Consultation Paper on the Pricing Framework for Australian Public Hospital Services 2020–21

June 2019

Independent Hospital Pricing Authority

IHPA

Consultation Paper on the Pricing Framework for Australian Public Hospital Services 2020–21 — June 2019

Table of contents

Glossary

ABF	Activity Based Funding
ACHI	Australian Classification of Health Interventions
ACS	Australian Coding Standards
AECC	Australian Emergency Care Classification
AHPCS	Australian Hospital Patient Costing Standards
ANACC	Australian Non-Admitted Care Classification
AMHCC	Australian Mental Health Care Classification
AN-SNAP	Australian National Subacute and Non-Acute Patient classification
AR-DRG	Australian Refined Diagnosis Related Group
ATTC	Australian Teaching and Training Classification
DRG	Diagnosis Related Group
HAC	Hospital Acquired Complication
ICD-10-AM	*International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification*
IHI	Individual Healthcare Identifier
IHPA	Independent Hospital Pricing Authority
LBVC	Leading Better Value Care
LHN	Local Hospital Network
MBS	Medicare Benefits Schedule
MDCC	Multidisciplinary Case Conference
NBP	National Benchmarking Portal
NEC	National Efficient Cost
NEP	National Efficient Price
NHCDC	National Hospital Cost Data Collection
NHRA	National Health Reform Agreement
NWAU	National Weighted Activity Unit
PREMs	Patient Reported Experience Measures
PROMs	Patient Reported Outcomes Measures
The Addendum	Addendum to the National Health Reform Agreement
The Commission	Australian Commission on Safety and Quality in Health Care
UDGs	Urgency Disposition Groups
URGs	Urgency Related Groups
VBHC	Value Based Healthcare

1

Introduction

1 Introduction

The Consultation Paper on the *Pricing Framework for Australian Public Hospital Services 2020–21* (Consultation Paper) is the primary mechanism for providing input on the approach the Independent Hospital Pricing Authority (IHPA) takes to determine public hospital funding. It provides an opportunity to comment on the development and refinement of the national Activity Based Funding (ABF) system, including data collection, classification systems and policy decisions which underpin the National Efficient Price (NEP) and National Efficient Cost (NEC) Determinations for 2020–21 (NEP20 and NEC20).

The current National Health Reform Agreement (NHRA) was entered into by all states, territories and the Commonwealth in August 2011. It sets out the shared intention of the Commonwealth, state and territory governments to work in partnership to improve health outcomes for all Australians and ensure the sustainability of the Australian health system. In 2017, all Australian governments signed the Addendum to the NHRA (the Addendum). The Addendum comes to an end in June 2020 with a new agreement still in negotiation.

This document has been prepared in anticipation that the fundamental elements of the Addendum will form the basis of a new or rolling agreement for the 2020–21 financial year.

This Consultation Paper provides an opportunity to investigate some emerging themes around hospital pricing and funding following the maturation of ABF. This includes the growing support for more open access to data and the opportunities this provides for a number of areas such as value-based care and a more patient-centric focus to health funding.

Specifically, this Consultation Paper covers opportunities for bundled pricing and capitation models as well as patient reported outcome measures (PROMs) and how they could be incorporated into ABF funding models. Discussion also continues around improving safety and quality through funding measures to reduce avoidable hospital readmissions.

This Consultation Paper builds on previous work in this area and should be read in conjunction with the following documents:

- *Pricing Framework for Australian Public Hospital Services 2019–20*
- National Efficient Price Determination 2019–20
- National Efficient Cost Determination 2019–20

Have your say

Submissions close at 5pm on Monday, 15 July 2019.

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

All submissions will be published on IHPA's website unless respondents specifically identify sections that they believe should be kept confidential due to commercial or other reasons.

The *Pricing Framework for Australian Public Hospital Services 2020–21* will be released in December 2019 prior to publication of the NEP20 and NEC20 in March 2020.

2

The Pricing Guidelines

2 The Pricing Guidelines

The decisions made by IHPA in pricing in-scope public hospital services are evidence-based and use the latest costing and activity data supplied to IHPA by states and territories. In making these decisions, IHPA balances a range of policy objectives including improving the efficiency and accessibility of public hospital services. This involves exercising judgement on the weight to be given to different policy objectives.

The Pricing Guidelines signal IHPA's commitment to transparency and accountability as it undertakes its work. They are the overarching framework within which IHPA makes its policy decisions, which are outlined in the annual *Pricing Framework for Australian Public Hospital Services*.

IHPA has proposed one addition to the Pricing Guidelines for 2020–21 in recognition that pricing should seek to promote value in public hospital services and support alternative funding solutions that deliver efficient high quality care and have a focus on patient outcomes. This addition is highlighted under the 'System Design Guidelines' in **Figure 1**.

Consultation questions

- Are the Pricing Guidelines still relevant in providing guidance on IHPA's role in pricing Australian public hospital services?
- Does the proposed addition to the Pricing Guidelines appropriately capture the need for pricing models to support 'value' in hospital and health services?

Figure 1: Pricing Guidelines

Overarching Guidelines that articulate the policy intent behind the introduction of funding reform for public hospital services comprising ABF and block grant funding:

- **Timely–quality care:** Funding should support timely access to quality health services.
- **Efficiency:** ABF should improve the value of the public investment in hospital care and ensure a sustainable and efficient network of public hospital services.
- **Fairness:** ABF payments should be fair and equitable, including being based on the same price for the same service across public, private or not-for-profit providers of public hospital services.
- **Maintaining agreed roles and responsibilities of governments determined by the National Health Reform Agreement:** Funding design should recognise the complementary responsibilities of each level of government in funding health services.

Process Guidelines to guide the implementation of ABF and block grant funding arrangements:

- **Transparency:** All steps in the determination of ABF and block grant funding should be clear and transparent.
- **Administrative ease:** Funding arrangements should not unduly increase the administrative burden on hospitals and system managers.
- **Stability:** The payment relativities for ABF are consistent over time.
- **Evidence-based:** Funding should be based on best available information.

System Design Guidelines to inform the options for design of ABF and block grant funding arrangements:

- **Fostering clinical innovation:** Pricing of public hospital services should respond in a timely way to introduction of evidence-based, effective new technology and innovations in the models of care that improve patient outcomes.
- **Promoting value:** Pricing should support innovative and alternative funding solutions that deliver efficient quality care with a focus on patient outcomes.
- **Promoting harmonisation:** Pricing should facilitate best practice provision of appropriate site of care.
- **Minimising undesirable and inadvertent consequences:** Funding design should minimise susceptibility to gaming, inappropriate rewards and perverse incentives.
- **ABF pre-eminence:** ABF should be used for funding public hospital services wherever practicable.
- **Single unit of measure and price equivalence:** ABF pricing should support dynamic efficiency and changes to models of care with the ready transferability of funding between different care types and service streams through a single unit of measure and relative weights.
- **Patient-based:** Adjustments to the standard price should be, as far as is practicable, based on patient-related rather than provider-related characteristics.
- **Public-private neutrality:** ABF pricing should not disrupt current incentives for a person to elect to be treated as a private or a public patient in a public hospital.

