Pricing Framework for Australian Public Hospital Services 2020–21

Queensland submission to the Independent Hospital Pricing Authority July 2019

Background

The Independent Hospital Pricing Authority (IHPA) is seeking feedback from stakeholders on the *Consultation Paper on the Pricing Framework for Australian Public Hospital Services 2020–21* released on 14 June for public feedback.

Feedback gathered from the public consultation process will inform IHPA's development of the *Pricing Framework for Australian Public Hospital Services 2020–21.* The consultation provides an opportunity to investigate some emerging themes around hospital pricing and funding. Specifically, the Consultation Paper seeks feedback on opportunities for bundled pricing and capitation models as well as patient reported outcome measure (PROMs) and how they could be incorporated into activity based funding (ABF) models.

Directorate Position

The Department of Health sought input from all areas of Queensland Health (QH) which includes the Department's divisions, 16 Hospital and Health Services (HHSs) and the Queensland Ambulance Service. This feedback is to be considered the view from QH. However, standalone HHSs may choose to provide specific feedback.

Feedback

QH responses to the 18 Questions for Stakeholders as included in the consultation paper are included below.

1. *Are the Pricing Guidelines still relevant in providing guidance on IHPA's role in pricing Australian public hospital services?*

The pricing guidelines are still relevant in providing guidance on IHPA's role in pricing Australian public hospital services. However, when considering whether some of the stated guidelines have been met, some concern has been raised by non-metropolitan HHSs. In particular, ABF facilities located outside metropolitan and large coastal centres face higher cost structures. As such, the principal of "Fairness" that payments should be based on the same price for the same service regardless of provider may not be appropriate for rural and remote facilities. QH acknowledges that the funding model includes adjustments to account for facility location and that the calculation of

these adjustments is being reviewed as part of the National Efficient Price (NEP) Fundamental Review.

Concerns were raised around the principal of "Timely-quality care" given the long payment delays experienced in recent times and the three-year lag between cost data which informs price development. Therefore, the adoption of new technology and/or practices are slow to be reflected in the ABF model which is not conducive to fostering innovation.

2. Does the proposed addition to the Pricing Guidelines appropriately capture the need for pricing models to support 'value' in hospital and health services?

QH supports the adoption of this guideline.

The proposed principal refers to funding solutions that deliver efficient quality care with a focus on patient outcomes. As discussed in consultation question 13, measuring patient outcomes is likely to require time to fully develop.

Prior Pricing Frameworks have included consideration of whether normative or average pricing should be used. Queensland still supports average pricing and believes that any discounts for low value care to be the responsibility of the State System Manager in accordance with jurisdictional priorities.

3. What should IHPA prioritise when developing AR-DRG Version 11.0 and ICD-10-AM/ACHI/ACS Twelfth Edition?

The following issues should be prioritised by IHPA:

- For Australian Classification for Healthcare Interventions (ACHI)
    - Where possible, consideration and inclusion of Medicare Benefit Schedule changes in a more timely manner.
    - Codes for contemporary cardiac interventions including endovascular clot retrieval, and leadless pacemakers
    - Differentiation of planned and unplanned services.
- For ICD-10-AM
    - Further development of supplementary codes for chronic conditions.
    - Capability to distinguish between Left- and Right-sided conditions, and multi-site conditions.
- For AR-DRG V11.0
    - Consideration of including non-invasive ventilatory support time in the costing model.
    - Further refinement of codes that support the reliable identification of Hospital Acquired Complications (HACs) as a quality measure.
    - Split(s) for surgical DRGs between robot assisted and manual procedures where there are statistically significant cost variances.
    - Split(s) to Delirium and Dementia DRGs for patients with co-morbidities common to cases requiring 1 on1 nursing care (e.g. behavioural management issues). These patients are significantly more expensive to treat and often proceed to lengthy maintenance sub and non-acute patient (SNAP) admissions.

