Dear Minister,

On behalf of the Independent Hospital Pricing Authority (IHPA), I am pleased to present the 

The Pricing Framework is the key strategic document underpinning the National Efficient Price (NEP) and National Efficient Cost (NEC) Determinations for the financial year 2020–21. The NEP Determination will be used to calculate Commonwealth payments for in-scope public hospital services that are funded on an activity basis, whilst the NEC Determination covers the services that are block funded.

This is the ninth Pricing Framework issued by IHPA. The nature of the comments received in response to the Consultation Paper on the Pricing Framework for Australian Public Hospital Services 2020–21 (the Consultation Paper) demonstrates that IHPA has developed a clear and stable methodology that guides the annual determination of the NEP and NEC. IHPA will continue to develop and refine the Australian national classification systems, counting rules, data, coding and costing standards that underpin the national Activity Based Funding (ABF) system.

Alongside the Pricing Framework, IHPA has released a companion document, the Pricing Framework for Australian Public Hospital Services 2020–21 Consultation Report. The report includes an overview of the submissions received in response to the Consultation Paper.

Feedback this year supported IHPA’s work to explore alternative funding approaches to promote value-based health care. This included pricing models that support the delivery of services that prevent admissions to hospital and encourage innovation to improve both health outcomes and experiences for patients. A critical prerequisite for this work is the supply of the Individual Healthcare Identifier by states and territories, as this will allow data across various settings to be combined to give a true picture of the costs and outcomes of services delivered to patients.

I would like to affirm IHPA’s commitment to independence, transparency and continuous improvement in how it undertakes its functions through open access to data. This is grounded in an open and consultative approach to working with the health sector in the implementation of ABF for public hospital services.

Yours sincerely

Shane Solomon
Chair
Pricing Authority
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# Glossary

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<th>Description</th>
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<tr>
<td>ABF</td>
<td>Activity Based Funding</td>
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<tr>
<td>ACHI</td>
<td>Australian Classification of Health Interventions</td>
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<td>ACS</td>
<td>Australian Coding Standards</td>
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<td>AECC</td>
<td>Australian Emergency Care Classification</td>
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<td>AHPCS</td>
<td>Australian Hospital Patient Costing Standards</td>
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<td>AIHW</td>
<td>Australian Institute of Health and Welfare</td>
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<td>ANACC</td>
<td>Australian Non-Admitted Care Classification</td>
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<td>AMHCC</td>
<td>Australian Mental Health Care Classification</td>
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<td>AN-SNAP</td>
<td>Australian National Subacute and Non-Acute Patient classification</td>
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<td>AR-DRG</td>
<td>Australian Refined Diagnosis Related Group</td>
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<td>ATTC</td>
<td>Australian Teaching and Training Classification</td>
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<tr>
<td>CQR</td>
<td>Clinical Quality Registries</td>
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<td>DRG</td>
<td>Diagnosis Related Group</td>
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<td>HAC</td>
<td>Hospital Acquired Complication</td>
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<tr>
<td>ICD-10-AM</td>
<td>International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification</td>
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<td>ICD-11</td>
<td>International Classifications of Diseases Eleventh Revision</td>
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<td>ICHOM</td>
<td>International Consortium for Health Outcomes Measures</td>
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<td>IHI</td>
<td>Individual Healthcare Identifier</td>
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<td>IHPA</td>
<td>Independent Hospital Pricing Authority</td>
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<td>LHN</td>
<td>Local Hospital Network</td>
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<td>MBS</td>
<td>Medicare Benefits Schedule</td>
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<td>MDCC</td>
<td>Multidisciplinary Case Conference</td>
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<td>NHRA</td>
<td>National Health Reform Agreement</td>
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<td>NBP</td>
<td>National Benchmarking Portal</td>
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<td>NEC</td>
<td>National Efficient Cost</td>
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<td>NEP</td>
<td>National Efficient Price</td>
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<td>NHCDC</td>
<td>National Hospital Cost Data Collection</td>
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<td>NWAU</td>
<td>National Weighted Activity Unit</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>PBS</td>
<td>Pharmaceutical Benefits Scheme</td>
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<td>PROMs</td>
<td>Patient Reported Outcomes Measures</td>
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<td>The Addendum</td>
<td>Addendum to the National Health Reform Agreement</td>
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<td>The Commission</td>
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Introduction
Introduction

The Pricing Framework for Australian Public Hospital Services is the key strategic document underpinning the National Efficient Price (NEP) and National Efficient Cost (NEC) Determinations for the financial year. The Pricing Framework for Australian Public Hospital Services is released prior to the NEP and NEC which are released in early March. This provides an additional layer of transparency and accountability by making available the key principles, scope and approach adopted by the Independent Hospital Pricing Authority (IHPA) to inform the NEP and NEC Determinations.

