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# **Consultation Response**

# Pricing Framework for Australian Public Hospital Services 2022–23

## Prepared by Stryker South Pacific 15 July 2021



## **Summary**

Stryker supports the overall approach of the Independent Hospital Pricing Authority (IHPA) to the implementation of the Addendum to the National Health Reform Agreement with the aim of developing and refining the national activity-based funding (ABF) system.

Stryker has made a number of comments about the processes involved in determining the development cycles for all classifications in order to reflect current clinical practice and facilitate continual improvement of the national pricing model.

In relation to the exploration of alternate and value-based funding models, Stryker stresses the importance of including consumer input into pricing models and using available data sources on the outcomes of procedures, such as the Australian Orthopaedic Association National Joint Replacement Registry.

We also recommend that a broad value-based approach be taken into consideration for investigation of new innovative funding modes, including patient-reported experience and outcome measures, the long-term cost impact on the community and equity considerations.

This should additionally include technologies that are regarded as 'peripheral' but make a large difference to the outcome, hence the cost to the health system e.g., robotic-assisted arthroplasty and endovascular clot retrieval. Research findings suggest that these technologies can provide significant benefits compared to conventional treatments.

Finally, most funding mechanisms such as the ABF and the national pricing framework, where technologies are embedded into the bundled payment hinder the adoption of new and innovative technologies. This is particularly the case with high investment cost-effective technologies, as any reduction in episodes-of-care cost will reduce the associated DRG payments over time. As such, hospitals may be reluctant to use new and innovative technologies until the national funding / pricing framework is updated to account for their additional costs.

Further recommendations and feedback against the draft guidelines are provided as follows.

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## **Consultation Commentary**

### **Section 5.1:** Standard development cycles for all classifications

#### Question

Do you support the proposal to establish standard development cycles for all classification systems?

Is there a preferred timeframe for the length of the development cycle, noting the admitted acute care classifications have a three-year development cycle?

Do you have any feedback on what measures should be standard as part of the review and development of an updated version of an established classification?

#### **IHPA Commentary / Proposal**

Under the Addendum to the National Health Reform Agreement 2020–25 (the Addendum), one of IHPA's determinative functions is to develop, specify, refine and maintain the national classifications to ensure that they remain fit-for-purpose, reflect current clinical practice and facilitate continual improvement of the national pricing model.

The admitted acute care classification systems undergo refinements through established three-year development cycles. IHPA is seeking feedback on the feasibility of implementing standard classification development cycles for the other patient service categories. A standard development cycle provides stakeholders with certainty regarding timing of new versions and ensures that classifications maintain clinical currency.

Standard development cycles would require the establishment of a minimum set of measures that would be assessed as part of the review for an updated classification version. Potential measures may include:

- Assessment of classification performance using the latest cost and activity data
- Review and refinement of complexity splits
- Review of variables contributing to complexity
- Review of existing variables and consideration of new variables used for grouping.

#### **Stryker's Comments**

Stryker supports the proposal to establish standard development cycles for all classification systems.

In line with the typical 12-18-month timeframe associated with Heath Technology Assessments as seen within both IHPA's Impact of New Health Technologies Framework and MSAC's processes, Stryker suggests a comparable 12-18-month timeframe should be introduced as the standard development cycles for all classification systems.

Stryker suggests that in addition to what has been proposed by IHPA an additional measure that should be included as part of the review and development of an established classification is the introduction of any new health technologies / interventions. The introduction of a new technology has the potential to alter the cost and activity data associated with a particular classification and as such should be considered with the development cycle process. Refer to case study below.

#### Case Study - Endovascular Clot Retrieval

IHPA has previously outlined that within Australia's payment model the current funding group for stroke episodes where there was administration of a stent, coil or clipping of an aneurysm, is also where episodes with endovascular clot retrieval (ECR) are grouped. Additional this funding group applies to



procedures such as burr holes, removal of lesion of brain stem, cranioplasty with insertion of skull plate and hemispherectomy. Within the classification of these procedures there are three levels of complexity: minor, intermediate and major, each associated with different levels of funding. The very essence of stroke treatment is complex; the procedure is consistently performed in time sensitive and high-risk scenarios and requires specialised stroke units and clinicians to perform the procedure with intricate and complicated medical technology.

In saying that, ECR's reduction in length of stay combined with the non-invasive nature of the procedure has seen the treatment option inaccurately funded due to the lack of granularity within the current funding groups. To accurately reflect the complex nature and high cost of the procedure whilst accommodating the reduction in length of stay and episode-of-care costs ECR should be separated into a unique funding group (as is the case in Victoria).

The current process for reviewing and amending these funding groups is based on a utilization threshold and confined to assessment within extended timeframes as per the current classification development cycles. An increased frequency in the development cycles for all classifications would allow for the assessment of technologies / interventions according to their clinical need.

