Australian
Private Hospitals
Association

Bundling Arrangements for General Use Items on the Prostheses List

OCTOBER 2022

Contents

Executive Summary

It is important to note that the task given to IHACPA is a complex one in terms of the diversity and range of "general use" (GU) items and the wide range of procedures and treatments in which they are used. These items are used across the private hospital sector which is itself significantly fragmented. This means that the management of risk associated with shifting to a bundled funding mechanism falls to individual hospitals which vary greatly in size and breadth of case-mix.

Furthermore, analysis by APHA has shown the utilisation of General Use items is highly variable and the factors associated with this variation may not be easy to ascertain. This is in large part due to the fact that selection of these items has been a matter of clinician choice such that even within a single procedure, a given category of device is used only a small percentage of the time[1]. The quantum and combination of GU items also varies from case to case.

A bundled payment methodology needs so far as possible to account for those sources of variation that are beyond the service provider's control so that, while recognising the responsibilities of both payers and providers to manage their respective risks, the likelihood of excessive over or under-payment is minimised.

In the private hospital sector there are two main options available as a basis for bundling:

- AR-DRGs which are used as a basis for contracting an estimated 40 per cent of privately insured surgical episodes[2].

- Procedure based benefits referencing specific MBS items or groupings of related items

Because of the high variability in utilisation of GU items it is unlikely that either option will yield a simple solution to the bundling of GU items without consideration of additional variables.

In view of this difficulty, it is necessary to consider whether:

- patient characteristics i.e. gender, age and comorbidity,
- procedural/theatre admission characteristics i.e. bilateral procedures or multiple procedures,
- separation characteristics i.e. intensive care unit status, admission transfer status or multiple admissions to theatre, day-only separation, separations involving hospital in the home.

provide explicatory value and whether any of these variables could be used as additional weighting factors.

---

[1] APHA response - The scope and definition of the Prostheses List, September 2021. https://apha.org.au/wp-content/uploads/2021/09/FINAL-AS-SENT-APHA-Submission-Prostheses-List-Purpose-Scope-and-Definitions-September-2021.pdf

[2] APHA response - Prostheses List Reform, February 2021, https://apha.org.au/wp-content/uploads/2021/03/APHA-Prostheses-List-Reform-Feb-2020-FINAL-1.pdf

It may also be useful to consider hospital type. APHA is wary of speculating on the potential outcomes ahead of further analysis based on data for the sector as a whole, but there are general observations which support the contention that hospital type may be worthy of consideration:

- Larger hospitals may have a more diverse case mix and greater diversity in clinical practice (because of a larger number of surgeons in any given specialty).

- Day hospitals tend to have quite a narrow case mix – i.e. a narrower range of services and a lower incidence of highly complex patients.

- Preliminary investigation suggests that regional hospitals may have different utilisation patterns to hospitals in metropolitan centres.

It should also be noted that although the task given IHACPA is to provide a bundled funding solution that can be used for the funding of health services through private health insurance, the Prostheses List, and hence the outcomes of IHACPA's work on this issue, will very likely also be referenced by other payers including the Department of Veteran's Affairs, The Department of Defence, and accident and workers compensation insurers. Patient cohorts and services covered by these payers are not directly comparable with those provided to privately insured patients. These differences are to some degree detectible through comparison of PHDB and HCP data. It would be prudent for IHACPA to consider this issue when preparing its advice as the outcome may affect the utility of the results to non-private health insurance payers.

Within the time allowed for this consultation it has not been possible for APHA to conduct the statistical analysis necessary to test all of the issues discussed in this submission. Further more some issues may not be resolvable without analysis of data across the sector as a whole rather than data held by any one hospital operator or industry body. Nevertheless it is hoped that the explanations provided will assist IHACPA to develop and execute a rigorous plan to develop and test proposed bundling arrangements.

Responses to consultation questions

Are you aware of any issues with the HCP data collection that may impact on the way it captures utilisation of General Use Items for private patient services? Please provide detailed examples that illustrate these issues where possible.

While the HCP data collection for the private hospital sector appears to correlate well with data reported to APRA, the collection still presents a number of challenges when used as the basis for understanding the utilization of GU items:

- The data is only as good as the ability of hospitals to bill accurately for the actual number and range of devices used in a procedure. Overtime some hospitals have invested in bar-coding systems to improve the accuracy of data capture. But uptake of such technologies is far from universal and data capture is far from uniform in quality.
- Some funds cap the number of items funded /amount paid for some items.