The implementation of a national Activity Based Funding (ABF) system is intended to improve the efficiency and transparency of funding contributions of the Commonwealth and state and territory governments for each Local Hospital Network (LHN) across Australia and to drive improvements in safety and quality in all Australian public hospitals. To achieve this, IHPA is required under the National Health Reform Agreement (NHRA) and the National Health Reform Act 2011 (Cwth) to determine the NEP to calculate Commonwealth ABF payments for in-scope public hospital services and the NEC covering those services that are block funded.


IHPA received 31 submissions to the Consultation Paper including the majority of states and territories and the Commonwealth government. These submissions are available on the IHPA website. A Consultation Report on their content, including commentary regarding how IHPA reached its decisions for 2020–21 can also be found on IHPA’s website.

Stakeholders were supportive of IHPA’s work to explore alternative funding approaches to promote value-based health care. This includes pricing models that support the delivery of services that prevent admissions to hospital and encourage innovation to improve both health outcomes and experience for patients. However, it is notable that IHPA’s work to progress value-based health care and improve safety and quality through reducing avoidable hospital readmissions is dependent on the availability of an Individual Healthcare Identifier (IHI) in national minimum datasets. At this point, states and territories could not provide a clear way forward in regards to how the IHI could be included in national datasets.

IHPA will work with states and territories through its Jurisdictional and Technical Advisory Committees over the coming year to address safeguards and develop educational resources that will contextualise data ahead of any potential plan to provide the public with access to the National Benchmarking Portal.

IHPA notes that the Addendum to the National Health Reform Agreement sets out public hospital financing arrangements until 1 July 2020. This Pricing Framework has been prepared for the 2020–21 financial year in anticipation that the fundamental elements of the Addendum will form the basis of a new NHRA from July 2020.
The Pricing Guidelines
# 2.1 Overview

The decisions made by IHPA in pricing in-scope public hospital services are evidence-based and use the latest cost 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 [see Figure 1] 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 Pricing Framework.

Stakeholders supported IHPA’s proposal to include an addition to the Pricing Guidelines in recognition that pricing should seek to promote ‘value’ in public hospital services and support alternative funding solutions that deliver efficient, high-quality, patient-centred care.

IHPA has updated the Pricing Guideline ‘Fairness’ incorporating stakeholder feedback as follows:

**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 and recognise the legitimate and unavoidable costs faced by some providers of public hospital services.

## IHPA’s decision

IHPA will continue to use the Pricing Guidelines to inform its decision making where it is required to exercise policy judgement in undertaking its legislated functions.

IHPA has included a new Pricing Guideline ‘Promoting value,’ incorporating stakeholder feedback to ensure that patient outcomes and patient experience are reflected as a priority as follows:

**Promoting value:** Pricing supports innovative and alternative funding solutions that deliver efficient, high quality, patient-centred care.

## Next steps and future work

IHPA will continue to evaluate how the Pricing Guidelines can incorporate value-based health care and alternative funding models, while working within its legislative framework and continue to consult stakeholders through the Pricing Framework consultation process.
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.

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 supports innovative and alternative funding solutions that deliver efficient, high quality, patient-centred care.
- **Price 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.

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.
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.

3.2 General List of In-scope public hospital services

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 (Cwth) 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.
Figure 2 outlines the scope of public hospital services eligible for Commonwealth funding under the NHRA. The next iteration of the General List will be published as part of the National Efficient Price Determination 2020–21 (NEP20) in early March 2020.

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
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 homogeneous).

IHPA reviews and updates existing classifications and is also responsible for developing and introducing new classifications. There are currently six 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;
- Teaching and training; and
- Mental health care.

4.2 Admitted acute care

The Australian Refined Diagnosis Related Group (AR-DRGs) 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.

