



Pricing Framework for Australian Public Hospital Services 2021–22

March 2021

Independent Hospital Pricing Authority



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Table of contents

1	Introduction.....	3
2	Addendum to the National Health Reform Agreement 2020–2025	5
3	Impact of COVID-19	9
4	The Pricing Guidelines	11
5	Scope of public hospital services	15
6	Classifications used to describe and price public hospital services.....	17
7	Setting the national efficient price for activity based funded public hospitals.....	23
8	Data collection	28
9	Treatment of other Commonwealth programs	30
10	Setting the national efficient cost.....	32
11	Alternative funding models.....	34
12	Pricing and funding for safety and quality	38

Glossary

ABF	Activity Based Funding
ACHI	Australian Classification of Health Interventions
ACS	Australian Coding Standards
ADRG	Adjacent Diagnoses Related Group
AECC	Australian Emergency Care Classification
AHMAC	Australian Health Ministers Advisory Council
AMHCC	Australian Mental Health Care Classification
ANACC	Australian Non-Admitted 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
CHC	Council of Australian Governments Health Council
COVID-19	Coronavirus Disease 2019
HAC	Hospital Acquired Complication
HCP	Hospital Casemix Protocol
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification
ICD-11	International Classification of Diseases 11th Revision
IHI	Individual Healthcare Identifier
IHPA	Independent Hospital Pricing Authority
LHN	Local Hospital Network
MBS	Medicare Benefits Schedule
MBUs	Mother and Baby Units
MHPoC	Mental Health Phase of Care
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
The Addendum	Addendum to the National Health Reform Agreement
The Administrator	Administrator of the National Health Funding Pool
The Commission	Australian Commission on Safety and Quality in Health Care



1

Introduction

1

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. Ordinarily, the Pricing Framework for Australian Public Hospital Services (the Pricing Framework) is released prior to the NEP and NEC which are released in early March.

This year the Pricing Framework is being released alongside the NEP and NEC Determinations. This is to ensure the Independent Hospital Pricing Authority's (IHPA) consultation in developing the Pricing Framework included feedback on the Addendum to the National Health Reform Agreement 2020–25 (the Addendum). The adjusted timeline for release has also allowed IHPA to conduct early consultation on the emerging issues resulting from the COVID-19 pandemic.

The Addendum reaffirms IHPA's primary function as an independent, national agency responsible for calculating and determining the NEP for public hospital services in Australia. The Addendum has implications for IHPA's functions, including determining pricing arrangements for private patients in public hospitals, avoidable hospital readmissions and innovative funding models, which will be addressed in this Pricing Framework.

IHPA released the Consultation Paper on the Pricing Framework for Australian Public Hospital Services 2021–22 (the Consultation Paper) for a 30-day public comment period on 9 September 2020. The Consultation Paper set out the key issues for consideration in preparation of the Pricing Framework. The Pricing Framework has been informed by stakeholder feedback on the Consultation Paper.

IHPA received 35 submissions to the Consultation Paper including responses from seven jurisdictions (the Australian Capital Territory was in caretaker at the time of Consultation Paper's release and was unable to provide a submission). These submissions are available on the IHPA website. A Consultation Report on their content, including commentary regarding how IHPA reached its decisions for 2021–22 can also be found on IHPA's website.

Stakeholders provided valuable feedback around the impact that COVID-19 has had on service delivery, activity levels and models of care. Stakeholders noted that COVID-19 had led to an initial reduction in activity levels as a result of suspension of elective surgery and some other services. States and territories reported an increase in telehealth and other virtual health care activities as the pandemic progressed.

Stakeholders provided feedback on progress towards pricing public hospitals services using new classifications, including the Australian Emergency Care Classification and the Australian Mental Health Care Classification. Stakeholders also provided feedback on IHPA's proposed pricing model for avoidable hospital readmissions.