Data capture

The quality of data capture in the HCP collection would be impossible to fully assess without auditing of each stage of the data collection process. If discrepancies in the data from hospital operators becomes apparent, variability in data capture may be a potential cause.

Where apparent anomalies arise in data from different hospitals, particularly in relation to categories where multiples of a small components are used, there may be value in comparing the data provided by hospitals where bar-coding systems are in place with those where they are not.

Capping by insurers

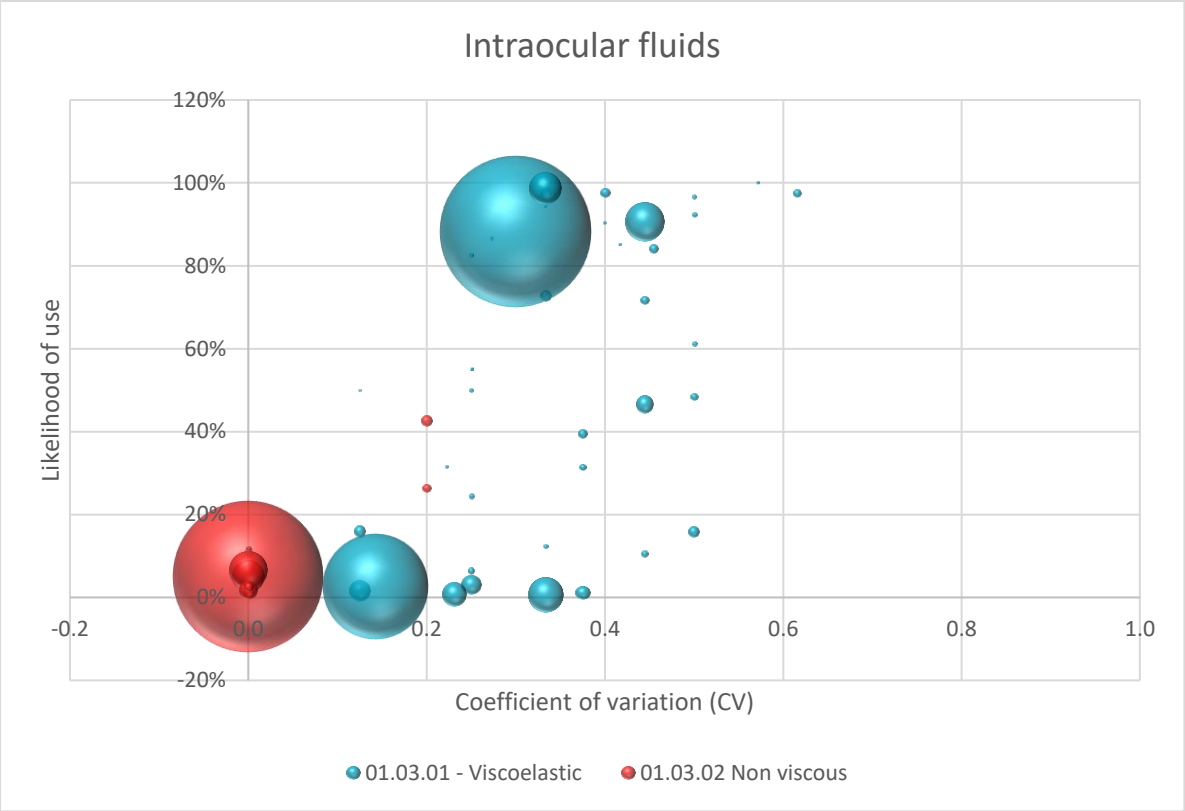
It is a standard practice amongst some insurers to require contractual clauses which limit the number of items that will be funded and/or the amount that will be paid in specific instances. APHA is not privy to contract terms and so the prevalence of this practice is unknown. It is likely that this practice is more prevalent where there is a high difference in negotiating power between the insurer and hospital.

The impact of capping of benefits by insurers will likely be difficult to discern in the data but it is a factor which should be kept in mind particularly where there appear to be marked differences between insurers.