Within IHPAs recent '*Development of the admitted care classifications*' consultation a new ADRG for Endovascular Clot Retrieval (ECR) has been proposed for development as part of V11.0 of the AR-DRG. However, this will only be implemented in July 2023 as per the admitted acute care developed cycle timelines this is despite the clinical need for appropriate funding being immediate.

### Section 6.2: Adjustments to the national efficient price

#### Question

What evidence can be provided to support any additional adjustments that IHPA should consider for NEP22?

#### **IHPA Commentary / Proposal**

Clauses A46 and A47 of the Addendum require IHPA to determine adjustments to the NEP and have regard to legitimate and unavoidable variations in wage costs and other inputs which affect the costs of service delivery, including:

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

For the NEP Determination 2021–22 (NEP21), IHPA investigated the need for an adjustment for patient transport in rural areas, however did not implement this adjustment for NEP21, as high travel costs for remote patients were considered to be already adjusted for in the national pricing model with the existing patient residential and treatment remoteness adjustments.

For NEP21, IHPA also removed the emergency care age adjustment with the introduction of the Australian Emergency Care Classification to price emergency department activities.

In developing NEP22, IHPA is investigating the need to review or assess the following existing or new adjustments:

- Reinvestigation of an adjustment for patient transport in rural areas
- Review of the Specified Intensive Care Unit eligibility criteria and adjustment
- Review of the Indigenous adjustment
- Genetic services
- Socioeconomic status



#### **Stryker's Comments**

Stryker supports the approach and changes proposed by IHPA regarding NEP22. However, in addition, and as mentioned within the section above, Stryker believes that the introduction of any new health technologies / interventions should be considered as part of the NEP adjustment process. New and innovative technologies have the potential to alter the cost and activity data associated with the determination of the NEP cost weights. As such, when the introduction of a disruptive technology is identified there should be consideration to determine appropriate adjustments to the NEP.

As an example, Stryker suggests that robotic surgery outcomes should be compared with conventional surgery outcomes and take any differences between these outcomes into account when determining the efficient price. Clinical evidence<sup>1-4</sup> has shown that robotic assisted knee replacements deliver improved outcomes, including shorter hospital stays, lower levels of need for opioid pain medication, shorter rehabilitation times, and increased function. Cost analyses of robotic-assisted vs. manual surgery have also demonstrated that robotic surgery has significantly lower average 90-day episode of care costs. This data, along with other relevant research on robotic surgery outcomes, should be considered by IHPA for NEP22.

Additionally, as outlined with IHPAs 'Development of the admitted care classifications' a new ADRG for Endovascular Clot Retrieval (ECR) is proposed for development as part of AR-DRG V11.0. Stryker has been a strong advocate for advancement in the delivery of stroke treatment across Australia. In 2019-20 Stryker engaged with IHPA advocating for further investigation into the delivery of ECR. This included undertaking our own modelling and pricing analysis in consultation with surgeons to present IHPA with evidentiary data and endorse the claims made by NSW Health within their submission to the Pricing Framework for Australian public hospital services 2018–19. Following consultation and engagement with industry, surgeons, consumers, and peak bodies as well as with federal MPs and Senators Stryker formulated a white paper discussing the development of a national plan for acute stroke treatment. This paper outlines the evidence from clinical trials to support the use of ECR to substantially improve survival rates and functional outcomes following ischaemic stroke. It also includes data on how mechanical thrombectomy results in a significant reduction in length of hospital stay for stroke patients, much lower inpatient costs, and a dramatically reduced need for ongoing nursing care. This data, along with other relevant research on ECR outcomes and costs should be considered by IHPA for NEP22, if this coincides with the establishment of the ECR ARDG.

Stryker is eager to work with IHPA, in conjunction with Public Hospitals and physicians to provide / generate accurate and real-world evidence in order to establish the need adjustment within NEP22.

### **Section 6.5.1:** Phasing out the private patient correction factor

#### Question

Are there any objections to IHPA phasing out the private patient correction factor for NEP22?

#### **IHPA Commentary / Proposal**

The collection of private patient medical expenses has been problematic in the National Hospital Cost Data Collection (NHCDC). For example, some states and territories use Special Purpose Funds to collect associated revenue (for example, the MBS) and reimburse medical practitioners.

The private patient correction factor was introduced as an interim solution for the issue of missing private patient costs in the NHCDC. The implementation of the Australian Hospital Patient Costing Standards Version 4.0 should have addressed the issue of missing costs in the NHCDC, meaning the private patient correction factor is no longer required.

The private patient correction factor was removed for the Northern Territory for NEP21.



For NEP22, IHPA intends to phase out the private patient correction factor in the remaining states and territories.