IHPA will continue to work with jurisdictions through its Jurisdictional and Technical Advisory Committees to understand how COVID-19 is impacting activity levels and costs and to implement changes resulting from the Addendum.

A large green graphic consisting of two overlapping shapes. The left shape is a rounded rectangle with a white number '2' inside. The right shape is a larger, more complex shape that resembles a stylized arrow or a rounded rectangle with a pointed right side, overlapping the first shape.

2

Addendum to the National Health Reform Agreement 2020–2025

2

Addendum to the National Health Reform Agreement 2020–2025

In May 2020, the Commonwealth and all state and territory governments signed the [Addendum to the National Health Reform Agreement 2020–2025](#) (the Addendum). The Addendum has a range of policy implications for IHPA and the national pricing model, however the below key points remain from the previous iteration of the National Health Reform Agreement (NHRA):

- The national bodies (including IHPA) and their functions remain independent
- Activity based funding (ABF) remains the basis for Commonwealth funding except where ABF is not appropriate or practical
- The 6.5 per cent Commonwealth funding cap remains in place
- The pricing approach for safety and quality in relation to both sentinel events and hospital acquired complications has been retained.

Significant changes arising from the Addendum and IHPA’s approach to implementing new arrangements are outlined below.

Note: Unless otherwise stated, all references to ‘the Addendum’ in this Pricing Framework refer to the [Addendum to the National Health Reform Agreement 2020–25](#).

2.1. Working with Australian Governments

The Addendum has clauses outlining new arrangements for the national funding bodies, and measures to strengthen the links between IHPA, the Australian Health Ministers’ Advisory Council (AHMAC) and the Council of Australian Governments Health Council (CHC)¹. These measures include:

- Clause B10, which outlines that IHPA will consult with CHC on changes that materially impact the application of the national funding model
- Clauses B37–B40 outline a requirement that IHPA must provide a Statement of Impact to the Commonwealth, states and territories (via CHC) when material changes are proposed to the national funding model. This includes changes that will have a major impact on any one party or materially redistribute activity between service streams. The Statement of Impact must be timely in relation to the matter raised and:
 - include a risk assessment of the proposed changes or adjustments
 - outline appropriate transition arrangements
 - be informed by consultation with the parties
 - have input from the Administrator of the National Health Funding Pool.

¹ The Council of Australian Governments has been disbanded, and the ongoing status of CHC is to be determined at a future time. IHPA will provide further advice on how it will fulfil the requirements of the Addendum once national health committee arrangements are known.

2.2. Shadow pricing periods

Clause A42 of the Addendum outlines transitional arrangements when developing new ABF classification systems or costing methodologies. Those transitional arrangements are to last two years or a period agreed with the Commonwealth and a majority of states and territories, and include shadow pricing classification system changes or where pricing is based on a costing study. Where states and territories participate fully in shadow pricing and provide their best available data, there will be no retrospective adjustments to funding (except as a result of service volume reconciliations).

Other changes to the Addendum include a requirement that IHPA develop business rules and a process around retrospective adjustments. That includes ensuring the 45-day consultation period with jurisdictions prior to any decision on retrospective adjustments being made. It also notes the above requirement for the provision of a Statement of Impact from IHPA to all impacted parties.

IHPA has consulted with jurisdictions to develop business rules and parameters for determining the significance and impact of classification and costing changes.

IHPA's decision

IHPA has consulted with all jurisdictions to seek feedback on the interpretation of these new clauses. IHPA developed the 'Alterations to the National Pricing Model Framework' (the Alterations Framework) which addresses the new consultation requirements. The Alterations Framework sets out the processes by which IHPA will seek guidance from the jurisdictions, IHPA's policy around shadow pricing and when IHPA will conduct additional consultation with CHC. The Alterations Framework includes the Statement of Impact, which IHPA utilised to consult on the draft National Efficient Price Determination 2021–22.