3

Scope of public hospital services

3 Scope of public hospital services

3.1 Overview

In August 2011, Australian governments agreed to be jointly responsible for funding efficient growth in public hospital services. As there was no standard definition or listing of public hospital services, the Council of Australian Governments assigned IHPA the task of determining whether a service is ruled 'in-scope' as a public hospital service, and therefore eligible for Commonwealth funding under the NHRA.

Each year, IHPA publishes the *General List of In-Scope Public Hospital Services* (the General List) as part of the NEP Determination. The General List defines public hospital services eligible for Commonwealth funding, except where funding is otherwise agreed between the Commonwealth and a state or territory.

In accordance with Section 131(f) of the *National Health Reform Act 2011* (Cth) and Clauses A9-A17 of the NHRA, the IHPA *General List of In-Scope Public Hospital Services Eligibility Policy* (the General List policy) defines public hospital services eligible for Commonwealth funding to be:

- All admitted programs including hospital in the home programs and forensic mental health inpatient services;
- All emergency department services; and
- Other non-admitted services that meet the criteria for inclusion on the General List.

The General List policy does not exclude public hospital services provided in settings outside a hospital (e.g. whether the service is provided in a hospital, in the community or in a person's home). The Pricing Authority determines whether specific services proposed by states and territories are 'in-scope' and eligible for Commonwealth funding based on criteria and empirical evidence provided by states and territories. These criteria are outlined in the General List policy.

3.2 Review of the General List policy

Recognising that the General List criteria and assessment process previously created challenges for states and territories, IHPA undertook a comprehensive review of the General List policy in consultation with all states and territories in late 2018. Following the review, IHPA updated the General List policy to:

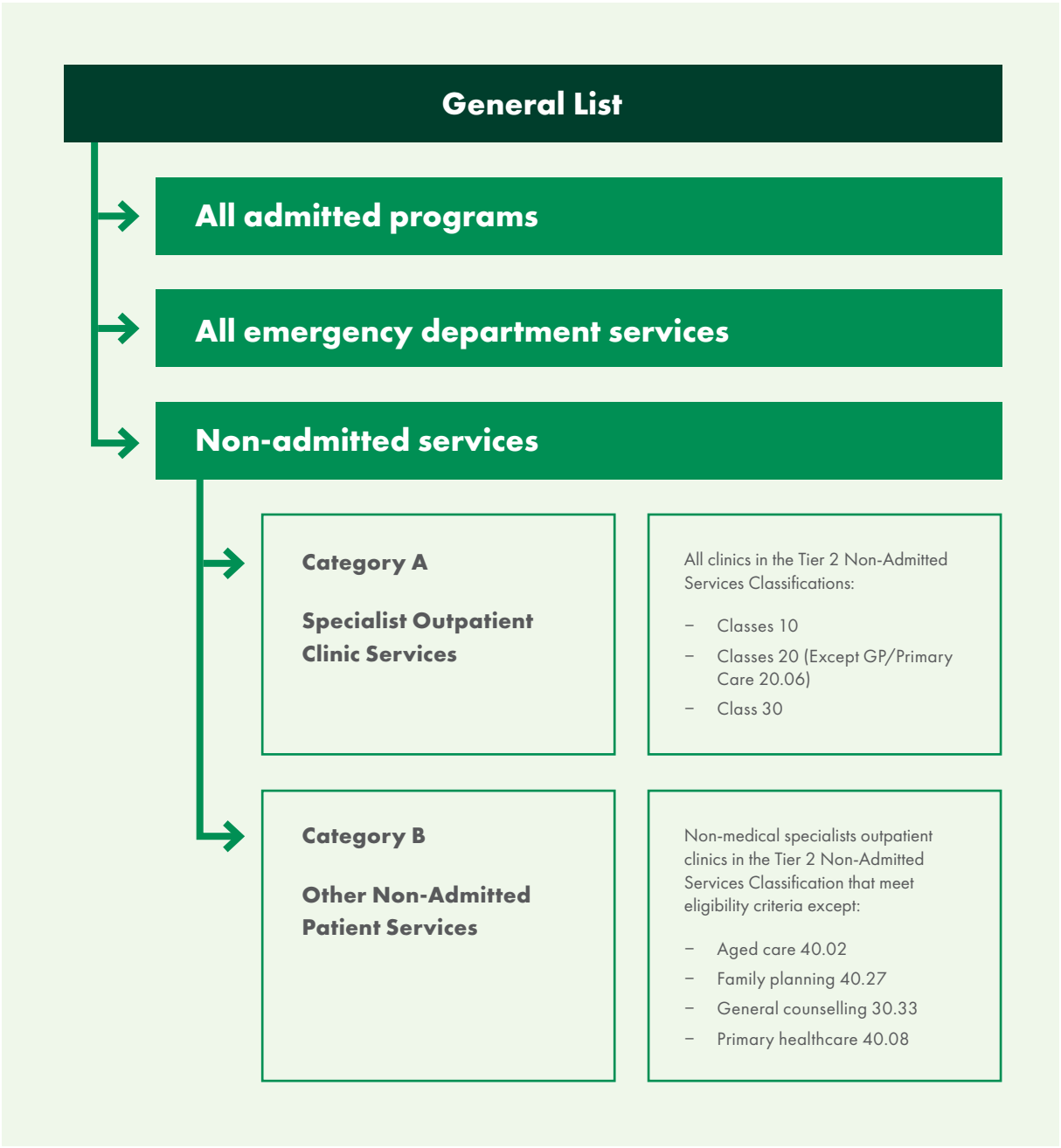
- Clarify the extent to which disease streams may include patients with chronic disease;
- Strengthen the definition around what constitutes a hospital avoidance program; and
- Include a simpler application form to apply for a service to be considered 'in-scope'.

The updated General List policy was approved by the Pricing Authority in May 2019 and can be accessed on IHPA's website.

Figure 2 outlines the scope of public hospital services eligible for Commonwealth funding under the NHRA. The General List was last published as part of the National Efficient Price Determination 2019-20 (NEP19) in early March 2019.

Applications to have a particular service added to the General List are made as part of the annual process outlined in the General List policy.

Figure 2: Scope of public hospital services



4

Classifications used to describe and price public hospital services

4 Classifications used to describe and price public hospital services

4.1 Overview

Classifications aim to provide the health care sector with a nationally consistent method of classifying all types of patients, their treatment and associated costs to provide better management, measurement and funding of high quality and efficient health care services. Classifications are a critical element of ABF as they help to group patients with similar conditions and complexity (i.e. the groups are clinically relevant and resource homogenous).

IHPA reviews and updates existing classifications and is also responsible for introducing new classifications. There are currently six patient service categories that have classifications in use or in development in Australia:

- Admitted acute care;
- Subacute and non-acute care;
- Non-admitted care;
- Emergency care;
- Mental health care; and
- Teaching and training.

4.2 Admitted acute care

The Australian-Refined Diagnosis Related Group (AR-DRG) classification system is used for admitted acute episodes of care. This system is based on a set of three standards:

- The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM) to code diseases and problems;
- Australian Classification of Health Interventions (ACHI) to code procedures and interventions; and
- Australian Coding Standards (ACS), a supplement to ICD-10-AM and ACHI, to assist clinical coders in using the classifications.

For NEP19, IHPA used AR-DRG Version 9.0 to price admitted acute patient services. IHPA has since developed AR-DRG Version 10.0, which will be used for NEP20.