4. *Are there other priorities that should be included as part of the comprehensive review of the admitted acute care classification development process?*

Consideration should be given to the following:

- As quality of care and outcome measures are emerging as important guiding principles for pricing and funding health services, consideration could be given to collecting metrics such as the Body Mass Index in routinely coded data that attempts to capture relevant information.
- Risk of treatment and severity of illness are still poorly measured in the administrative sets used to classify inpatients. Instead length of stay (LOS) and co-morbidities are used as proxies. Development of reliable tools to measure these would improve the robustness of ABF classification.
- The National Health Service (NHS) has more groupings pertaining to paediatric care. These provide a different grouping where there is a real difference in the model of care, not just a variation in the weight.
- Establishment of definite delivery time frames for completion and delivery of key material, specification and requirements that meet both IHPA and jurisdictional/private organisation requirements i.e. DRG references files, DRG specifications, finalised ICD-10-AM/ACHI electronic code lists.
- The introduction of new code sets (such as the ICD-10-AM U codes for chronic conditions) create code burden and should be fully explored with state coding representatives before committing to implementation whether trial or otherwise.
- There needs to be a focus on providing high quality education and ongoing support nationally when edition changes occur.

5. *Are there any impediments to implementing pricing using the AECC Version 1.0 for emergency departments from 1 July 2020?*

The main impediment is related to data collection including the resources required to collect the information and system requirements needed to capture the information. Data specifications need to be finalised well in advance of planned implementation to allow time to develop, implement and test the required system changes. Introduction of the ICD10 shortlist has proven problematic, particularly the lack of mapping for External Cause codes.

If jurisdictions are using Systematized Nomenclature of Medicine (SNOMED) to capture diagnostic information in the emergency department (ED) there is an additional complication required to convert the SNOMED code into a diagnosis code – which is a principal driver for the ED classification. This is a national problem which requires a national solution, and Queensland supports the work that IHPA is undertaking with the Commonwealth Scientific and Industrial Research Organisation (CSIRO) to progress this.

6. *Are there any impediments to implementing pricing for mental health services using the AMHCC Version 1.0 from 1 July 2020?*

QH has advised IHPA through the Mental Health Working Group that it does not support pricing of mental health services using the Australian Mental Health Care Classification (AMHCC) at this point

in time. The underlying data, particularly phase of care, is still in the development stage for many jurisdictions and has not been tested with the clinical teams in a robust manner and is not considered by QH to be comprehensive enough nationally to reliably price. The costing of services outside of the admitted patient component is new and outside of QH we have not seen other jurisdictions community mental health costing data, which further limits the ability to determine an appropriate price.

A number of changes to phase of care, which is the fundamental element of the AMHCC, have been proposed to address the lack of agreement between clinicians on how to assess phase of care as identified in the final inter-rater reliability study. The report recommended the need for a comprehensive training program, periodic re-training, modification of the tool and guidance material, and further testing of the applicability of the tool for child, adolescent and older persons. A re-evaluation of the tool should be made prior to adopting the tool as a classification system for pricing mental health services. Although not proposed for implementation in the immediate future, a fundamental change in the model compromises any pricing undertaken based on version 1.0.

Episode based funding for Mental Health has always been contentious due to the wide variation of clinical practice amongst psychiatrists. This is demonstrated under the current DRG episodic payments where average LOS at some facilities can be more than 10 times longer than at others.

7. *Are there adjustments for legitimate and unavoidable cost variations that IHPA should consider for NEP20?*

The Department has not submitted a request for legitimate and unavoidable cost variations to IHPA under the *Assessment of Legitimate and Unavoidable Cost Variations Framework* for NEP20.

However, one HHS has raised concerns around its losses for DRG L61Z Haemodialysis. The cause appears to be the ability to include dispensed drug costs at the patient level whereas many facilities contributing costing data to National Hospital Cost Data Collection (NHCDC) may use proxies, such as LOS to distribute drug costs generally. National Weighted Activity Unit (NWAU) calculations based on average treatment costs across 400+ facilities are far lower than the actual costs observed by the HHS. For NWAU calculations, it is suggested that data from any facility not able to include true drug costs at a patient level are excluded.