Major refinements to AR-DRG Version 10.0 included:

- 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 homogeneous groups being created for nephrolithiasis (urinary calculus) interventions, liver procurement from a living donor and osseointegration interventions.
4.2.1 Phasing out support for older classification versions

In the Pricing Framework for Australian Public Hospital Services 2019–20, IHPA stated its intention 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.

IHPA’s decision

IHPA will phase out support for old AR-DRG versions. The rolling timeline is detailed in Figure 3.

Figure 3: Timeline of AR-DRG phase out

<table>
<thead>
<tr>
<th>AR-DRG version</th>
<th>Proposed phase out date</th>
<th>Most current AR-DRG version</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR-DRG Version 5.0, 5.1, 5.2, 6.0, 6.x and 7.0</td>
<td>1 July 2021</td>
<td>AR-DRG Version 11.0</td>
</tr>
<tr>
<td>AR-DRG Version 8.0 and 9.0</td>
<td>1 July 2023</td>
<td>AR-DRG Version 12.0</td>
</tr>
<tr>
<td>AR-DRG Version 10.0</td>
<td>1 July 2025</td>
<td>AR-DRG Version 13.0</td>
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</tbody>
</table>

Next steps and future work

IHPA recognises concerns raised by the private sector and will continue to work closely with them to assess the readiness for phasing out old AR-DRG versions at each stage.

IHPA’s decision

AR-DRG Version 10.0 and ICD-10-AM Eleventh Edition will be used for NEP20.

Next steps and future work

IHPA has commenced development of the work program for AR-DRG Version 11.0 and ICD-10-AM/ACHI Twelfth Edition. IHPA has considered stakeholder feedback to inform the key priorities for consideration in the AR-DRG work program. Priorities include consideration of capturing patient social and functional determinants, behavioural issues and chronic conditions in determining patient complexity, continued investigation of mental health consultation liaison services, and a review of the coding rules related to assigning the Condition Onset Flag to minimise ‘false’ hospital acquired complications (HACs) being reported.

Separately, an end-to-end review of the AR-DRG classification system development process has been conducted in the second half of 2019. In line with stakeholder feedback, the review considered the education and resource requirements for the delivery of new classification versions as well as the cycle times for AR-DRG and ICD-10-AM/ACHI/ACS development. It also looked at how high acuity, high cost health technology could be incorporated into the classification system in a more timely fashion. The review has been conducted in consultation with all jurisdictions, clinicians and other stakeholders.
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.

IHPA’s decision

For NEP20, IHPA will continue to use AN-SNAP classification Version 4.0 to price admitted subacute and non-acute services.

IHPA will continue to investigate pricing of paediatric palliative care using AN-SNAP Version 4.0 for NEP20.

Next steps and future work

IHPA is working closely with AIHW on the feasibility and timeframe for implementation of ICD-11 in Australia noting that any decision in this regard will require consideration by health ministers.

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. Patients are classified on the basis of care type, phase of care, functional impairments, age and other measures.

Subacute and non-acute services that are not classified using the Australian National Subacute and Non-Acute Patient (AN-SNAP) classification are classified using AR-DRGs.

4.3.1 Developing AN-SNAP Version 5.0

IHPA is continuing to develop the next version of the AN-SNAP classification.

As part of the development of AN-SNAP Version 5.0, 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.

Next steps and future work

IHPA is working with its Subacute Care Working Group to continue to progress AN-SNAP Version 5.0. The timelines will be communicated through IHPA’s Subacute Care Working Group. It is currently anticipated that a draft AN-SNAP Version 5.0 classification will be released for public consultation in 2020.

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 that are generally based on the nature of the service and the type of clinician providing the service.
4.4.2 Australian Non-Admitted Care Classification

IHPA is developing a new Australian Non-Admitted Care Classification (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 that span multiple settings are tested.

IHPA’s decision

For NEP20, IHPA will continue using the Tier 2 Non-Admitted Services classification for pricing non-admitted services while working to develop the ANACC.

Next steps and future work

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.

A public consultation on the costing study was undertaken in May 2019. IHPA has collaborated with its working groups and committees to incorporate feedback into the costing study design where appropriate. Non-admitted activity and cost data will be collected for the costing study between October 2019 and June 2020.

4.5 Emergency care

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.