Major refinements to AR-DRG Version 10.0 include:

- A clinical and statistical review of the diagnosis exclusions within the complexity model;
- Measures to improve its overall stability; and
- More clinically coherent and resource homogenous groups being created for nephrolithiasis (urinary calculus) interventions, liver procurement from a living donor and osseointegration interventions.

The Australian Consortium for Classification Development produced the Eleventh Edition of ICD-10-AM, ACHI and the ACS, which will be used for the underlying diagnosis and intervention coding from 1 July 2019.

IHPA is undertaking a comprehensive review of the admitted acute care classification development process. The review will:

- Evaluate the end-to-end development process of ICD-10-AM/ACHI/ACS and AR-DRGs to identify strengths and weaknesses and areas for improvement;
- Understand stakeholder needs regarding development of ICD-10-AM/ACHI/ACS and AR-DRGs, including consideration of development timeframes, methods of incorporating new technologies faster and classification system materials; and
- Provide recommendations on a preferred model for ICD-10-AM/ACHI/ACS and AR-DRG development.

The development of ICD-10-AM/ACHI/ACS Twelfth Edition and future revisions will now be undertaken by IHPA. Work is anticipated to commence on both the Twelfth Edition and AR-DRG Version 11.0 from July 2019.

Consultation questions

- What should IHPA prioritise when developing AR-DRG Version 11.0 and ICD-10-AM/ACHI/ACS Twelfth Edition?
- Are there other priorities that should be included as part of the comprehensive review of the admitted acute care classification development process?

4.2.1 Phasing out support for older classification versions

In the *Pricing Framework for Australian Public Hospital Services 2019–20* IHPA announced that it intends to phase out support for old AR-DRG versions to maintain clinical currency of the classification and to ensure benefits of more recent versions are realised.

The rolling timeline for phasing out support for subsequent versions is detailed in **Figure 3**. From 1 July 2019, AR-DRG Version 4.2 (and any versions prior to this) will not be supported. IHPA will continue to work closely with the private sector to assess the readiness for phasing out at each stage.

Figure 3: Timeline for phasing out AR-DRG versions

AR-DRG version	Proposed phase out date	Most current AR-DRG version
AR-DRG Version 5.0, 5.1, 5.2, 6.0, 6.x and 7.0	1 July 2021	AR-DRG Version 11.0
AR-DRG Version 8.0 and 9.0	1 July 2023	AR-DRG Version 12.0
AR-DRG Version 10.0	1 July 2025	AR-DRG Version 13.0

4.2.2 Release of ICD-11

The World Health Organization released the eleventh revision of the International Classification of Diseases (ICD-11) in June 2018, which was approved by the World Health Assembly in May 2019. The Australian Institute of Health and Welfare (AIHW) is reviewing the feasibility and potential timeframe for implementation of ICD-11 in Australia. No decision has yet been made regarding ICD-11 implementation.

4.3 Subacute and non-acute care

Subacute care is specialised multidisciplinary care in which the primary need is optimisation of the patient's functioning and quality of life. Subacute care includes rehabilitation, palliative care, geriatric evaluation and management and psychogeriatric care types while non-acute care is comprised of maintenance care services.

For NEP19, IHPA used the Australian National Subacute and Non-Acute Patient (AN-SNAP) Version 4 classification system to price admitted subacute and non-acute services. Patients are classified on the basis of care type, phase of care, functional impairments, age and other measures. IHPA intends to continue using AN-SNAP Version 4 for NEP20.

Subacute and non-acute services which are not classified using AN-SNAP are classified using AR-DRGs.

4.3.1 Developing AN-SNAP Version 5

IHPA is continuing to develop the next version of the AN-SNAP classification. The AN-SNAP Version 4 final report highlighted a key limitation to developing prior versions was a lack of data to aid the assessment of proposed structural changes to the classification. States and territories have made significant progress in their collection of subacute activity and cost data which may support improvements for AN-SNAP Version 5.

As part of the development of AN-SNAP Version 5, IHPA is reviewing the existing clinical variables used in AN-SNAP and testing the clinical and statistical assumptions that underpin the existing classification structures. This includes work to assess if the classification's explanatory power can be improved using the existing data items. Following this, IHPA will explore whether new variables, such as complications and comorbidities, will improve the clinical and cost coherence of AN-SNAP.

4.4 Non-admitted care

4.4.1 Tier 2 Non-Admitted Services classification

The Tier 2 Non-Admitted Services classification is the existing classification system which categorises a public hospital's non-admitted services into classes which are generally based on the nature of the service and the type of clinician providing the service.

For NEP20, IHPA plans to continue using the Tier 2 Non-Admitted Services classification for pricing non-admitted services while continuing work to develop a new non-admitted care classification — the Australian Non-Admitted Care Classification (ANACC).

4.4.2 Multidisciplinary case conferences where the patient is not present

To provide an indicative cost for service planning purposes, IHPA shadow priced medical led multidisciplinary case conference (MDCC) service events in NEP19 but was unable to shadow price nursing or allied health led MDCC service events (class 40.62) due to insufficient data.

IHPA plans to continue to shadow price medical led MDCCs where the patient is not present (class 20.56) for NEP20 and will continue working with states and territories to obtain the data to determine a shadow price for the nursing and allied health led MDCC class.

4.4.3 Australian Non-Admitted Care Classification

IHPA is developing the new ANACC to better describe patient characteristics and the complexity of care in order to more accurately reflect the costs of non-admitted services. It will also better account for changes in care delivery as services transition to the non-admitted setting, as new electronic medical records allow for more detailed data capture and as new funding models which span multiple settings are tested.

A national costing study is currently underway to collect non-admitted (including non-admitted subacute) activity and cost data and test a shortlist of variables and potential classification hierarchies. In addition to collecting non-admitted activity and cost data through the costing study, IHPA is aiming to understand:

- The level of data collection, in particular data captured electronically in non-admitted services; and
- How to improve the collection of patient variables in non-admitted services.

Web-based and mobile device applications will be used to facilitate data collection, assist sites, states and territories in managing the quality of data collection, and manage the data submission process.

A public consultation on the costing study was undertaken in May 2019. IHPA is currently reviewing the submissions it received, and will collaborate with its working groups and committees to incorporate feedback into the costing study design where appropriate.

4.5 Emergency care

For NEP19, IHPA used Urgency Related Groups (URGs) to classify presentations to emergency departments and Urgency Disposition Groups (UDGs) for presentations to emergency services. In 2015, IHPA commenced work on the development of the Australian Emergency Care Classification (AECC) to provide a new classification with a stronger emphasis on patient factors, such as diagnosis, compared to the current focus on triage category.

The application of the diagnosis-based AECC to public hospital emergency services remains under consideration. Emergency services are usually located in small rural and remote hospitals and collect limited patient information. IHPA is working with states and territories to determine whether emergency services could collect a subset of diagnosis data using the Emergency Department Principal Diagnosis Short List to support implementation of the AECC for these services.

4.5.1 Pricing for emergency care

A quality assurance process was undertaken earlier this year to check and validate the AECC Version 1.0, with a view to pricing emergency departments using the AECC for NEP20. Prior to implementation, IHPA will work with stakeholders to identify any barriers to pricing emergency departments using the AECC.