2.3. New high cost, highly specialised therapies

Clauses C11 and C12 of the Addendum contain specific arrangements for new high cost, highly specialised therapies recommended for delivery in public hospitals by the Medical Services Advisory Committee.

These arrangements include the following:

- The Commonwealth will provide a contribution of 50 per cent of the growth in the efficient price or cost (including ancillary services), instead of 45 per cent.
- They will be exempt from the national funding cap for a period of two years from the commencement of service delivery of the new treatment.

The Medical Services Advisory Committee has recommended the following high cost therapies for delivery in public hospitals:

- Kymriah® – for the treatment of acute lymphoblastic leukaemia in children and young adults.
- Kymriah® or Yescarta® – for the treatment of diffuse large B-cell lymphoma, primary mediastinal large B-cell lymphoma and transformed follicular lymphoma.
- Qarziba® – for the treatment of high risk neuroblastoma.
- Luxturna™ – for the treatment of inherited retinal disease.

The Commonwealth Government is establishing or has established Deeds of Agreement with the sponsors of each product.

IHPA's decision

IHPA will work with jurisdictions to develop an approach for funding new high cost, highly specialised therapies. As part of this process, IHPA will review the *Impact of New Health Technology Framework* to outline the process for incorporating new high cost, highly specialised treatments into the classification systems and the national pricing model.

IHPA will include expenditure amounts for Kymriah®, Yescarta®, Qarziba® and Luxturna™ in the National Efficient Cost Determination 2021–22 on the advice of states and territories.

2.4. Other issues arising from the Addendum

The Addendum sets parameters for how funding for private patients in public hospitals should be considered. Clause A13 states the parties agree to the principle that both the Commonwealth, state and territory funding models will be financially neutral with respect to all patients, regardless of whether they elect to be treated as a private or public patient. Clause A44 specifies that in determining the cost weight for private patients, IHPA will adjust the price to the extent required to achieve overall payment parity between public and private patients in the relevant jurisdiction. These adjustments will take into account all hospital private patient revenue and will be subject to back-casting. This is discussed in detail in Chapter 7.

The Addendum also stipulates requirements for a pricing model for reducing avoidable hospital readmissions. This is discussed in detail in Chapter 12.

3

Impact of COVID-19

COVID-19 has resulted in significant and potentially long lasting changes to models of care and service delivery in Australian public hospitals. It is important that these changes are adequately accounted for in the national pricing model as quickly as possible.

3.1. Implications of COVID-19 on the pricing of public hospital services

IHPA needs to consider the impact of COVID-19 on the overall delivery of all public hospital services in order to ensure the national pricing model reflects current models of care.

IHPA will continue to work with jurisdictions to understand changes occurring in models of care. In response to the Consultation Paper, jurisdictions outlined some common challenges including:

- lower patient volumes due to reduced elective surgery and emergency department presentations, potentially resulting in cost increases per patient in the short term
- changes to how patients access services (for example, increased use of telehealth and hospital-in-the-home)
- longer term changes to service delivery required to implement COVID-safe measures (for example, additional personal protective equipment and staffing to support social distancing) which will also have implications for costs.

Some of the services that have been expanded are already priced by IHPA through the national pricing model. For example, hospital-in-the-home services are priced under the admitted acute care pricing model. Where non-admitted care is delivered via telehealth, it is priced under the non-admitted care pricing model.

Data underpinning a given national efficient price (NEP) Determination has a three year time lag. For example, for the NEP Determination 2021–22 (NEP21) IHPA will use costed activity data based on 2018–19 models of care. These costs are indexed forward to 2021–22.

IHPA's decision

While jurisdictions identified a number of areas for consideration, there is currently no data to support changes to the national pricing model for NEP21. IHPA will continue to finalise the collection and review of 2019–20 activity based funding activity data and will receive the National Hospital Cost Data Collection for this period in early 2021.

Next steps and future work

IHPA will continue to work with jurisdictions to understand the impact of COVID-19 on service delivery, activity levels and models of care. Any changes to the national pricing model for future NEP iterations will require accurate cost and activity data.