A quality assurance process was undertaken earlier this year to validate the AECC Version 1.0, with a view to pricing emergency department activities using the AECC for NEP20. However, stakeholder feedback indicated a preference for a shadow year to assess the impacts of the new classification system on funding.

Urgency Disposition Groups will continue to be used to classify and price emergency services for NEP20. The application of the diagnosis-based AECC Version 1.0 to emergency services in the longer term remains under consideration. Emergency services are usually located in small rural and remote hospitals and collect limited patient information.

IHPA’s decision

IHPA will use Urgency Related Groups Version 1.4 to classify and price emergency department activities and Urgency Disposition Groups Version 1.3 to classify and price emergency service activities.

For NEP20 IHPA will also include shadow price weights for emergency department activities using AECC Version 1.0. IHPA intends to price emergency department activities using the AECC Version 1.0 for NEP21.

Next steps and future work

IHPA will undertake a review of the shadow year to assess the impacts of the shadow pricing period and the merits of the shadow process.

IHPA will continue to work with states and territories through its committees to ensure any barriers to pricing emergency department activities using the AECC are addressed prior to NEP21. IHPA will also continue to provide states and territories with data for evaluation through its Technical Advisory Committee and the Emergency Care Advisory Working Group.

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.
4.6 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.

4.6.1 Australian Teaching and Training Classification

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. States and territories are required under IHPA’s Three Year Data Plan to provide ATTC data. IHPA remains committed to pricing teaching and training activities using the ATTC, and will continue to explore options to accelerate this in the absence of reliable cost data being supplied by states and territories.
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 reporting and grouping mental health care activity to better understand the costs of delivering mental health services than the AR-DRG classification.

4.7.1 Pricing mental health care

IHPA has continued to work with states and territories to understand the mental health specific activity data reported through the quarterly data submissions. IHPA has linked 2017–18 activity data to National Hospital Cost Data Collection (NHCDC) cost data to assess the viability of pricing AMHCC Version 1.0. Based on the quality and quantity of data available, IHPA anticipates preparing a shadow price for mental health activity using the AMHCC for 2020–21. IHPA will continue to work with states and territories to expand the volume and quality of community data to be used for pricing in future NEP Determinations.

4.7.2 Refining mental health ‘phase of care’

A new clinician-rated measure of mental health ‘phase of care’ was introduced in 2016 to support the AMHCC. 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. Outcomes of the project to review and refine the mental health ‘phase of care’ will be provided to stakeholders later in 2019. IHPA will not be making significant changes to the ‘phase of care’ model at this stage.

IHPA’s decision

IHPA will use AMHCC Version 1.0 to shadow price mental health services for 2020–21.

Next steps and future work

IHPA will continue to work with states and territories to ensure they have the necessary support to provide cost and activity data under the AMHCC Version 1.0 for 2020–21. IHPA will continue working with states and territories regarding the pricing approach and will continue to work with all stakeholders to further develop the pricing strategy.
Setting the National Efficient Price
5.1 Overview

Under the National Health Reform Act 2011 (Cwth), Section 131(1), IHPA is required to determine the NEP for health care services provided by public hospitals where services are funded on an activity basis. The NEP includes a series of adjustments to reflect legitimate and unavoidable variations in the costs of delivering health care services.

5.2 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.

In 2019 IHPA completed a first principles independent review of the National Pricing Model (the Fundamental Review).

The review began in September 2018 and included:

- 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 methodology underpinning the development of the NEP.

The Fundamental Review recommended no significant changes were required to the National Pricing Model. However, outcomes of the Fundamental Review highlighted the following areas for further consideration, outlined under the six topics that formed the basis of the technical review:

1. Data preparation:
   - Incorporating more stringent criteria on pharmaceutical claims matching;
   - Retention of outliers, incorporating reduced weighting;
   - Revision of the minimum plausible episode cost trimming rule; and
   - Including costed ‘work-in-progress’ activity for episodes admitted in the prior financial year.

2. Base Model:
   - Use of the median vs the mean for base price setting;
   - Revision of inlier bound setting methodology; and
   - Use of credibility theory for setting non-admitted prices.

3. Adjustments:
   - Calculating adjustments concurrently considering interactions between adjustment categories; and
   - Including age adjustments in all categories.