Consultation questions

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

4.6 Teaching, training and research

Teaching, training and research activities represent an important role of the public hospital system alongside the provision of care to patients. However, the components required for ABF are not currently available to enable these activities to be priced. As a result, these activities are currently block funded, except where teaching and training is delivered in conjunction with patient care (embedded teaching and training), such as ward rounds. These costs are reported as part of routine care and the costs are reflected in the ABF price.

IHPA has developed a classification for teaching and training, however determining the feasibility of ABF for research has not been straightforward due to an absence of available research data. The teaching, training and research costing study in 2015–16 did not collect sufficient information on research capability to support classification development.

4.6.1 Australian Teaching and Training Classification

Since completing a costing study in 2015–16, IHPA has undertaken work to develop the first version of the Australian Teaching and Training Classification (ATTC). The ATTC will improve reporting of hospital-based teaching and training activity and in the future improve the transparency of funding.

The availability of activity and cost data remains a key challenge for implementing the ATTC. Teaching and training activity has been collected on a best endeavours basis since 2014–15, with research data included in the data set from 2016–17. There has been a substantial increase in data reported by states and territories over this time; however, teaching and training activity and cost data are still limited and ABF for teaching and training cannot progress without commitment from states and territories. IHPA will continue to work with states and territories on improving the data collection.

In 2020–21, IHPA will determine block funding amounts for teaching, training and research activity based on states and territories' advice.

4.7 Mental health care

IHPA has developed the Australian Mental Health Care Classification (AMHCC) to classify and price mental health services across admitted and non-admitted settings. The classification provides a clinically meaningful way of classifying mental health care to better predict the actual cost of delivering mental health services than the previous AR-DRG classification.

4.7.1 Refining mental health 'phase of care'

A new clinician-rated measure of mental health 'phase of care' was introduced in 2016 to support the classification. A mental health 'phase of care' is a prospective description of the primary goal of care for a consumer at a point in time.

IHPA undertook an inter-rater reliability study in 2016 to test the rate of agreement amongst clinicians in assigning the concept of 'phase of care' to people with similar mental health care needs. The study's report recommended a comprehensive review and refinement of the 'phase of care' instrument.

Subsequently, IHPA engaged a number of mental health clinicians to undertake a clinical refinement project to review the 'phase of care' instrument. IHPA will not be making significant changes to the 'phase of care' model at this stage. Outcomes of the project to review and refine the mental health 'phase of care' instrument will be provided to stakeholders in 2019.

4.7.2 Pricing of mental health care

IHPA is committed to prioritising the pricing of mental health services using AMHCC. IHPA intends to commence pricing mental health services in NEP20. Shadow pricing will be conducted using the existing AMHCC Version 1.0.

IHPA will continue working with states and territories to link the Activity Based Funding: Mental Health Care National Best Endeavours Data Sets (NBEDS) 2018–19 to enable pricing. IHPA is consulting stakeholders through its Technical Advisory Committee (TAC) and National Hospital Cost Data Collection (NHCDC) Advisory Committee regarding the approach and will continue to work with all stakeholders to further develop the pricing strategy.

IHPA will share the results of shadow pricing and any further analyses, and seek further stakeholder feedback in next year's Consultation Paper on the *Pricing Framework for Australian Public Hospital Services*.

Consultation questions

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

5

Setting the National Efficient Price for activity based funded public hospitals

5 Setting the National Efficient Price for activity based funded public hospitals

5.1 Technical improvements

IHPA has developed a robust pricing model that underpins the NEP Determination. The model is described in detail in the National Pricing Model Technical Specifications on IHPA's website.

Some stakeholders have previously recommended that IHPA consider alternative approaches to calculating the NEP, which may better deliver on the objectives in the NHRA.

Following feedback from stakeholders, IHPA has commenced a first principles independent review of the National Pricing Model (the Fundamental Review).

The review began in September 2018 and includes:

- A comprehensive literature review of current data analysis and statistical modelling techniques, focusing on the suitability and applicability for pricing public hospital services;
- A review of the processes used in the development of pricing models underpinning the NEP; and
- Recommendations to improve the processes and statistical techniques used in the NEP development.

Although the Fundamental Review is not yet complete, preliminary outcomes have highlighted the following areas for further consideration:

- A review of how the costs associated with benefits paid through the Commonwealth pharmaceutical programs are removed;
- Consideration of the median as a measure of the efficient cost for price weight setting;
- A review of how admitted inlier upper and lower bounds are determined;
- Work to further account for association and interaction between adjustment categories, for example the interaction between remoteness and indigenous status; and
- Incorporating adjustments for patient age into each of the pricing models.

IHPA will consider any new technical improvements suggested by states and territories and other stakeholders in the development of NEP20.

5.2 Adjustments to the National Efficient Price

Section 131(1)(d) of the *National Health Reform Act 2011* (Cth) requires IHPA to determine "adjustments to the NEP to reflect legitimate and unavoidable variations in the costs of delivering health care services". Clause B13 of the NHRA additionally states that IHPA "must 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".

In adjusting the NEP, IHPA:

- Tests any empirical differences in the cost of providing public hospital services at the national level in order to determine potential legitimate and unavoidable variations in the costs of service delivery that may warrant an adjustment to the NEP;
- Examines patient-based characteristics in the cost of providing public hospital services before considering hospital or provider-based characteristics. This policy reinforces the principle that funding should follow the patient wherever possible; and
- Reviews existing adjustments, with the aim of discontinuing adjustments associated with input costs or which are facility-based when it is feasible.

IHPA developed the *Assessment of Legitimate and Unavoidable Cost Variations Framework* to assist state and territory governments in applying for services that have legitimate and unavoidable cost variations that are not adequately recognised in the National Pricing Model. If agreed, IHPA considers whether an adjustment to the NEP is warranted. States and territories may propose potential unavoidable cost variations on an annual basis.

For NEP19, IHPA expanded the application of a number of adjustments, in particular for the patient's remoteness and facility remoteness status, to the emergency and non-admitted settings.

For NEP20, IHPA intends to use the Australian Bureau of Statistics' 2016 Australian Statistical Geography Standard Remoteness Area classification.

IHPA will consider adjustments proposed by stakeholders in this consultation or by states and territories as part of the annual *Assessment of Legitimate and Unavoidable Cost Variations Framework* process.

Consultation questions

- Are there adjustments for legitimate and unavoidable cost variations that IHPA should consider for NEP20?

5.3 Harmonising price weights across care settings

The Pricing Guidelines guide policy decisions underpinning the National Pricing Model and were developed following extensive consultation with key stakeholders and the public. The Pricing Guidelines include System Design Guidelines to inform options for the design of ABF and block funding arrangements, including an objective for price harmonisation whereby pricing should facilitate best-practice provision of appropriate site of care.

IHPA harmonises (i.e. equalises) a limited number of price weights across the admitted acute and non-admitted settings, for example those for gastrointestinal endoscopes, to ensure that similar services are priced consistently across settings. Harmonisation ensures there is no financial incentive for hospitals to admit patients previously treated on a non-admitted basis due to a higher price for the same service.

IHPA will continue to investigate price harmonisation for potentially similar same-day services such as non-admitted and admitted same-day chemotherapy services, renal dialysis and sleep disorders on a case-by-case basis.

IHPA will wait for the conclusion of the Fundamental Review before proposing any further price weights for harmonisation.