8. *Is there any objection to IHPA phasing out the private patient correction factor for NEP20?*

No, provided there is no disadvantage to public hospitals who have the opportunity to treat private patients.

9. *Do you support IHPA making the NBP publicly available, with appropriate safeguards in place to protect patient privacy?*

In general, QH supports greater transparency and availability of healthcare related data. However, there are concerns regarding the trimmed NHCDC data and may no longer be consistent with jurisdictional data sets. Further investigation and quality assurance is required prior to making this information public

10. *What are the estimated costs of collecting the IHI in your state or territory?*

QH has previously raised concerns regarding reporting the Individual Healthcare Identifier (IHI) within National Minimum Data Seta (NMDSs) and National Best Endeavours Data Sets (NBEDs). This is due to quality issues with the ability to obtain the IHI as well as difficulties with local systems. The way the IHI system is currently implemented and used in QH, it would be prohibitively expensive to get the IHI into the right systems to support these data sets and would compete with numerous other IT and service provision priorities. The original scope when systems were implemented was solely for the purpose of the My Health Record.

The issue is broader than just system integration and system replacement. It is likely if this was ever enabled, there would be gaps in the number of IHIs available for patient cohorts, because of the data quality management issue. Furthermore, not all patients have an IHI, and some may have multiple IHIs. A better methodology might be a national client directory that uses probabilistic matching algorithms based on a number of patient details as opposed to a single number.

Although there are system issues, the main issue is about how data to support the capture of IHI is managed. Data needs to be matched on both ends (i.e. QH and Medicare) and there will always be a dependency for consumers to have up to date information with both parties to ensure a matched IHI. This dependency means there will never be a 100 per cent match rate and relying on this will be a risk (i.e. if it is ever mandated). As a health service provider, QH cannot update Medicare's system when there is incorrect information in their system, that is for the patient to do. The risk is that jurisdictions will be tied into something, where they have no influence or control to address the other parties' data quality.

11. Would you support the introduction of an incentive payment or other mechanism to assist in covering these costs for a limited time period?

For reasons listed in consultation question 10, this is not supported, particularly if this is applied as a penalty for non-compliance rather than additional funding.

12. What initiatives are curently underway to collect PROMs and how are they being collated?

There is currently no routine collection of Patient Reported Outcome Measures (PROMs) in Queensland.

Queensland has completed a proof-of-concept feasibility pilot of a Patient Reported Experience Measures (PREMs) and PROMs application to gather information and lessons learned (usability, feasibility and practicality) on the real-time collection and reporting of PREMs and PROMs.

13. Should a national PROMs collection be considered as part of national data sets?

QH agrees that in order to shift towards outcome-based funding models there will need to be more complete data capturing patient outcomes and experiences. However, QH does not support the development of a national core set of generic PROMs to be used in a national data set or national performance reporting framework, nor the incorporation into ABF funding models. It is recommended that IHPA consider objective measures such as Activities of Daily Living (ADL) scores.

There are a number of key issues that limit the use of a national PROMs collection:

1. Purpose for collecting PROMS

- A PROMs instrument/tool needs to be fit for purpose, therefore the purpose for collecting a national set of PROMs needs to be determined prior to specification of a national core set. The goal or purpose of using a generic PROM will impact the choice of PROM best suited (e.g. to estimate cost effectiveness or calculate quality adjusted life years, a health utility measure will need to be used).
- For Queensland, the main use of PROMs is at the clinician-patient level (in real-time), to support patients to make informed, shared decisions on their own treatment needs and care. This influences the choice of tool as it should allow a clinician/clinical area to select what will best inform their shared decision making and engagement with a patient.