IHPA will assess the impacts of COVID-19 on patient complexity over the long term as updated data is received.



4

The Pricing Guidelines

4

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 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.

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, and can be seen in **Figure 1**.

IHPA reviewed the Pricing Guidelines in light of the new Addendum to the National Health Reform Agreement 2020–2025 (the Addendum) and found they largely continue to reflect the principles and reforms the Addendum outlines. In the Consultation Paper IHPA proposed a change to the *Public-private neutrality* Guideline to reflect the requirements of the Addendum. IHPA proposed changing it from:

'Activity based funding (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'

To:

'ABF pricing should ensure that there is funding neutrality for the service provider for treating a person who elects to be treated as a private or a public patient in a public hospital.'

In response to the Consultation Paper some stakeholders recommended further changes to the *Public private neutrality* Guideline, as well as other Pricing Guidelines including *Fostering clinical innovation*, *Promoting value*, *ABF pre-eminence*, *Timely-quality care*, *Patient-based* and *Stability*.

The suggested changes sought alterations to the Pricing Guidelines to bring them into line with the Addendum, increase the focus on supporting the trialling of new models of care and support more hospital-based adjustments to the national efficient price where supported by evidence.

Further detail on the feedback provided by stakeholders on the Pricing Guidelines can be found in the Consultation Report, in addition to the full submissions published on IHPA's website.

In updating the Pricing Guidelines, IHPA considered its statutory obligations, changes resulting from the Addendum and feedback received from stakeholders. The changes outlined below reflect IHPA's intention to give improved flexibility to service providers to adapt ABF to new, innovative funding models when appropriate. The changes reflect IHPA's obligations under the Addendum.

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 updated the Pricing Guideline *ABF pre-eminence* incorporating stakeholder feedback as follows:

- **ABF pre-eminence:** *'ABF should be used for funding public hospital services wherever practicable and compatible with delivering value in both outcomes and cost.'*

IHPA has updated the Pricing Guidelines *Patient-based* incorporating stakeholder feedback as follows:

- **Patient-based:** *'Adjustments to the standard price should be, ~~as far as is practicable,~~ based on patient-related rather than provider-related characteristics wherever practicable.'*

IHPA has updated the Pricing Guideline *Public-private neutrality* to reflect the proposed wording in the Consultation Paper as follows:

- **Public-private neutrality:** *'ABF pricing should ensure that payments a local hospital network (LHN) receives for a public patient should be equal to payments made for a LHN service for a private patient.'*

Next steps and future work

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.

Figure 1: The 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 and recognise the legitimate and unavoidable costs faced by some 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 supports innovative and alternative funding solutions that deliver efficient, high quality, patient-centred care.
- **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 and compatible with delivering value in both outcomes and cost.
- **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 based on patient-related rather than provider-related characteristics wherever practicable.
- **Public-private neutrality:** ABF pricing should ensure that payments a local hospital network (LHN) receives for a public patient should be equal to payments made for a LHN service for a private patient.



5

Scope of public hospital services

5

Scope of public hospital services

In August 2011, Australian governments agreed to be jointly responsible for funding efficient growth in public hospital services. IHPA was assigned the task of determining whether a service is ruled 'in-scope' as a public hospital service and therefore eligible for Commonwealth funding under the National Health Reform Agreement (NHRA).

5.1 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 national efficient price 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.

This model has been retained by the Addendum to the NHRA 2020–25 (the Addendum). The Addendum notes that IHPA may update the criteria for inclusion on the General List to reflect innovations in clinical pathways (clause A21).

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 services, including hospital-in-the-home programs
- all emergency department services provided by a recognised emergency department service
- other non-admitted services.

The General List Policy does not exclude public hospital services provided in settings outside a hospital (for example, 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 a state or territory are 'in-scope' and eligible for Commonwealth funding, based on criteria and empirical evidence provided by that state and territory. These criteria are outlined in the General List Policy.