5.4 Setting the National Efficient Price for private patients in public hospitals

Public hospitals may receive revenue for delivering care from funding sources other than through the NHRA. For example, patients admitted to public hospitals may opt to use their private health cover or pay for their own hospital stay.

The NHRA requires IHPA to set the price for admitted private patients in public hospitals accounting for these payments by other parties, particularly private health insurers (for prostheses and the default bed day rate) and the Medicare Benefits Schedule (MBS).

Under Clauses A6 and A7 of the NHRA, IHPA does not price private non-admitted patient services.

5.4.1 Costing private patients in public hospitals

The collection of private patient medical expenses has been problematic in the NHCDC. For example, there is a common practice in some states and territories of using Special Purpose Funds to collect associated revenue (e.g. MBS) and reimburse medical practitioners.

For NEP19, IHPA corrected this issue by inflating the cost of some patients (the 'private patient correction factor') to account for costs not reported in the NHCDC. The Hospital Casemix Protocol data set was used to identify the missing medical costs of private patients.

The use of the correction factor assumes that all private patient costs are missing and that these costs are spread across both private and public patients, which is not always the case. For example, some hospitals appear to report specialist medical costs for private patients, whilst others may have costs missing from both public and private patients. This aspect of the pricing model will be reviewed as part of the Fundamental Review.

It is anticipated that the implementation of the Australian Hospital Patient Costing Standards (AHPCS) Version 4.0 will address this issue for NEP20. AHPCS Version 4.0 includes a Business Rule relating to the treatment of medical and other expenses found in Special Purpose Funds which manage Rights of Private Practice arrangements. It is intended that the Business Rule will support states and territories in accounting for all expenses contributing toward hospital activities, regardless of their funding source. The Business Rule informed the costing process for Round 22 (2017–18) of the NHCDC.

5.4.2 Phasing out the private patient correction factor

The private patient correction factor was introduced as an interim solution for the issue of missing private patient costs in the NHCDC. Submissions in response to previous consultation papers on the *Pricing Framework for Australian Public Hospital Services* have supported phasing out the correction factor when feasible.

IHPA has worked with its NHCDC Advisory Committee to assess the accuracy and national consistency in the implementation of the AHPCS Version 4.0. For Round 22 NHCDC, IHPA requested hospitals to provide a detailed self-assessment describing their application of the AHPCS costing standards and business rules. This was provided at either the state or territory or Local Hospital Network (LHN) level. The assessment included information relating to how private patients were costed in public hospitals. A summary of the results will be included in the Round 22 NHCDC Cost Report and IHPA will work with states and territories to ascertain whether private patient costs in public hospitals are adequately captured.

Pending the results of this assessment, IHPA intends to phase out the private patient correction factor for NEP20.

Consultation questions

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

6

Data collection

6 Data collection

6.1 Overview

IHPA requires accurate activity, cost and expenditure data from states and territories on a timely basis in order to perform its core determinative functions including the NEP and NEC Determinations. To determine the NEP and NEC, IHPA must first specify the classifications, counting rules, data and coding standards, as well as the methods and standards for costing data.

Guided by the single provision, multiple use concept, IHPA is committed to the principle of data rationalisation as outlined in the NHRA.

6.2 Phasing out aggregate non-admitted data reporting

States and territories are required to submit public hospital activity data at the patient level wherever possible on a quarterly basis. The patient level data is used by IHPA to determine the price weights in the NEP Determination.

While states and territories have increased the reporting of patient level non-admitted service events since 2012–13, this data has not accounted for all services delivered by states and territories. IHPA has allowed for aggregate non-admitted data reporting by states and territories to ensure that all activity is captured. The move towards patient level data is a crucial step in improving data reliability and embedding the reporting arrangements required for the new patient-centred ANACC.

IHPA will phase out the collection of aggregate non-admitted data from 1 July 2019. This was previously outlined in the Three Year Data Plan for 2018–19 to 2020–21. During 2019, IHPA will work with states and territories to address outstanding issues related to patient level reporting and agree a timeline for a patient level non-admitted national minimum data set.

6.3 Access to public hospital data

IHPA is committed to ensuring information is open and accessible while recognising the obligation to protect the privacy of individuals and the confidentiality of information.

A significant amount of public hospital data and related information is already available via IHPA's website. This includes the NHCDC Report and the NEP and NEC Determinations. IHPA cost data is also available on the AIHW MyHospitals website. This information has informed work and publications by research organisations, peak bodies and governments regarding trends in the average cost of public hospital care.

IHPA can also release public hospital data to government agencies and researchers under the *National Health Reform Act 2011* (Cth). IHPA may release data to specified government agencies to help them perform their functions, as well as to other third parties to benefit research activity. Further information is available on IHPA's website.

IHPA also operates a National Benchmarking Portal (NBP) which contains activity, cost and hospital acquired complication rate data at a hospital level. Access to the NBP is available to state and territory health departments and all public hospital staff, with access control administered by states and territories.

In some states and territories access has been made available widely, allowing hospital staff to benchmark cost and quality information against peer hospitals around the country. In other states and territories, access has been limited to health department staff only.

The Pricing Authority considers that open access to data, alongside appropriate privacy protections can enhance policy decisions, serve the interests of transparency and improve patient outcomes. As such, IHPA intends to make access to the NBP publicly available in future years, to allow this important data asset to be used by a wider audience, including clinicians, hospital managers and researchers.

IHPA also intends to develop public reports on subjects that are relevant to IHPA functions under the *National Health Reform Act 2011* (Cth). For example, this might include hospital cost information, analysis of the growth in activity and the impact of the introduction of funding adjustments for hospital acquired complications into the national pricing model.

Consultation questions

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

6.4 Unique patient identifier

A unique patient identifier would allow IHPA to accurately identify service delivery to patients across different care settings, financial years and hospitals.

Linked patient data would provide broad benefits to the health system and would support IHPA's existing work, including:

- Analysis to support a pricing or funding approach for avoidable hospital readmissions as discussed in Chapter 10;
- Development of the ANACC, by allowing consideration of a unit of count which is broader than one patient attendance;
- Further development of the AMHCC, by providing a more robust identifier for service delivery to mental health consumers within a phase of care;
- Consideration of innovative funding models, such as bundled payments (IHPA's work to develop a bundled pricing approach for maternity care concluded that a single person identifier was a precondition to implementation); and
- Reporting of patient reported outcome measures (PROMs) to support value-based care funding models as discussed in Chapter 9.

The Individual Healthcare Identifier (IHI) is an existing personal identifier that was introduced to support the My Health Record system. IHPA has previously signalled the intention to introduce the IHI into national data collections, to support the funding innovations outlined earlier.

While states and territories have been supportive of providing the IHI in national data sets in principle, some states and territories have raised concerns regarding the implementation of this collection that relate to local data systems.

Given the importance that the IHI will play in developing future pricing and funding models, IHPA will work with states and territories to quantify the costs of collecting the IHI. Once the costs are known, IHPA may consider options for an 'incentive' payment for states and territories paid for patient episode records that have a valid IHI. This method could occur on a cost neutral basis through an adjustment whereby funding is reduced for episode records without a valid IHI and increased for episode records reported to IHPA with a valid IHI.