Typically, where capping mechanisms are applied the insurer will refuse to pay for more than a set quantity of devices, e.g. clips within any particular episode. Other instances where caps and limits are imposed arise where insurers contract for services on a bundled basis.

APHA has no visibility of the extent to which such arrangements are in place. One example where this practice is visible is in the data in relation to ophthalmic procedures. In 2021, APHA conducted an analysis on the utilisation of intraocular fluids. The results are summarised in the following chart in which each bubble represented a separate MBS item. One large bubble represented a procedure in

which intraocular fluids would ordinarily be regarded as essential. The data suggested that utilisation occurred in only 88 percent of episodes, the balance was likely attributable to the known prevelance of bundled funding arrangements which in this case resulted in there being no separate claim for intraocular fluids.



APHA is aware that capping and bundling practices may occur in relation to other MBS but the Association does not have specific details. Episodes which include procedures where prostheses (particularly non-GU items) would normally be used but no prostheses claims have been made should be flagged as a potential indicator of a bundled funding arrangement.

Scope of data

Utilisation in the public and private sectors is likely to be different and the data is not of comparable quality. For this reason, public sector data should not be included in the calculation of bundled benefits for use in the private sector.

APHA makes no comment as to how bundled benefits for the public sector should be developed.

Do you have any comments on the quality and utility of the proposed data sources for the development of advice on bundling arrangements for General Use Items? Please provide details.

The private sector HCP data is generally understood to be of good quality in so far as completion rates are high and compliance with specifications is good.

Utility of private sector data is adequate provided the caveats mentioned above are noted and addressed as necessary.

Are there any other sources of data or empirical information that may be useful in defining alternative bundling arrangements for General Use Items? If so, please identify the specific information and describe the way in which the information could be utilised.

The primary sources of data have already been identified.

Do you support or oppose the use of the PL product classification within the design of General Use Item bundles? Please provide details in terms of the specific features of the PL classification.

Some of the GU devices are quite different in the way they are used – i.e. pumps used in ambulatory care or across multiple episodes or pumps used to deliver specific drug therapies. These instances of use may need to be treated differently recognising that these may be specific use applications for which there are limited range of alternatives.

If overall expenditure on GU items cannot be successfully correlated with specific variables. It may be necessary to explore correlations at category or sub-category level. For example, it is plausible that expenditure nf haemostats may correlate with patient characteristics which suggest a higher risk profile.

Some categories, sub-categories and sub-groups of device have low levels of utilization. This will present a difficulty that must be considered carefully in order to determine the appropriate solution. In some instances analysis of data across multiple years may be useful. In other instances it will be important to understand the extent to which analysis at a higher level (sub-category or category) is appropriate. Clinical advice should be sought on this point to ensure that the analysis combines devices that are viable alternatives or comparator products.

There may be instances in which the characteristics of specific categories, sub-categories and sub-groups are such as to indicate that a bundled funding mechanism is not appropriate and a specific solution needs to be considered.

Do you support or oppose the use of the ICD-10-AM/ACHI/ACS classifications within the design of General Use Item bundles? Please provide details of any perceived issues or benefits regarding the use of these classifications.

Exploration of these classifications as a component in the design of GU bundles is supported while noting they may not be sufficient to provide an adequate solution.

If AR-DRGs are used as a component in the design, it will be necessary to validate and maintain bundles in a range of AR-DRG versions reflective of the versions in use across the private sector.

Do you support or oppose the use of hospital characteristics within the design of General Use Item bundles? Please provide details of any perceived issues or benefits regarding the use of hospital characteristics.

It may be useful to consider hospital type. APHA is wary of speculating on the potential outcomes ahead of further analysis based on data for the sector as a whole, but there are general observations which support the contention that hospital type may be worthy of consideration.

- Larger hospitals may have a more diverse case mix and greater diversity in clinical practice (because of a larger number of surgeons in any given specialty).
- Day hospitals tend to have quite a narrow case mix – i.e. a narrower range of services and a lower incidence of highly complex patients.

- Hospitals without ready access to ICUs or transfers to alternative facilities may have a less complex casemix
- Preliminary investigation suggests that regional hospitals may have different utilisation patterns to hospitals in metropolitan centres.