4. Stabilisation:
   - Increasing the scope of the existing stability policy to include designated same-day prices; and
   - Introducing stricter stability rules for the specialist paediatric adjustments.

5. Transformation into pricing model:
   - Investigating use of different price indexes to calculation of the reference cost; and
   - No change to the calculation of the index rate.

6. Back-casting the NEP:
   - No change to the calculation of back-casting volume multipliers.
**IHPA’s decision**

IHPA will consider the recommendations from the Fundamental Review as it develops NEP20.

**Next steps and future work**

IHPA will continue to work with jurisdictions to consider technical improvements to the pricing model, including the recommendations from the Fundamental Review on a case-by-case basis.

### 5.3 Adjustments to the National Efficient Price

Section 131(1)(d) of the *National Health Reform Act 2011* (Cwth) 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 that 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 that 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.
IHPA’s decision
For NEP20, IHPA will use the Australian Bureau of Statistics’ 2016 Australian Statistical Geography Standard Remoteness Area classification.
For NEP20 IHPA will include an adjustment for non-admitted specialised paediatric services.

Next steps and future work
IHPA will continue to work with states and territories to consider adjustments to the NEP on a case-by-case basis and in line with the Pricing Guidelines. Any adjustments to the funding model will be evidence-based.

5.4 Harmonising price weights across care settings
IHPA’s 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.

Next steps and future work
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 for NEP20.
5.5 Shadow implementation periods

Previous pricing frameworks have noted that IHPA will shadow major changes to the ABF classification systems. A shadow implementation period provides jurisdictions with the lead time to assess the impact on funding, including for specific population and peer hospitals, and implement system changes to data reporting and clinical information systems.

Major changes to the National Pricing Model can also be shadow priced. For example, the funding approach to HACs underwent a shadow implementation period in 2017–18 to assess its expected impact and to allow for its refinement before it was implemented.

IHPA recently updated the shadow pricing section of its Back-casting Policy to clarify the parameters around when shadow pricing periods should occur. IHPA is currently consulting with jurisdictions on the proposed changes.

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

5.6.1 Pricing private patients in public hospitals

The NHRA allows for a Commonwealth funding contribution for patients who elect to use their private health insurance when they are admitted to a public hospital.

The NHRA stipulates that where this occurs, IHPA must calculate a reduced price, taking account of the other revenue sources available to the hospital. There are four distinct streams of funding in the context of private patients in public hospitals:

- Commonwealth NHRA funding through the National Health Funding Pool;
- State NHRA funding through the National Health Funding Pool;
- Private health insurance payments to hospitals; and
- Medical Benefits Schedule (MBS) payments to clinicians.

Figure 4 outlines how these funding sources flow through to Local Hospital Networks (LHNs) to fund patient care.
Clause A41 of the NHRA requires IHPA to set the price for admitted private patients in public hospitals accounting for payments by other parties, particularly private health insurers (for prostheses and the default bed day rate) and the MBS for payments made to clinicians. IHPA does this through its Private Patient Adjustments. This is an adjustment to National Weighted Activity Unit (NWAU) conducted in two parts:

1. The Private Patient Service Adjustment reduces the price weight by the amounts paid by the Commonwealth and private health insurers on behalf of private patients. Specifically, this includes MBS payments to medical staff and charges for prostheses.
2. The Private Patient Accommodation Adjustment further reduces the NWAU for a private patient by accounting for the default bed day benefit paid by the insurer to the hospital. The level is determined for each state and territory based on a determination made by the Commonwealth Minister for Health under the Health Insurance Act 1973 (Cwth). The adjustment is dependent on the length of stay.

The reduction in the price weights for private patients is, on average, around 30%, but varies according to the type of Diagnosis Related Group (DRG). For example, surgical DRG’s generally have higher reductions due to the cost of prostheses.

**Incentives to admit private patients in public hospitals**

While the Private Patient Adjustments account for the payments hospitals receive when treating private patients, the Grattan Institute in its submission to the Consultation Paper suggests that the price discount applied by IHPA for private patients only impacts the 45% of funding that is provided by the Commonwealth. IHPA has undertaken further analysis (which is provided in the Consultation Report), that confirms that the funding formula creates a potential incentive to admit private patients to public hospitals. The incentives in the system are complex and vary. Many of the targets and behaviours in the system are a result of historical funding arrangements and may not be influenced by current NHRA arrangements or the National Pricing Model.
IHPA has considered how to address the issue of incentives to treat private patients in public hospitals, through a pricing and funding approach.