Consultation questions

- What are the estimated costs of collecting the IHI in your state or territory?
- Would you support the introduction of an incentive payment or other mechanism to assist in covering these costs for a limited time period?

6.5 Patient reported outcome measures

Patient Reported Outcome Measures (PROMs) are questionnaires by which patients assess the outcomes of health interventions and their interactions with health services. This assessment can measure outcomes over varying time periods, and include indicators such as daily functions, symptom severity and overall quality of life.

In Australia, PROMs are not yet embedded in routine measurement at a national, state or territory level. Internationally there is significant use of PROMs in some Organisation for Economic Co-operation and Development (OECD) nations including England, Sweden and the United States of America. Each of these nations is adopting slightly different models of PROMs. Broadly PROMs can be separated in to three categories:

- Clinician-patient interactions;
- Descriptive and analytical studies (e.g. comparison of treatment effectiveness); and
- Population surveillance and policy.

There are multiple consortiums that have developed or are developing suites of tools to capture PROMs[1]. For example, the International Consortium for Health Outcomes Management (ICHOM) is working to develop health outcome standard measurements for specific disease and population groups and the Europe-based EQ-5D is a standardised instrument for use as a measure of health-related quality of life and is used widely in Europe and North America.

In Australia, the Australian Commission on Safety and Quality in Health Care (the Commission) is undertaking a program of work on PROMs. This work aims to support the use of PROMs to drive quality improvement in a way that brings patients' voices and outcomes to the fore. The Commission has published a series of reports investigating the use of PROMs in Australia and in similar health systems internationally. Further work will focus on supporting the uptake of PROMs in Australia through the compilation and dissemination of information on PROMs and by supporting the exchange of information between the early adopters of PROMs.

1 Williams K, Sansoni J, Morris D, Grootemaat P and Thompson C, Patient-reported outcome measures: Literature review. Sydney: ACSQHC; 2016

The Commission is actively involved in international work on PROMs being undertaken by the OECD and ICHOM. Through its Patient-Reported Indicators Survey initiative, the OECD is developing instruments, definitions and data collection strategies focused on hip and knee replacements, breast cancer care, and mental health care. New measures are in development for patients with one or more chronic conditions, who are living in the community, and who are principally treated in primary care or other ambulatory care settings.

The Commission has also worked extensively to develop national clinical quality registries (CQRs). CQRs monitor quality of health care within a specific clinical domain, such as hip fractures. Detailed data is recorded by clinicians with the aim to provide benchmarking reports on highlighting areas such as clinical variation back to the clinician to better inform clinical practice and decision making. In 2010, health ministers endorsed the Commission's tested and validated Operating Principles and Technical Standards for CQRs and in 2014 the Commission developed the Framework for Australian CQRs which incorporated the endorsed Operating Principles and Technical Standards (the Framework). In 2016, the Commission developed a prioritised list of clinical domains for CQR development and completed an economic evaluation of CQRs. The Commission is currently undertaking a review of CQR governance arrangements provided by the Framework.

Additionally, the Australian Government Department of Health is undertaking consultation on the 10 year National Strategy which sets out the Australian Government's Commitment to broaden the benefits of CQRs for equitable improvements in patient care. The National Strategy will build on the Framework and 'consider ways to provide a nationally consistent approach to the selection, funding, implementation, management and performance of CQRs to improve health outcomes'.

IHPA is aware that some health services in Australia have begun collecting PROMs at a local level. This includes initiatives such as the NSW Patient Reported Measures Framework which maintains a virtual registry that joins information across the patient journey. IHPA is interested in how state-wide or local initiatives could be incorporated into national data sets for future analysis.

Consultation questions

- What initiatives are currently underway to collect PROMs and how are they being collated?
- Should a national PROMs collection be considered as part of national data sets?

7

Treatment of other Commonwealth programs

7 Treatment of other Commonwealth programs

7.1 Overview

To prevent a public hospital service being funded twice, Clause A6 of the NHRA requires IHPA to discount Commonwealth funding provided to public hospitals through programs other than the NHRA. The two major programs are blood products (through the National Blood Agreement) and Commonwealth pharmaceutical programs including:

- Highly Specialised Drugs (Section 100 funding);
- Pharmaceutical Reform Agreements — Pharmaceutical Benefits Scheme Access Program; and
- Pharmaceutical Reform Agreements — Efficient Funding of Chemotherapy (Section 100 funding).

The AHPCS Version 4.0 includes a costing guideline related to the consumption of blood products. The objective of *Costing guideline 6 Blood Products* is to guide costing practitioners through the steps required to ensure that all blood product consumption and expenses which contribute to the production of final blood products are included in the patient costing process.

For 2020–21, IHPA proposes no changes be made to the treatment of other Commonwealth programs.

8

Setting the National Efficient Cost

8 Setting the National Efficient Cost

8.1 Overview

IHPA developed the NEC for hospitals with activity levels which are too low to be to be funded on an activity basis, such as small rural hospitals. These hospitals are funded by a block allocation based on their size, location and the type of services provided.

A low volume threshold is used to determine whether a public hospital is eligible to receive block funding. All hospital activity is included in assessing it against the low volume threshold, rather than just admitted acute activity.

IHPA uses public hospital expenditure as reported in the National Public Hospital Establishments Database to determine the NEC for block funded hospitals. IHPA expects that continued improvements to the data collection will lead to greater accuracy in reflecting the services and activities undertaken by block funded hospitals. In addition, work to price classifications for mental health and teaching and training should eventually result in more services being funded through ABF rather than block funded amounts, increasing transparency of costs.

8.2 Consideration of alternative NEC methodologies

Both ABF and block funding approaches cover services that are within the scope of the NHRA. The key difference is that the ABF model calculates an efficient price per episode of care, while the block funded model calculates an efficient cost for the hospital.

While activity reported for ABF hospitals is directly priced through the NEP, block funded hospitals are clustered into volume groups based on set thresholds of activity. The efficient cost of a small rural hospital is determined based on these volume groups and other factors including remoteness and whether the hospital provides surgical or obstetric services.

However, the block funded model does not increase funding to a hospital commensurate to an increase in activity if it does not lead to a change in the volume grouping. This can occur where services are relocated from metropolitan to regional and remote areas.

The existing block funding model was used for NEC19; however, work continues through the Small Rural Hospital Working Group to develop a 'fixed plus variable' model where the total modelled cost of each hospital will be based on a fixed component as well as a variable ABF style amount. Under this approach, the fixed component decreases while the variable component increases with hospital size. IHPA intends to implement this for NEC20 subject to stakeholder support, including shadow pricing the 'fixed plus variable' model.

Consultation questions

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

9

Alternate funding models

9 Alternate funding models

9.1 Overview

Whilst Activity Based Funding models have been effective in driving technical efficiency in the delivery of public hospital services, the current pricing models designed by IHPA do not necessarily provide incentives to maximise allocative and dynamic efficiency. It is important that pricing models support the delivery of services that prevent admissions, or allow for treatment in lower cost settings than the admitted setting.

Some stakeholders have previously advocated for IHPA to increase focus on chronic disease models of care and other hospital admission avoidance programs. For 2018–19, the total funding reported against the Hospital Avoidance non-admitted clinic is expected to be around $200 million, compared to total public hospital expenditure in the order of $50 billion, suggesting that more could be done to incentivise hospital avoidance programs.