Many procedures are provided in both day hospitals and overnight hospitals. If volumes are low it may not be feasible to undertake separate analysis for day hospitals and overnight hospitals. It may be preferable to conduct analysis on day-only separations irrespective of whether they are provided in a day hospital or overnight hospital. It may also be relevant to consider whether the characteristic of the separation or the characteristic of the facility is the salient factor. The following table shows the respective role of private overnight hospitals and private day hospitals in treating common diagnoses and providing common procedures in same-day separations.

Same-day acute separations for the 20 most common principal diagnoses in 3-character ICD-10-AM groupings, total separations, performed in private hospitals, percent of private hospital separation performed in day hospitals, 2020–21

	PRINCIPAL DIAGNOSIS	TOTAL SEPARATIONS	PRIVATE: TOTAL	DAY: TOTAL PRIVATE
Z49	Care involving dialysis	1,601,932	21%	57%
Z51	Other medical care	641,030	53%	27%
H26	Other cataract	261,836	74%	55%
R10	Abdominal and pelvic pain	149,428	51%	36%
R19	Other … digestive system and abdomen	114,010	63%	29%
D12	Benign neoplasm of colon, rectum…	106,840	79%	36%
C44	Other malignant neoplasms of skin	105,017	71%	42%
R07	Pain in throat and chest	102,798	8%	12%
H35	Other retinal disorders	82,913	89%	83%
K21	Gastro-oesophageal reflux disease	80,769	74%	34%
Z45	Adjustment drug delivery/ device	80,525	70%	9%
Z31	Procreative management	79,606	95%	65%
K01	Embedded and impacted teeth	76,896	94%	27%
K92	Other diseases of digestive system	70,859	60%	27%
Z09	Follow-up examination other than malignant neoplasms	70,337	64%	32%
D50	Iron deficiency anaemia	60,829	38%	39%
E61	Deficiency of other nutrient elements	60,177	56%	23%
M54	Dorsalgia	56,084	66%	12%
Z08	Follow-up - malignant neoplasms	55,123	56%	12%
K50	Crohn's disease [regional enteritis]	53,086	43%	14%
	Other	3,001,123	44%	28%
Total		**6,911,218**	**45%**	**35%**

Data source: AIHW report *Admitted patient care 2020–21*

Interventions reported for the 20 most common procedure blocks for same-day acute separations, percent performed in private hospitals, percent of private hospital interventions performed in day hospitals, 2020–21

	PROCEDURE BLOCK	TOTAL	PRIVATE: TOTAL	DAY HOSPITALS: TOTAL PRIVATE
1910	Cerebral anaesthesia	2,687,633	69%	31%
1060	Haemodialysis	1,609,328	22%	59%
1920	Administration of pharmacotherapy	1,025,455	48%	24%
911	Fibreoptic colonoscopy with excision	562,337	74%	33%
1008	Panendoscopy with excision	468,839	75%	34%
200	Extraction of crystalline lens	303,790	74%	58%
193	Insertion of intraocular lens prosthesis	296,975	74%	58%
905	Fibreoptic colonoscopy	287,989	71%	38%
1909	Conduction anaesthesia	280,581	67%	50%
1620	Excision of lesion of skin and subcutaneous tissue	244,864	68%	34%
1893	Administration of blood and blood products	219,747	40%	32%
1916	Generalised allied health interventions	187,675	15%	19%
458	Surgical removal of tooth	156,325	93%	27%
72	Percutaneous neurotomy of other peripheral nerve	153,919	96%	11%
1265	Curettage and evacuation of uterus	143,014	60%	35%
209	Procedures on retina, choroid or posterior chamber	121,904	84%	81%
1089	Examination procedures on bladder	114,702	55%	9%
1297	Procedures for reproductive medicine	88,058	95%	70%
1005	Panendoscopy	80,003	71%	44%
1259	Examination procedures on uterus	78,182	56%	11%
	Other	2,724,128	62%	24%
	Interventions reported	**11,835,448**	**59%**	**33%**
	No intervention or not reported[(b)]	827,165	4%	10%
	Total same-day acute separations	**6,911,218**	**35%**	**45%**

Data source: AIHW report *Admitted patient care 2020–21*

The Australian Institute of Health and Welfare (AIHW) peer grouping for private hospitals provides a useful starting point for categorising facilities because it is based on evaluation of size, capabilities and case mix[5]. Second Tier categories should also be considered as it may smooth implementation of the final results if any categorisation of facilities within the bundling method is aligned with Second Tier arrangements. However the primary consideration should be the achievement of a technically robust and statistically supported outcome. It should also be noted that recommendations for the review of Second Tier categories may emerge from the review of default benefit arrangements which is currently underway by the Department of Health and Aged Care.