**Pricing approach**

In order to address the issue with the growth incentive as a result of the funding formula through a pricing approach, IHPA would need to increase the quantum of the Private Patient Adjustments to account for the fact that currently only 45% of the funding reduction is passed through the funding formula. The magnitude of the increase is 1/.45 or 2.22 times. Therefore, IHPA would need to increase the Private Patient Adjustment by a factor of 2.22 to ensure that there was no residual incentive for hospitals to encourage patients to utilise their private insurance.

**Funding approach**

An alternate approach would be for IHPA to remove the Private Patient Adjustment from the pricing model and for the Administrator of the National Health Funding Pool to apply the adjustments in the funding formula after the 45% funding contribution has been calculated by the National Health Funding Body. This would ensure that the full amount of revenue associated with private patient services was removed, resulting in no residual incentive for public hospitals to admit private patients.

IHPA is constrained in its ability to address this issue because of the phrasing of the NHRA and the complexity of the revenue flows between governments, insurers, doctors and hospitals and the incentives created from these revenue flows.

**IHPA’s decision**

Consistent with Clause B3(l) of the NHRA, IHPA’s ‘Public-private neutrality’ Pricing Guideline states that ABF pricing should not disrupt current incentives (in place prior to the commencement of the NHRA on 1 July 2012) for a person to elect to be treated as a private or a public patient in a public hospital. IHPA is constrained in the actions it can take regarding altering current incentives for public hospitals to treat private patients under the current NHRA and therefore will not undertake further work in this area.

### 5.6.2 Costing private patients in public hospitals

The costing of private patients in public hospitals is different to the pricing mechanism discussed before. The private patient correction factor was introduced as an interim solution to address missing private patient costs in the NHCDC. IHPA previously corrected this issue by inflating the cost of some patients (the ‘private patient correction factor’) to account for costs not reported in the NHCDC.

It is anticipated that the implementation of the Australian Hospital Patient Costing Standards (AHPCS) Version 4.0 will address this issue, meaning that the private patient correction factor is no longer required. 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.

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 of the NHCDC, IHPA requested hospitals to provide a detailed self-assessment describing their application of the AHPCS Version 4.0 costing standards and business rules. This was provided at either the state, territory or LHN level. The assessment included information relating to how private patients were costed in public hospitals.

**IHPA’s decision**

IHPA will retain the Private Patient Correction Factor for NEP20.

**Next steps and future work**

An assessment of how each jurisdiction has complied with AHPCS Version 4.0 will be included in the Independent Financial Review of the NHCDC.

IHPA will continue to investigate phasing out the Private Patient Correction Factor for NEP21.
Data collection
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.

Guided by the single submission, 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 ANACC.

IHPA has already commenced phasing out of aggregated non-admitted data reporting. IHPA will continue to work with states and territories to identify any specific services which may need further time to transition from aggregate non-admitted data reporting.

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 (Cwlth). 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 the National Benchmarking Portal (NBP) which contains activity, cost and HAC rate data at a hospital level. Access to the NBP is available to state and territory health departments, with access control currently 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 the NBP publicly available to allow this important data set to be used by a wider audience including clinicians, hospital managers and researchers.
IHPA’s decision

IHPA will work with states and territories through its Jurisdictional and Technical Advisory Committees over the coming year to address safeguards and develop educational resources to enable public access to the NBP by the end of 2020.

Next steps and future work

IHPA will consult with states and territories as well as non-government stakeholders through its Jurisdictional, Stakeholder and Technical Advisory Committees to develop timeframes to expand access to the NBP. IHPA will also develop resources to educate users about NBP data and how it should be interpreted.

IHPA will progress plans to release reports on subjects that are relevant to IHPA functions under the NHRA such as the average cost of hospital services and the impact of funding adjustments for HACs.

6.4 Individual Healthcare Identifier (IHI)

The IHI is a personal identifier that was introduced to support the My Health Record system. IHPA has previously detailed the value of introducing the IHI into national data collections, to support funding innovations.

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 (see 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; and
- Consideration of innovative funding models, such as bundled payments and capitation models (see Chapter 9).