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

Stakeholders recommended a review of the General List Policy to ensure:

- changes in the provision of services introduced due to COVID-19 and funding of services in all settings are appropriately covered
- eligibility criteria are reviewed as IHPA develops innovative models of care (covered further in Chapter 11) in order to reflect the *Fostering clinical innovation* Pricing Guideline.

Next steps and future work

IHPA will consider stakeholder feedback and changes resulting from the Addendum in its annual review of the General List Policy.



6

Classifications used to describe and price public hospital services

6

Classifications used to describe and price public hospital services

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 activity based funding (ABF) as they help to group patients with similar conditions and complexity, resulting in groups that 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
- Teaching and training.

6.1. 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 related health problems
- Australian Classification of Health Interventions (ACHI) to code procedures and interventions
- Australian Coding Standards (ACS), a supplement to ICD-10-AM and ACHI, to assist clinical coders in using the classifications.

Next steps and future work

IHPA will continue to develop AR-DRG Version 11.0 and ICD-10-AM/ACHI/ACS Twelfth Edition.

IHPA's decision

IHPA will use AR-DRG Version 10.0 and ICD-10-AM/ACHI/ACS Eleventh Edition to price admitted acute patient services for the National Efficient Price (NEP) Determination 2021–22 (NEP21).

6.1.1. Review of admitted acute care classification systems

In 2019, IHPA commissioned a review of the processes involved in the development of the classifications for acute care, which was delivered in early 2020.

The review identified that while the acute care classification development process was functioning well, there are four key opportunities for improvement to provide the most benefit to the health care system and stakeholders that use and implement the classifications. These opportunities include:

- extending the current development cycle from two years to three years
- embedding principles to focus the development approach
- streamlining clinical and technical input into the classifications
- enhancing education material and other support implementation.

IHPA will continue to work with jurisdictions and key stakeholders through its advisory committees and working groups to progress the opportunities outlined above.

6.1.2. Phasing out support for older AR-DRG versions

IHPA is committed to phasing out support for old AR-DRG versions. IHPA has developed a revised timeline to accommodate the extended three-year development cycle as detailed in Table 1.

Table 1: Timeline of AR-DRG phase out

AR-DRG version	Original proposed phase out date	New proposed phase out date	Most current AR-DRG version
Version 5.0, 5.1, 5.2, 6.0, 6.x and 7.0	1 July 2021	1 July 2022	Version 11.0

6.1.3. Release of ICD-11

The World Health Organization released the eleventh revision of the International Classification of Diseases (ICD-11) in June 2018. ICD-11 was approved by the World Health Assembly in May 2019. The Australian Institute of Health and Welfare has explored the feasibility and potential timeframe for implementation of ICD-11 in Australia, however Commonwealth, state and territory health ministers are yet to make a decision on the implementation of ICD-11.

IHPA's decision

IHPA will adopt a three year development cycle for the acute care classifications.

Next steps and future work

IHPA will consult with stakeholders in the private sector to discuss the implications of IHPA withdrawing support for older versions of the AR-DRG classification. IHPA notes that any new agreements between private hospitals and health funds should use the most recent AR-DRG version.

IHPA will explore the readiness of ICD-11 for implementation in admitted care by undertaking a gap analysis that includes mapping ICD-10-AM to ICD-11. IHPA will review the impact of moving to ICD-11 on the AR-DRG classification and determine whether remediation is required to use ICD-11 within AR-DRGs.

6.2. 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 which are not classified using the Australian National Subacute and Non-Acute Patient (AN SNAP) classification are classified using AR-DRGs.

IHPA's decision

IHPA will use the AN-SNAP classification Version 4.0 to price admitted subacute and non-acute services for NEP21.