Private acute medical/surgical hospitals have been classified by the AIHW into four broad groups:

- Group A hospitals are private acute hospitals with a 24-hour emergency department and an intensive care unit, providing a number of specialised services such as coronary care, special care nursery, cardiac surgery and neurosurgery.
- Group B hospitals have intensive care units and a number of other specialised services including coronary care, special care nursery, cardiac surgery and neurosurgery.
- Group C hospitals are those with specialised services in a range of clinical specialities.
- Group D hospitals are private acute hospitals with a narrower, often more specialised range of services. Some of these have as few as 200 separations per year.

In addition to these groups, there are a number of more specialised categories of private hospital including: women and children's hospitals, hospitals specialising in the treatment of drug and alcohol addiction, psychiatric hospitals, hospitals specialising in (non-drug/alcohol) rehabilitation.

Day hospitals have been classified by the AIHW into 11 groups as summarised in the table below.

DAY HOSPITALS	MAJOR CITIES	INNER REGIONAL	OUTER REGIONAL	TOTAL
Dialysis clinics	14	0	0	14
Endoscopy centres	53	3	0	56
Eye surgery clinics	38	3	1	42
Fertility clinics	8	0	0	8
Haematology/oncology clinics	10	1	0	11
Hyperbaric treatment centres	4	0	0	4
Mixed day procedure hospitals	40	15	4	59
Oral and maxillofacial	13	0	0	13
Plastic and reconstructive surgery clinics	28	0	1	29
Reproductive health centres	6	1	1	8
Sleep centres	3	0	0	3
Total Day Hospitals	**217**	**23**	**7**	**247**
	88%	9%	3%	100%

Data source: AIHW report *Private Hospitals 2012-13,* the most recent report providing this level of detail.

Are there any other classification systems that IHACPA should incorporate in the design of General Use Item bundles? If so, please provide details of these classifications and a rationale for their use.

APHA considers it necessary to consider whether:

- patient characteristics i.e. gender and age and comorbidity,
- procedural/theatre admission characteristics i.e. bilateral procedures or multiple procedures,
- separation characteristics i.e. intensive care unit status, admission transfer status or multiple admissions to theatre, day-only separation, separations involving hospital in the home.