Furthermore, the current non-admitted service event episodic pricing model does not align well with how hospital avoidance programs are delivered.

There is a growing discussion in Australia, and internationally, about the need to increase the focus on delivering high value healthcare to patients.

The challenge is not to expand hospital avoidance activity but to set incentives that encourage better health outcomes and patient experiences while maintaining technical efficiency.

In this context, IHPA has undertaken a review of hospital funding models in operation in Australia and internationally to understand what may help improve the incentives in the national pricing model to enhance the allocative and dynamic efficiency in the Australian public hospital system.

9.2 Global horizon scan

IHPA undertook a global horizon scan in 2018–19 to investigate health care funding initiatives in the United States of America and Europe that could possibly be incorporated into the Australian context.

The review focused on value-based payment models including:

- **Value-based purchasing:** A broad set of performance-based payment strategies that link financial incentives to providers' performance;
- **Pay-for-performance:** Providers are rewarded or penalised based on pre-established targets or benchmarks;
- **Bundled payments:** Payments are made to health providers based on the expected costs for a clinically defined episode or bundle of related health care services; and
- **Capitation payments:** A provider or group of providers are paid to cover the care provided to a specified population across different care settings and time periods.

In Australia there is currently work underway in some states and territories to explore alternative funding models.

Capitation

Victoria is currently trialling a capitation funding model called Healthlinks. Healthlinks aims to reduce hospitalisations by 20% for a group of patients identified as having a very high probability of hospital admissions in the next 12 months based on their previous hospital utilisation and diagnosis. IHPA has agreed to block fund this program in 2019–20 and is working with Victoria to understand the effectiveness of the program.

If this approach is found to be effective, IHPA intends to work with states and territories to design capitation pricing models that could be more broadly applied.

The design principles for effective capitation models share many of the principles of current ABF approaches, including:

- Identifying groups of patients who are clinically similar, and consume similar levels of resources over a given period;
- Ensuring adequate risk adjustment is incorporated in the pricing so that incentives to avoid enrolling higher risk patients are addressed; and
- Providing adequate incentives to ensure that patients receive appropriate services

Value based healthcare

NSW has launched a large scale Value Based Healthcare (VBHC) program. The Leading Better Value Care (LBVC) program aims to change how care is delivered by focusing on the patient's experience through the health system and working collaboratively with the state's health care services. The LBVC program currently has eight clinical initiatives ranging from osteoarthritis and diabetes to chronic heart failure and renal supportive care. Initial evaluation of the program is positive with 1,200 fewer patients needing hospitalisation for re-fracture, 3,200 fewer patients with diabetes needing hospitalisation for high risk foot services and 390 fewer patients needing joint replacement operations[2]. NSW has also been working on integrated care models across the state. This initiative trialled models involving health care providers in a local health district (e.g. hospital and primary care networks) working together to better understand people's health, allowing them to provide care that is tailored to individual needs. It focussed on patients with chronic health conditions and mental health issues.

Victoria is also investigating options for VBHC for stroke patients across different care settings — acute, rehabilitation and community. The 'improving value in stroke care' project is in its initial stages, consulting with clinicians and other key stakeholders on options for obtaining feedback on patient outcomes and experience and identifying opportunities to make a difference. The project identifies a number of key enablers including patient engagement, clinical leadership, benchmarking of outcomes, process and costs and bundled payments.

2 Liz Hay, Mahendra Sharan, Ansari Jainullabudeen, Economics is your friend, the use of economics to support Value Based Healthcare, IHPA Activity Based Funding Conference, 2019

Bundled payments

Bundled payments differ from traditional ABF payments in that they combine payments across a number of settings and generally over a longer period of time, to allow healthcare providers more flexibility in how they provide services to patients, without facing financial disadvantages.

IHPA has previously investigated the feasibility of a bundled payment for maternity care, concluding that whilst it was technically feasible, the lack of a stable individual patient identifier presented a significant barrier to implementation.

Queensland is currently developing a renal services funding model that would introduce a bundled payment for patients with chronic kidney disease. The intention would be to isolate current state-wide renal funding and 'quarantine' the allocation with the aim of better aligning funding to outcomes for patients and service effectiveness. The multidisciplinary approach to caring for these patients has a focus on Indigenous, rural and remote patient needs and will be linked to individual patients on different care pathways. The initial work has focused on developing standard patient pathways, including measures that describe the level of care that an adult kidney patient should reasonably expect. Proposed benefits include best practice care, for example encouraging home-based care, identification of service gaps, opportunities for state-wide collaboration and more predictability of future budget allocations.

Similarly, the Victorian 'improving value in stroke care' project noted before identifies bundled payments as a preferred option. This would include combining all payments across a pathway of care into one, providing more flexibility to integrate and tailor care. This would enable relocation of care across settings such as outpatients or home.

Consultation questions

- Are there any additional alternative funding models IHPA should explore in the context of Australia's existing NHRA and ABF framework?
- IHPA proposes investigating bundled payments for stroke and joint pain, in particular knee and hip replacements. Should any other conditions be considered?

10

Pricing and funding for safety and quality

10 Pricing and funding for safety and quality

10.1 Overview

In 2017, all Australian governments signed the Addendum. Through this, parties committed to improve Australians' health outcomes and decrease avoidable demand for public hospital services through reforms including the development and implementation of funding and pricing approaches for safety and quality. These reforms are designed to improve patient outcomes in the public health system.

The commitment by Australian governments to safety and quality follows a four-year program of collaborative work between IHPA and the Australian Commission on Safety and Quality in Health Care (the Commission) to consider the incorporation of safety and quality measures into the determination of the NEP.

Under the Addendum, IHPA is required to advise on an option or options for a comprehensive and risk adjusted model to determine how funding and pricing could be used to improve patient outcomes across three key areas: sentinel events, hospital acquired complications (HACs) and avoidable hospital readmissions.

The implementation of pricing and funding for safety and quality is being rolled out on a staged basis. Funding adjustments related to sentinel events were introduced in July 2017, followed in July 2018 by funding adjustments for HACs.

IHPA is now investigating the viability of funding adjustments to reduce avoidable hospital readmissions.

10.2 Sentinel events

In 2002, Australian Health Ministers agreed on the Australian Sentinel Events List, a national set of sentinel events. Sentinel events are adverse events that result in death or serious harm to patients.

Since 1 July 2017, the *Pricing Framework for Australian Public Hospital Services* has specified that an episode of care including a sentinel event is not funded. As sentinel events are not currently reported in national data sets, states and territories submit an additional data file identifying episodes where a sentinel event occurred. A zero National Weighted Activity Unit (NWAU) is then assigned to episodes with a sentinel event. This approach is applied to all hospitals, whether funded on an activity basis or a block funded basis.

IHPA will continue to assign zero NWAU to episodes with a sentinel event for NEP20 using Version 2.0 of the Australian Sentinel Events list published on the Commission's website.

10.3 Hospital acquired complications

HACs are complications which occur during a hospital stay and for which clinical risk mitigation strategies may reduce (but not necessarily eliminate) the risk of that complication occurring.

A list of HACs was developed by a Joint Working Party of the Commission and IHPA.