Next steps and future work

States and territories have made significant progress in their collection of subacute activity and cost data. IHPA is working with its Subacute Care Working Group to continue to progress development of AN-SNAP classification Version 5.0. It is anticipated that a draft AN-SNAP classification Version 5.0 will be released for public consultation in early 2021.

6.3. Non-admitted care

IHPA is developing the Australian Non-Admitted Care Classification (ANACC). ANACC will be used to better describe patient characteristics and the complexity of care in order to more accurately reflect the costs of non-admitted services.

The classification 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.

IHPA commenced a national costing study in 2018 to collect non-admitted (including subacute) activity and cost data and test a shortlist of variables and potential classification hierarchies.

The impact of COVID-19 on hospitals participating in the costing study has resulted in the study being suspended. Data collection ceased in March 2020 with a decision reached in August 2020 to suspend the study.

The Tier 2 Non-Admitted Services Classification is the existing classification system that 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. IHPA continues to undertake maintenance work on the Tier 2 Non-Admitted Services Classification while ANACC is being developed.

IHPA has consulted with jurisdictions via its advisory committees on further refinements that could be made to the Tier 2 Non-Admitted Services Classification. One refinement will be implemented in the next version of the Tier 2 Non-Admitted Services Classification: the addition of a clinical nurse specialist/allied health led clinic in chronic pain management.

IHPA's decision

For NEP21, IHPA intends to continue using the Tier 2 Non-Admitted Services Classification Version 7.0 for pricing non-admitted services. IHPA will price one additional clinical nurse specialist/allied health led class in chronic pain management.

Next steps and future work

IHPA has used the information provided by stakeholders to determine an appropriate price for the new Tier 2 Non-Admitted Services Classification chronic pain management class.

Due to the impact of COVID-19 there will be delays to the ongoing development of the new non admitted care classification to replace the Tier 2 Non-Admitted Services Classification.

6.4. Emergency care

For the NEP Determination 2020–21 (NEP20), IHPA used Urgency Related Groups Version 1.4 to classify presentations to emergency departments and Urgency Disposition Groups Version 1.3 for presentations to emergency services. IHPA included shadow price weights for emergency department activities using the new Australian Emergency Care Classification (AECC) Version 1.0, with an intent to price using AECC Version 1.0 for NEP21.

The [IHPA Work Program 2020–21](#), published in June 2020 outlined IHPA's intention to continue supporting jurisdictions to improve data collection and reporting. It also noted that the AECC will continue to be refined, including consideration of potential new variables.

IHPA's decision

IHPA will use AECC Version 1.0 to price emergency department activities for NEP21. For NEP21, emergency services will continue to be priced using Urgency Disposition Groups Version 1.3.

Next steps and future work

IHPA will continue to work with states and territories to determine the feasibility of transitioning emergency services to the AECC, including the collection of a subset of diagnosis data using the [Emergency Department Principal Diagnosis Short List](#).

IHPA is undertaking a project to explore the additional variables collected in the Emergency Care Costing Study and the application of the refinement of the National Non-Admitted Patient Emergency Department Care national minimum data set. These include 'diagnosis modifiers' (conditions or states that contribute to a patient being more complex than expected given their diagnosis) and investigations such as imaging, pathology and diagnostic procedures performed in emergency departments.

IHPA acknowledges that there is a need for a stabilisation period after the implementation of the AECC Version 1.0 and will continue to support jurisdictions to improve data collection and reporting.

6.5. Mental health care

IHPA commenced shadow pricing admitted mental health services using the Australian Mental Health Care Classification (AMHCC) Version 1.0 for NEP20. The shadow price weights for admitted AMHCC end classes are outlined in the [Australian Mental Health Care Classification Pricing Feasibility Report](#). The pricing model for admitted mental health care is based on a fixed price for the majority of phases (inliers), with exceptionally short or long phase prices (outliers) adjusted based on the phase length.