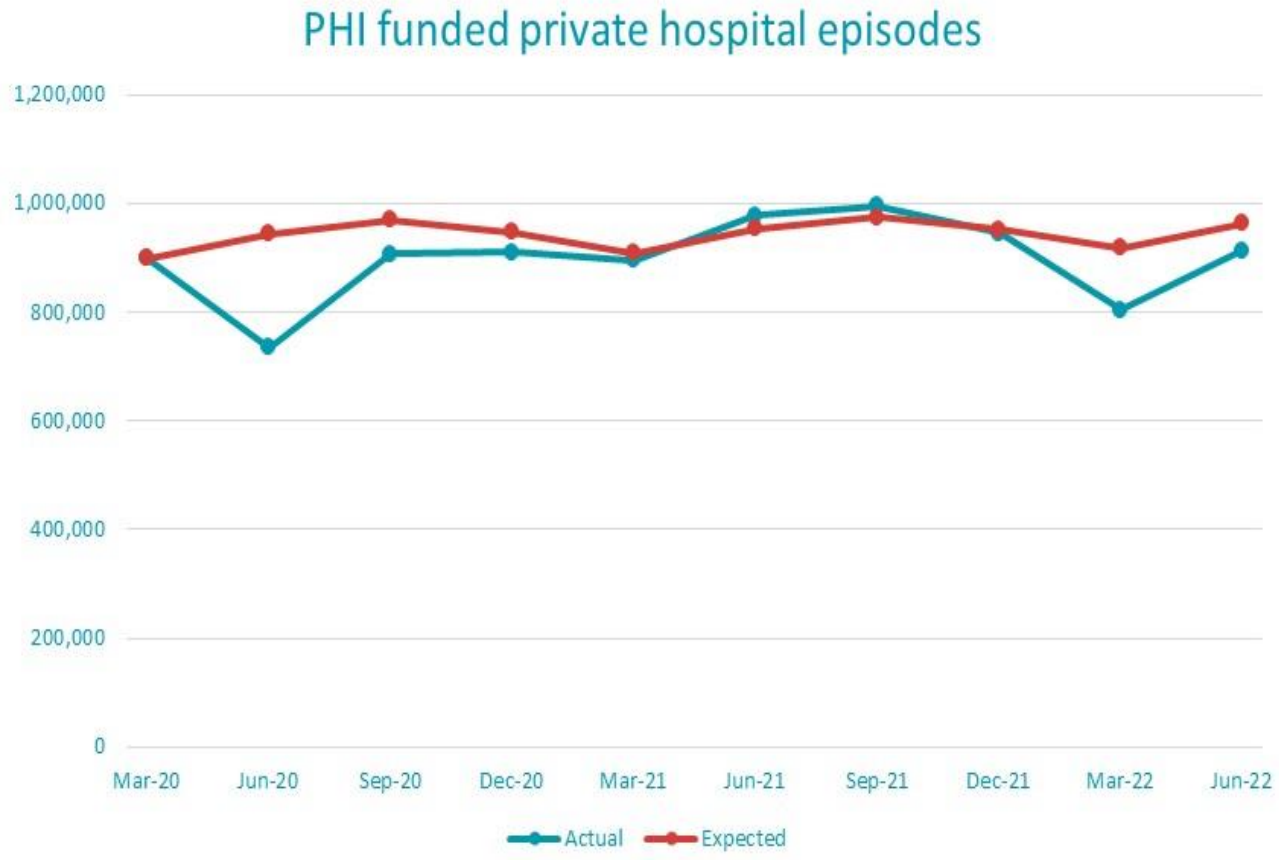
provide explicatory value and whether any of these factors could be used as additional weighting factors. The rationale is as follows:

- patient characteristics – several GU categories are used to either address or prevent complications such as haemorrhage, wound dehiscence and infection. As such patient characteristics associated with the increased risk of such complications should be considered[3].
- procedural characters – some procedural characteristics are likely to involve higher levels of utilisation than would otherwise been the case (all other factors being equal)
- separation characteristics – these may be useful in indirectly indicating the presence of complications or the elevated risk of complications and/or the need for prophylactic measures. Some separation types such as same-day separations and separations involving hospital in the home care may require specific technologies.

Are you aware of any short-term changes, brought on by the impact of COVID-19, to the utilisation of General Use Items among episodes in which these items are used? If so, please provide details that enable the changes to be examined using the 2020–21 HCP data collection.

The following chart shows actual privately insured episodes compared with expected levels based on historic trends. Unfortunately data published by APRA does not isolate surgical episodes but the magnitude of the pandemic's impact is still evident.

[3] The relevance of this approach is illustrated by the IHACPA methodology for pricing and funding for safety and quality Risk adjusted model for hospital acquired complications National Efficient Price Determination 2020–21, March 2020 in which risk factors for gastrointestinal bleeding are identified as emergency admission status, age, mjor diagnosis, intensive care unit status, DRG10 type, Charlson Score, Gender and admission transfer status.



During 2020 there were significant restrictions on elective surgery with the result that fewer cases were treated. Periods of high case numbers also impacted privately insured admissions as patients deferred planned treatments and hospitals responded to government requests for assistance. This will mean that data is atypically low for some procedures; particularly in the June 2020 and March 2022 quarters. The length of restrictions varied between jurisdictions. Even after restrictions were relaxed, surgical episodes have continued to be constrained by COVID precautions and workforce constraints. These effects were experienced unevenly across facilities, surgical specialties and jurisdictions. The variable impact on surgical specialties is illustrated in prostheses claims data reported to APRA.