2. Choice of PROMS tool

- Choice of PROMs tool is also dependent on the clinical setting, and the scope and methodology of its implementation will be different between jurisdictions, and between health services.
- A large number of generic PROMs tools, and condition specific PROMs tools are already available that are validated and evidence based. Generic tools such as EQ-5D and AQOL, and condition specific tools (e.g. Australian Pelvic Floor Questionnaire, Oxford Knee Score) are already used in specific clinical areas measuring PROMs at a local clinic level (non-system-wide) in some Queensland health services.
- A generic tool should not be used stand-alone, it should be used in conjunction with disease or condition-specific tools that can more fully assess multiple factors that may relate to the patient's outcomes, in line with the treatment and care provided and inform decisions at different stages of their care.
- Further, patient expectations should be measured as evidence has shown these greatly affect outcomes (https://www.nejm.org/doi/full/10.1056/NEJMp1702978).
- The Agency for Clinical Innovation, New South Wales (NSW), advise that the collection and use of PROMs may vary depending upon clinical condition and care setting. Further, they recommend more than one generic tool for use dependent on the clinical setting and note that clinical specialties should use their own condition specific PROMs (http://eih.health.nsw.gov.au/bvh/projects/patient-reported-measures).

3. Variations

- The questions in a standardised PROMs tool may need to be altered, to a local context or to meet the needs of the patient and the clinician and tailored to the patient's journey through the health care setting, as this will be different in health services.
- The mode of administration of PROMs can vary, e.g. paper or electronic, which may affect the accuracy and interpretation of the data and can impact choice of tool.

4. Patient factors

- Some published studies have found that patient factors and expectations have the greatest effect on changes in outcomes scores. Without adequate case-mix adjustment outliers may incorrectly be attributed to a hospital's or clinician's care and treatment. It is questionable that case-mix can be adequately adjusted for PROMs (https://www.ncbi.nlm.nih.gov/pubmed/22844046).

The NHS Consultation report on their national PROMs programme reported a number of concerns including:

- Poor statistical reliability- low survey response rates and non-response bias impacted validity of scores;
- Clinicians unable to identify areas for improvement- data reported was too high level and not easily applied to local context;
- Clinicians unable to understand individual patient outcomes- can't respond to these in clinical care, can't be used directly while delivering care;
- Patients not defining what is important to them.

(https://www.england.nhs.uk/wp-content/uploads/2017/10/proms-consultation-report.pdf)

As per the Australian Commission on Safety and Quality in Health Care's (ACSQHC) published Patient-reported outcome measures Literature review:

(https://www.safetyandquality.gov.au/wp-content/uploads/2017/01/PROMs-Literature-Review-December-2016.pdf)

- Section 4.6.1 states that the dimensions below should be considered when selecting tools and PROMs to use. A core set of PROMs will not meet all of these dimensions for all patients in all clinical areas.
    - Reliability: consistency of measurement, e.g. internal consistency and test/retest reliability.
    - Validity: does the instrument measure what it claims to measure? There are different types of validity –content, construct, criterion, concurrent, convergent, discriminant etc.
    - Discriminatory Power / discriminant validity: is the instrument able to discriminate well between groups, for example, healthy public versus people with major diseases?
    - Responsiveness/Sensitivity to Change: can the instrument detect change in health status over time?
    - Availability of Comparative Data: are there norms and clinical reference datasets available for comparison purposes?
    - Type of Instrument: generic health status measure, condition- or disease-specific measure, profile or index.
    - Style of Instrument: for example, is it better to use a self-report instrument or a rating scale or a combination of both? Is a self-report inventory the best instrument to use with severely disturbed patients?
    - Practical Utility: is the instrument too long/short, is it easy to administer and use, is it easy to score, will there be respondent burden, etc.?
    - Freedom from Confounding Factors: for example, social desirability of responses, inappropriate questions associated with missing data, literacy level of the survey etc.
    - Relevance and Suitability of Application: for example, whether the generic and/or disease-specific measures adequately capture the relevant domains for the condition or disease concerned.
    - Mode of Administration: self-reported or structured interview, telephone administration, tablet or online kiosk application etc.
    - Culture, Gender and Age Appropriateness: are there translations/adaptations for other cultural groups, are all the items suitable for both genders, and are there versions suitable for

use with children/adolescents? Some instruments need linguistic validation for use in the Australian context.