Whilst states and territories are generally supportive of a unique patient identifier, there is still a reluctance to provide the IHI as part of national data collections. Feedback indicates that there is some concern regarding resources required to collect the IHI, such as software and training. However, it was not clear from the submissions received the extent of the costs this would entail. In general, states and territories were wary of an ‘incentive’ or an adjustment based on the collection of an IHI with each activity.

IHPA’s decision

IHPA will continue to discuss incentive payments to recognise the legitimate additional costs associated with provision of the IHI in national data sets.
Next steps and future work

IHHA recognises that routine collection of the IHI is a critical prerequisite to progress work relating to alternative funding models. IHHA will continue to work with all jurisdictions, other national agencies and national data committees to progress the inclusion of the IHI in the national data collections.

6.5 Patient reported outcome measures

Patient Reported Outcomes Measures (PROMs) are questionnaires via 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 function, symptom severity and overall quality of life.

In Australia, PROMs are not yet embedded in routine measurement at a national level, however responses to the Consultation Paper from a range of stakeholders highlighted initiatives to collect PROMs at a state-wide or local level. These initiatives are detailed in the Consultation Report.

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 into 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. 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 forefront. 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.

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 that incorporated the endorsed Operating Principals 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 Commonwealth Department of Health has recently sought feedback 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’.

Next steps and future work

IHHPA will continue to monitor the progress made by international agencies and work closely with the Commission and the Commonwealth Department of Health on a national CQR strategy and with stakeholders via its advisory committees and relevant data committees to identify opportunities to incorporate PROMs into national datasets.
Treatment of other Commonwealth programs
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 (PBS) 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 that contribute to the production of final blood products are included in the patient costing process.

The 2019–20 Commonwealth Budget included changes to the PBS’s policy around drugs covered under Section 85 of the National Health Act 1953 (Cwth) (also known as the ‘General Schedule’). The PBS wholesale mark-up for private and public hospital pharmacies is being aligned with community pharmacies. This change commenced on 1 October 2019.

IHPA’s decision

IHPA will work with the Commonwealth Department of Health and jurisdictions to ensure the NEP20 cost model accounts for recent changes to the PBS Section 85 reimbursement rules.

Next steps and future work

IHPA will assess the impact of any changes to pharmacy dispensing practices and costs as part of its annual NHCDC process and development of the National Pricing Model.
Setting the National Efficient Cost
8 Setting the National Efficient Cost

8.1 Overview

IHPA developed the NEC for hospitals with activity levels that are too low 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 currently 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.

IHPA has worked with its Small Rural Hospital Working Group to shadow 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 component. Under this approach, the fixed component decreases while the variable component increases, reflecting volume of activity. Awareness of hospital activity volume increases without exposing hospitals to ‘shock’ when they move from block funding to ABF. IHPA has worked with stakeholders throughout 2019 to develop the ‘fixed-plus-variable’ model and will prepare a report detailing the impact of the change in the model before releasing NEC20. Throughout this process, stakeholders were supportive of pricing the ‘fixed-plus-variable’ model for NEC20.

IHPA’s decision

IHPA will use the ‘fixed-plus-variable’ model for NEC20.

Next steps and future work

IHPA will continue to work with its Small Rural Hospital Working Group as it implements the ‘fixed-plus-variable’ model for NEC20, and provide regular reports through its committee process.
Alternative funding models
9 Alternative funding models

9.1 Overview
There is a growing discussion in Australia, and internationally, about the need to increase the focus on delivering value-based health care to patients. Stakeholders strongly supported the inclusion of an addition to the Pricing Guidelines 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. However, it is also clear that the Pricing Guidelines and the current NHRA have a focus on the pre-eminence of ABF which poses some challenges for implementing alternative funding models.

Feedback received through the Consultation Paper encouraged IHPA to investigate alternative funding models that would support innovative ways to manage hospital avoidance with patient outcomes and experience at the forefront of care delivery. These included capitation models and bundled pricing approaches. The challenge for IHPA is not to expand hospital avoidance activity but to set incentives that encourage better health outcomes and patient experiences while maintaining technical efficiency.

Further information on the various alternative funding model initiatives being pursued by states and territories and a number of options for bundled payments are discussed in detail in the Consultation Report.