#### **Stryker's Comments**

Stryker supports IHPA's intention to phase out the private patient correction factor in the remaining states and territories.

### **Section 10.3.2:** Trialling innovative models of care

#### Question

What other considerations should IHPA have in investigating innovative models of care and exploring trials of new and innovative funding approaches?

#### **IHPA Commentary / Proposal**

As provided by the Addendum, IHPA is to facilitate exploration and trial of new and innovative approaches to public hospital funding. Clause A99 of the Addendum stipulates that states and territories can seek to trial innovative models of care, either:

- as an ABF service with shadow pricing, reporting, and appropriate interim block funding arrangements for the trial period; or
- as a block funded service, with reporting against the national model and program outcomes for the innovative funding model.

Consistent with feedback received from states and territories to the Pricing Framework for Australian Public Hospital Services 2021–22, IHPA notes the preference for states and territories to nominate their own models of care or services for consideration under the innovative funding model clauses of the Addendum, rather than specific models of care or services determined by IHPA.

For the National Efficient Price Determination 2022–23, IHPA is seeking expressions of interest from jurisdictions that wish to nominate alternate funding models such as bundling or capitation to trial.

#### **Stryker's Comments**

Stryker suggests that a broad value-based approach be taken into consideration for investigation of new innovative funding modes, including patient-reported experience and outcome measures, the long-term cost impact on the community and equity considerations. This should additionally include technologies that are regarded as 'peripheral' but make a large difference to the outcome, hence the cost to the health system e.g., robotic-assisted arthroplasty and endovascular clot retrieval. Research findings suggest that these technologies can provide significant benefits compared to conventional treatments.

For example, research has shown that robotic-assisted surgery (performed with Stryker's Mako) enables less-invasive partial knee arthroplasty (PKA), as opposed to total knee arthroplasty (TKA), leading to improved clinical outcomes for patients including<sup>5</sup>:

- 55.4% lower median pain scores from day one to week eight postop, compared to manual surgery.
- Reduced use of opiates, due to reduced bone, ligament, and soft-tissue injury.
- Faster recovery times and return to work or the community and improved quality of life.
- 33 per cent shorter length of hospital stay, resulting in higher bed throughput.
- Reduced costs of implants (Mako partial knee replacement procedures are 24 per cent less expensive, compared to total knee replacement procedures).



However, the major barrier to the increased uptake of evidence-based new technologies is the inadequacy of current funding mechanisms available within the current public hospital system. This is particularly the case with technologies like the Mako System where the full benefits accrue over the long term and are realised outside of the hospital system (for example in increased productivity and a reduced need for assistance with daily living).

As such, a focus of incentivising the implementation and adoption of proven valued-based technologies should be a key consideration in the investigation of innovative models of care and could be easily trailed within any new and innovative funding approaches.

It is also important that any new models of care reflect the potential for innovative technologies to change the environment in which care is delivered, This can include enabling the provision of services in the community or home setting which previously would have been provided only in a hospital. Given the potential benefits of a more flexible approach to the delivery of care, new funding models should be sufficiently flexible to enable services to be provided in the most appropriate setting, taking into account clinical evidence and consumer preferences.

## References

<sup>1</sup>Illgen, R, Bukowski, B, Abiola, R, Anderson, P, Chughtai, M, Khlopas, A, Mont, M. Robotic-assisted total hip arthroplasty: Outcomes at minimum two year follow up. Surgical Technology International. 2017 July 25; 30:365-372.

<sup>2</sup>Kayani B, Konan S, Tahmassebi J, Pietrzak JRT, Haddad FS. Robotic-arm assisted total knee arthroplasty is associated with improved early functional recovery and reduced time to hospital discharge compared with conventional jig-based total knee arthroplasty: a prospective cohort study. The Bone and Joint Journal. 2018;100-B:930-7.

<sup>3</sup>Kleeblad LJ, Borus T, Coon T, Dounchis J, Nguyen J, Pearle A. Midterm survivorship and patient satisfaction of robotic arm assisted medial unicompartmental knee arthroplasty: a multicenter study. The Journal of Arthroplasty. 2018:1-8.

<sup>4</sup>Cool, C.L., Jacofsky, D.J., Seeger, K.A., Sodhi, N. and Mont, M.A., 2019. A 90-day episode-of-care cost analysis of robotic-arm assisted total knee arthroplasty. Journal of comparative effectiveness research

<sup>5</sup>Analysis conducted by Baker Tilly using a database compiled by OptumInsight, Inc. (Eden Prairie, MN) comprising claims generated by a national commercial health plan consisting of approximately 25 million members. Index cases incurred Jan. 2013 – Dec. 2013, revision cases incurred within 24 months of index procedure.