cost on total projected spend with a new public pricing methodology.

As these costs are incurred in private hospitals, we propose part of the difference between the private sector benefit and the public sector reference price should be retained by private hospitals. This will streamline processes, alleviate administrative burden for private hospitals and increase transparency of funding received by private hospitals.

[1] Although note our concern around gap payments earlier in this submission.

If part of the difference between the private hospital benefit and the public reference price is retained in private hospitals, hospitals will not need to negotiate their share of the private sector benefit differential directly with device manufacturers, lowering administration costs to hospitals. It will also increase clarity for the sector, and acknowledge the cost and risk incurred by private hospitals in providing cutting edge technology to patients.

References

Australian Institute of Health and Welfare (AIHW) 2021. Australian hospital statistics: Admitted patient care. Available online: https://www.aihw.gov.au/reports-data/myhospitals/content/data-downloads. Accessed on 23 September 2021.

Independent Hospital Pricing Authority (IHPA) 2021. Consultation Paper on a Methodology for Determining the Benchmark Price for Prostheses in Australian Public Hospitals.