IHPA will continue to work with stakeholders via its advisory committees to investigate these models, including how they could be incorporated under the current ABF framework.

IHPA’s decision
IHPA will continue to investigate value-based health care funding models and look at how ABF can incorporate funding options for more innovative patient-centric models of care.

Next steps and future work
IHPA will develop a roadmap towards adopting alternative funding models, including selected clinical bundles, in close consultation with its Clinical and Jurisdictional Advisory Committees.

However, progression of many projects on the roadmap will be dependent on the availability of a unique patient identifier. IHPA will continue to work with states and territories to progress the inclusion of the IHI in the national data collections.

IHPA’s recently completed Global Horizon Scan explored alternative funding models being developed internationally with a focus on value-based funding options. IHPA will explore a number of options highlighted in this report specifically relating to capitation models and bundled pricing. IHPA will also continue to work with jurisdictions to look at hospital avoidance programs such as the Victorian HealthLinks program, in the context of the Australian ABF framework.
Pricing and funding for safety and quality
10.1 Overview

In 2017, all Australian governments signed the Addendum to the NHRA. 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 followed a four-year program of collaborative work between IHPA and the Commission to incorporate 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, HACs and avoidable hospital readmissions.

Funding adjustments related to sentinel events were introduced in July 2017, followed in July 2018 by funding adjustments for HACs.

IHPA is currently analysing three options of funding adjustments to reduce avoidable hospital readmissions. These are being shadowed over a 24-month period.

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 has specified that an episode of care including a sentinel event is not funded. As sentinel events are not currently reported in national datasets, states and territories submit an additional data file identifying episodes where a sentinel event occurred. A zero 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’s decision

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 (CCAG). Version 2.0 of the HACs list has been released and includes updates to delirium, renal failure, pressure injuries, cardiac complications, respiratory complications, third and fourth degree perineal tears and neonatal birth trauma. 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. The HACs list is published on the Commission’s website.

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 are available through IHPA’s NBP to enable hospitals to benchmark and assist in driving improvements to patient outcomes.

Stakeholder feedback largely noted that it was too early to determine the impacts of a funding approach to improving HACs as fully coded data has not yet flowed through the system. However, anecdotal evidence would suggest that the funding approach has raised the profile of HACs and created a platform for discussion.

Stakeholder feedback also demonstrated a lack of communication in relation to how the funding mechanism works in that an improvement in HACs rates can result in a financial gain.
IHPA’s decision

IHPA will use HAC list Version 2.0, published on the Commission’s website.

Next steps and future work

IHPA will continue to work with its committees to gain a greater understanding of the impacts of the introduction of the HAC funding approach. IHPA will continue to work with its stakeholders to provide greater education around the funding impact of HACs and how funding adjustments are applied. This will include plans to produce a report on HAC funding impacts in line with its commitment to provide more access to public hospital data.

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 health care-associated infection). The Commission will also continue to consider the inclusion of mental health specific conditions on the HACs list.
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 (AHMAC) approved the list of avoidable hospital readmissions developed by the Commission. The current 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 foreshadowed in the Pricing Framework 2019–20, IHPA commenced analysis of three funding options from 1 July 2019 for a 24-month period.

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 includes 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 Pricing Framework 2019–20. IHPA met with NSW to discuss a proposed fourth option. NSW proposed benchmarking the three options against each other so that readmission rates and funding impacts were transparent across each option and that hospitals could access this analysis prior to any decisions being made. It was agreed that this approach is not an alternative funding approach, but an additional mechanism for analysing the three proposed funding options currently being considered. NSW agreed that adding avoidable readmission rates to the National Benchmarking Portal and providing a comparison under each option should address this.
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.

Next steps and future work

Throughout the shadow period, IHPA will provide analysis through quarterly reports to its advisory committees. The shadow period will allow IHPA to test the proposed options to understand the activity and funding impacts. To support the monitoring of avoidable hospital readmissions rates, IHPA will include avoidable hospital readmission rates in the NBP.

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 allows investigation of a broader scope of avoidable readmission conditions than the current list of avoidable hospital readmissions.

IHPA received a number of suggestions for inclusion in the technical requirements for the software that are discussed in more detail in the Consultation Report.

Next steps and future work

Stakeholder feedback will help inform the technical requirements for the software IHPA is developing to help identify potentially avoidable hospital readmissions.