The Commission is responsible for the ongoing curation of the HACs list to ensure it remains clinically relevant. It has also developed a range of tools to support local monitoring of HACs and quality improvement strategies. The Commission's HACs Information Kit outlines activities that health services can implement in order to minimise the occurrence of HACs. There are also specifications and groupers that health services can download to monitor HACs using their administrative data.

The HACs list is reviewed regularly by the Commission's HACs Curation Clinical Advisory Group (HACs CCAG). In early 2019, the Commission convened condition-specific panels for delirium, pressure injuries, renal failure, cardiac complications, respiratory complications, third and fourth degree perineal tears and neonatal birth trauma under the direction of the HACs CCAG to review and refine the complications and codes included in the list. The HACs CCAG also endorsed additions to the medication safety HAC, following advice from a mental health-specific panel that considered adverse events resulting from mental health medications.

Following approval from the HACs CCAG, the Commission has amended the diagnoses to the existing HACs outlined in **Figure 4**. These changes have been included in Version 2.0 of the HACs list to be published on the Commission's website. IHPA intends to use Version 2.0 of the HACs list for NEP20.

Figure 4: Changes to HAC diagnoses

Complication	Inclusion
1. Pressure injuries	1.4 Unstageable pressure injury
	1.5 Suspected deep tissue injury (recommendation not to include in pricing)
6. Respiratory complications	6.2 Aspiration pneumonia – Included: ventilation associated pneumonia
	6.3 Pulmonary oedema (previously included in cardiac complications)
8. Renal failure	Other associated codes: – Included: procedure codes for intermittent haemofiltration and intermittent haemodiafiltration
10. Medication complications	10.4 Movement disorders due to psychotropic medication
	10.5 Serious alteration to conscious state due to psychotropic medication
14. Cardiac complications	14.2 Arrhythmias – Included: bradycardia with intervention codes relating to insertion of pacing wires or pacemaker/defibrillator leads – Removed: codes related to a predisposition or chronic condition
	14.5 Infective endocarditis
15. Perineal Tears	Recommendation to include fourth degree perineal tears in the model for pricing and funding. The key factors identified for risk adjustment are: foetal distress, use of instruments, and primiparity.
16. Neonatal birth trauma	16.1 Neonatal birth trauma – Included: other specified birth trauma and birth trauma, unspecified
	16.2 Hypoxic ischaemic encephalopathy
	Removed: the codes relating to newborn weight from the exclusion codes
	Included: unqualified, qualified and semi-qualified newborns in the denominator for this HAC.

In late 2019, the Commission will convene panels to review the remaining HACs (falls resulting in fracture or intracranial injury, surgical complications requiring unplanned return to theatre, venous thromboembolism, gastrointestinal bleeding, medication complications, persistent incontinence, malnutrition, and healthcare-associated infection). The Commission will also continue to consider the inclusion of mental health specific conditions on the HACs list.

10.3.1 Approach to funding of HACs

Funding is reduced for any episode of admitted acute care where a HAC occurs. The reduction in funding reflects the incremental cost of the HAC, which is the additional cost of providing hospital care that is attributable to the HAC. This approach recognises that the presence of a HAC increases the complexity of an episode of care or the length of stay, driving an increase in the cost of care.

The HAC funding approach incorporates a risk adjustment model that assigns individual patient episodes with a HAC to a low, medium or high complexity score. This complexity score is used to adjust the funding reduction for an episode containing a HAC on the basis of the risk of that patient acquiring a HAC. Each HAC is separately risk-adjusted based on risk factors including patient age, sex, diagnosis-related group type (medical, surgical, other), major diagnostic category, Charlson score, intensive care unit status, admission status and transfer status.

The risk adjusted HAC rates were added to IHPA's NBP to enable hospitals to benchmark and assist in driving improvements to patient outcomes.

Consultation questions

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

10.4 Avoidable hospital readmissions

Unplanned hospital readmissions are a measure of potential issues with the quality, continuity and integration of care provided to patients during or subsequent to their original hospital admission (the index admission).

In June 2017, the Australian Health Ministers Advisory Council approved the list of avoidable hospital readmissions developed by the Commission. An up to date list can be found on the Commission's website.

10.4.1 Funding Options

To avoid perverse or unintended consequences, IHPA maintains a cautious approach to implementing funding options to reduce avoidable hospital readmissions.

As outlined in the *Pricing Framework for Australian Public Hospital Services 2019–20*, IHPA will commence analysis of three funding options from 1 July 2019 for a 24-month period.

Throughout the shadow period IHPA will provide analysis through quarterly reports to its advisory committees. The shadow period will allow IHPA to test options for funding avoidable hospital readmissions to understand the activity and funding impacts of the proposed options. To support the monitoring of avoidable hospital readmissions rates, IHPA will also include avoidable hospital readmission rates in the NBP in mid-2019, pending finalisation of a risk adjustment model.

The options are:

Option 1: Under this episode-level approach, an episode with an avoidable hospital readmission would not be funded, instead, these episodes would be assigned zero NWAU. However, this funding adjustment would always be applied to impact on where the index admission occurred (even when the readmission occurred in a different hospital or LHN to the index admission).

Option 2: Under this episode-level approach, the index admission and the readmission would be combined for funding purposes. This means that the two merged episodes would retain the DRG of the initial admission but also include the additional length of stay days that occur during the readmission. The funding adjustment would always be applied to where the index admission occurred (even when the readmission occurred in a different hospital or LHN to the index admission).

Option 3: Under this hospital-level approach, funding would be adjusted on the basis of differences in rates of avoidable hospital readmissions compared either at the level of hospitals or at the level of LHNs. This would involve setting benchmark rates of avoidable hospital readmissions.

Throughout the trial period, IHPA is undertaking further technical work on issues involved in the setting, administration and outcomes monitoring of the three funding options. This will include consideration and analysis of:

- The impact of setting adjustments at a hospital, LHN, jurisdiction and national level; and
- The impact of setting readmissions within or across financial years.

Detailed information on the three options including proposed measurements is provided in the current Pricing Framework 2019–20. IHPA will share the results and seek further stakeholder feedback in next year's Consultation Paper on the *Pricing Framework for Australian Public Hospital Services*.

10.4.2 Approach to risk adjustment

In early 2019, IHPA commenced work to develop a risk adjustment model for avoidable hospital readmissions with the University of Melbourne. The risk adjustment model aims to use patient characteristics to predict the risk of an avoidable hospital readmission by initially using the same methodology as the HAC risk adjustment model.

IHPA is also undertaking analysis of existing data to examine potential risk factors for avoidable hospital readmissions. IHPA has examined age, DRG type, major diagnostic category, sex, hospital remoteness and Indigenous status.

10.4.3 Commercial readmissions software

IHPA continues to explore the potential use of commercial software that determines whether a readmission is clinically related to a prior admission based on the patient's diagnosis and procedures in the index admission and the reason for readmission. This software would allow investigation of a broader scope of avoidable readmission conditions than the current list of avoidable hospital readmissions.

Consultation questions

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

Appendix A — List of consultation questions

Below is a list of all consultation questions raised throughout this consultation paper, along with page references. Please note, submissions are not required to respond to the consultation questions.

Independent Hospital Pricing Authority

Level 6, 1 Oxford Street
Sydney NSW 2000

Phone 02 8215 1100
Email enquiries.ihpa@ihpa.gov.au
Twitter @IHPAnews

www.ihpa.gov.au