Prostheses claims (number) by Category of Device

CATEGORY	FY19	FY20	FY21	FY22
Ophthalmic	359,976	332,167	380,744	377,652
Ear, nose and throat	36,648	33,472	22,855	27,048
General miscellaneous (GM)	1,048,555	1,071,654	1,092,376	1,065,767
Neurosurgical	34,675	33,760	35,448	30,594
Urogenital	39,355	39,117	39,554	39,214
Specialist orthopaedic	568,478	573,895	612,589	568,287
Plastic and reconstructive	94,231	93,545	107,357	113,557
Cardiac	84,144	93,106	97,899	96,614
Cardiothoracic	6,483	6,991	6,739	7,504
Vascular	84,400	88,959	87,722	84,229
Hip	121,074	118,962	131,261	123,663
Knee	136,684	133,676	155,981	140,692
Spinal	213,004	217,178	228,680	210,420
Other	276,548	280,468	318,587	335,594
Total	3,104,255	3,116,950	3,317,792	3,220,835
Total excluding GM	2,055,700	2,045,296	2,225,416	2,155,068

For the period FY2019 to FY2022, the number of claims in the GM category remained relatively constant when compared to other categories. The fact that claims in the GM category grew slightly when other categories fell is not surprizing. Multiple factors may have contributed:

- restrictions on elective surgery may have shifted priorities in favour of procedures in which GU use was more likely.
- prioritisation of urgent surgeries may have altered the risk profile of the patient population.
- delayed presentation of surgical cases since then may also have led to a higher than expected rate of complications.

APHA has not been able to test these hypotheses however the high likelihood that multiple factors drove utilisation through this period underlines the importance of considering a range of factors in the design of GU bundles.

Are you aware of any existing contracting arrangements between hospitals and insurers that might be considered relevant in the formulation of advice on alternative bundling arrangements? If so, please provide details of the arrangements, noting that IHACPA will ensure confidentiality of this information wherever necessary.

As already mentioned there are instances where funds are already be bundling GU items and consequently not paying PL benefits for those items. Where it is possible to identify them, these episodes need to be excluded from the analysis to avoid the false impression that no items have been used.

Where funds have capped coverage of GU items, a suitable adjustment should be made to more accurately reflect actual utilisation.

Claims by insurers that the cost of GU items should already be covered in hospital benefits – ie the PL benefits are effectively a double payment - should not be taken into account. Any assertion that a contract leads to double funding is an issue for the payer and hospital concerned to resolve separately.

Many contracts, particularly those held with day hospital operators reference the National Procedure Banding Schedule. The NPBS categorises MBS into 'band' reflecting relative costs. A defined range of factors are taken into account together with historical decisions and comparator procedures in order for the National Procedure Banding Committee to arrive at a consensus decision. Although it may be feasible to explore whether there is any correlation between GU utilisation and theatre bands, this is unlikely to yield strong statistical correlation because the sole criteria for assigning MBS to a specific band is aggregate cost, there are no other common features linking MBS within a band. The dominant fact determining cost is time and there is no reason to suspect that the use of GU items is time dependent.

Are you aware of any instances where a General Use Item charge is raised against an individual episode but where the item is used across multiple episodes, such as might occur for multi-pack or multi-use type items? If so, please provide details.

This may occur in instances where a pump is used to deliver care to one patient over an extended period of time and potentially across multiple episodes.

Are there any other issues of relevance to the formulation of advice on alternative bundling arrangements? If so, please provide details on these issues and their materiality with regard to the formulation of advice.

Nil.

The Australian Private Hospitals Association

- The Australian Private Hospitals Association (APHA) is the largest peak industry body representing the private hospital and day surgery sector.
- APHA members provide services in all states and territories.
- APHA members operate 160 overnight hospitals and 151 day hospitals across Australia.
- Major operators within the membership include:
    - Adventist HealthCare Limited
    - Aurora Healthcare
    - Cura Day Hospitals Group
    - Dental Corporation Pty Ltd
    - Eastern Heart Clinic Group
    - Epworth HealthCare
    - Evolution Healthcare Pty Ltd
    - Genea Limited
    - GenesisCare
    - Healthe Care Surgical Pty Ltd
    - Icon Pty Ltd
    - MSI Australia
    - Nexus Day Hospitals Pty Ltd
    - PresMed Australia
    - Queensland Eye Institute
    - Ramsay Health Care Australia Pty Ltd
    - Royal Rehab Group
    - The Park Private Hospital & Walcott Street Surgical Centre
    - Unitas HealthCare Pty Ltd
    - UnitingCare Health Group
    - Vision Eye Institute
    - Wesley Hospital Ashfield & Kogarah.

In addition to these corporate groups, APHA represents more than 90 independent stand-alone facilities.