QH's Aboriginal and Torres Strait Islander Branch has further noted concern that any outcome measures would need to be assessed for their validity, reliability, and cultural sensitivity across a range of patient groups including Aboriginal and Torres Strait Islander people.

14. Are there any impediments to shadow pricing the 'fixed plus variable' model for NEC20?

In general, QH supports the move towards a fixed plus variable model for block funded facilities as it is expected to more accurately reflect the true cost structure and would be less subject to group changes due to minor shifts in activity levels.

On the question of whether shadow pricing for NEC20 is supported, Queensland's regional/rural HHSs typically indicated that further consultation and development of the model is required. Specific factors raised include:

- Treatment of transport related supply costs not currently reflected in the National Efficient Cost (NEC) model remoteness class;
- Timeliness of activity data and the use of a rolling three-year activity average to determine banding; and
- Increasing the number of banding groups to reduce the funding impact of shifts between bands.

15. Are there any additional alternative funding models IHPA should explore in the context of Australia's existing NHRA and ABF framework?

All jurisdictions are finalising the National Health Reform Agreement (NHRA) Addendum for the period 2020-2025, which includes a commitment to exploring funding reforms, with a focus on paying for value and outcomes. It will be important that jurisdictions who are trialling funding and payment reforms to deliver better patient outcomes are not penalised in the current ABF growth model.

Some HHSs have indicated that a capitation or bundled payment model would be appropriate for particular patient cohorts (i.e. patients with chronic disease where avoidance of acute hospital admission may relieve pressure on hospital beds). In regional Queensland, such care may be shared across facilities/entities (in both admitted and non-admitted settings) in line with well-established regional/rural models of care.

QH is currently developing a framework to trial new funding arrangements that provide greater flexibility in how care is provided to achieve an agreed set of outcomes for a defined group of people. Broadly, such a funding arrangement would only be provided where the proposed initiative:

- Will improve health outcomes for a discernible patient cohort;
- Improvement can be achieved by providing care differently, not through increased funding;
- Would result in a funding reduction if it was implemented under the current ABF funding model (i.e. certain services in the care model are not recognised for ABF purposes), and
- Outcomes can be articulated and measured.

QH would expect the IHPA to have a supportive approach to the testing and trialling of new funding approaches and be actively engaged. Noting that any such approach needs to address the issue of Medicare data sharing.

16. IHPA proposes investigating bundled payments for stroke and joint pain, in particular knee and hip replacements. Should any other conditions be considered?

Conditions where treatment continues across outpatient, acute inpatient and sub and non-acute care settings are suitable for consideration under a bundled payment model. In addition to the conditions proposed by IHPA, QH suggests that the following conditions be explored further:

- Coronary Bypass Surgery – acute and rehabilitation components.
- Regional/rural models of care where patients may be treated across multiple facilities, e.g. non-admitted care can occur at a rural hospital moving to regional facility with after care at the local rural hospital close to the patient's home.
- Dementia and delirium admissions frequently progress to non acute maintenance, particularly those with behavioural issues. These patients may remain admitted in an inpatient bed for extended periods, due to difficulty with Residential Aged Care Facility (RACF) placement. These patients also frequently require 1 to1 nursing ratios, so are substantially more costly to treat than the ABF price. Bundling care of these patients into a per diem payment should be considered to support transfer to a more residential care environment and potentially reduce treatment costs.

It should be noted however that the impediments identified from prior experience with bundling maternity care still apply, ie:

- The lack of national, clinically agreed best practice and the ability to monitor compliance with this protocol.
- The inability to identify movement between the public and private sector (eg public acute cardiac surgery and private rehab).
- The administrative impost in administration, as patient episodes could not be priced independently and would need to be processed retrospectively.
- The likelihood that clinicians would not respond to pricing signals.

Queensland believes that the objectives of bundled care could be achieved without bundling payments by publishing compliance with nationally agreed clinical protocols.

17. Is IHPA's funding approach to HACs improving safety and quality, for example through changing clinician behaviour and providing opportunities for effective benchmarking?

It is not clear whether the observed improvement in the rate of HACs per 100 separations over the past two financial years can be attributed to the introduction of the funding adjustment for HACs. Unless the presence of a HAC results in a higher DRG complexity band, HACs already offer a financial disincentive as they increase the treatment cost with no offsetting revenue.

A review of source data is required where a significant change in the HAC rate has been observed to ensure that the data is providing an accurate representation. Furthermore, the current HAC

specifications do not take into account the patient's contribution to the HAC – such as noncompliance with treatment.

Jurisdictions have requested the ACSQHC lead a thorough audit of the HACs to determine the true preventability of these measures, to determine how effective these measures can be in driving safety and quality improvement. This could also assist in determining the funding approach. For example, if it can be determined that a certain proportion of HACs are preventable, then the funding approach can be more targeted on penalising the preventable HACs. The ACSQHC has agreed to progress an audit but work has not yet commenced.

Patient safety and quality benefits could be derived through sharing information about good care/process improvements to allow other organisations to continue to improve. On this basis, the reporting of HACs can be of benefit, as open and transparent data on patient outcomes serves as a powerful motivator for clinicians to review and improve their practice.

18. What should IHPA consider to configure software for the Australian context that can identify potentially avoidable hospital readmissions?

The definition of potentially avoidable readmissions should be developed in consultation with clinicians. There also needs to be consideration about having a nationally agreed admission protocol as this could negatively impact some organisations.

To be truly effective, readmissions should be aligned with the diagnosis. Applying a generic list of codes for readmissions regardless of diagnosis does not engage clinicians as much as having a specific list of codes for readmissions for each diagnosis. For example, a patient who is readmitted with a deep vein thrombosis (DVT) post a hip replacement would be likely be considered a true readmission associated with the hip replacement. However, a patient readmitted with a DVT post cataract surgery, is not likely to be a true readmission i.e. the DVT is unlikely to be associated with the cataract surgery. Hence, Queensland has developed readmission indicators specific to diagnosis.

If the 3M software is to be considered, similar to the HACs, it is recommended that the ACSQHC lead a thorough audit of the proposed 3M software to determine the true preventability of the readmissions to determine how effective these measures can be in driving safety and quality improvements. This would also assist in determining the funding approach. That is, if it can be determined that a certain proportion of avoidable readmissions are preventable, then the funding approach can be more targeted on these particular episodes. The readmission specifications should also take into account the patient's contribution to the readmission – such as noncompliance with treatment.

Regarding the funding options outlined in the Consultation Paper the following observations are made:

Firstly, all of these options require a universal identifier and timely submission and analysis of data.

Option 1 would require generating a penalty equal to the readmission NWAU and applying this to the index admission facility as quarterly or annual adjustment. It would require a universal identifier, as well as chart review of the original and subsequent admission to determine if the readmission was caused by poor initial clinical care. The software cannot do this without fully digitised medical records.

The application of option 2 is complex. The calculation of the NWAU and then subsequent adjustment at the index facility would require complex coding across the system which would need detailed specification(s) development and does become difficult to make transparent when reporting. Both the primary and second episode would in some way need to be linked in the reporting of the NWAU results; whilst potentially the most suitable, definitely the most complex solution.

Option 3 applies penalties or incentives based on industry average performance. It is unclear how a benchmark can be set as the definitions will evolve. It is recommended that the scope of activities are identified before options created, which also included the national admission practices.

Other Pricing Issues

QH does not support ABF classification and pricing of Teaching, Training and Research (TTR). The jurisdiction is unable to fully comply with the Data Request Specification as corporate systems do not support it, and significant investment would be required.

Benefits of pricing TTR are unclear due to the inherent inflexibility of Teaching arrangements, which are driven by workforce requirements and need to serve both the public and private systems. Given that embedded TTR would be excluded from the model, the quantum of funding involved is relatively small and there is little or no ability to reallocate funding in line with what the model would predict.

The Queensland approach is to use a fixed proportion of the clinical salaries by pay point. This is administratively simple, robust and similar to other jurisdictions.