The proposed pricing model for community mental health care uses a combination of different pricing models dependent on the type of phase. Assessment only phases are assigned a fixed price for the phase. The acute phases are priced using a per diem due to a shorter length of stay. Functional gain, intensive extended and consolidating gain phases are priced under a bundled monthly model to provide a single fixed price per month due to the longer length of stay.

In 2017–18, only one jurisdiction provided cost data for community mental health activity for NEP20 and as such, IHPA did not consider the developed price weights adequate for assessment of the impact of pricing these services in the community setting. The volume and coverage of community mental health data has improved substantially in 2018–19, with costed phase data now supplied by four jurisdictions (New South Wales, Victoria, Queensland and Tasmania).

6.5.1. Mother and baby units

IHPA has explored whether mother and baby units (MBUs) can be accurately identified to determine whether cost differences exist between MBUs and other mental health units. These investigations have highlighted challenges with identifying MBUs in activity data. Of those identified, MBUs are generally well priced.

IHPA's decision

IHPA will continue to use Australian Refined Diagnosis Related Groups Version 10.0 to price admitted mental health care for NEP21. IHPA will also continue to shadow price admitted mental health care using AMHCC for NEP21.

IHPA will use AMHCC Version 1.0 to shadow price community mental health care for NEP21.

IHPA will not make an adjustment for MBUs in NEP21, as analysis has indicated that the identification of costed data is extremely limited, with very large variation in cost per weighted separation. Therefore, the data is not robust enough for setting an adjustment.

Next steps and future work

IHPA will continue to work with jurisdictions to make ongoing improvements to the AMHCC.

IHPA intends to use AMHCC Version 1.0 to price admitted mental health care for the NEP Determination 2022–23 (NEP22). This is expected to drive more rapid improvements in the quality of mental health care data in the admitted setting.

IHPA will consider pricing community mental health using the AMHCC for NEP22, subject to a review of the quality of data submitted by jurisdictions and consultation with CHC as required under the Addendum.

6.6. 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 an implementation plan for the Australian Teaching and Training Classification (ATTC), however implementation of the ATTC has not been prioritised by jurisdictions.

IHPA's decision

For NEP21, IHPA will continue to determine block funding amounts for teaching, training and research activity based on states and territories' advice.

Next steps and future work

IHPA will continue to work with jurisdictions on the timeframe for implementation of shadow pricing, and investigating alternative models to block funding until the ATTC can be enabled.



7

Setting the national efficient price for activity based funded public hospitals

7

Setting the national efficient price for activity based funded public hospitals

Under clause A7 of the Addendum, IHPA is required to determine the national efficient price (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.

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.

7.1. Adjustments to the national efficient price

Clauses A46 and A47 of the National Health Reform Agreement (NHRA) Addendum 2020–25 (the Addendum) require IHPA to make adjustments to the NEP. Clause A47 of the Addendum requires IHPA to determine adjustments to the NEP while having “regard to legitimate and unavoidable variations in wage costs and other inputs which affect the costs of service delivery”. Examples of other inputs include hospital type and size, regional or remote status and patient complexity.

In determining adjustments to 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
- reviews existing adjustments, with the aim of discontinuing adjustments associated with input costs or that are facility-based when it is feasible.

For the NEP Determination 2021–22 (NEP21), IHPA reviewed the need for an adjustment for patient transport in rural areas, including medical transfers and other inter-service transport in rural areas. Patient travel costs are highest for remote patients, and high patient travel costs for these patients are adjusted for in the existing patient residential and treatment remoteness adjustments. IHPA assessed whether these can be refined to more accurately identify patients who will attract high travel costs. This assessment found that patient transport costs in rural areas are already captured in the national pricing model.

IHPA's decision

IHPA does not intend to make additional adjustments to the pricing model for NEP21.

Next steps and future work

Queensland requested that IHPA pursue the recommendation from the independent review of the national pricing model (the Fundamental Review) to consider revising the methodology for setting the inlier bounds for admitted patients.

IHPA will review its methodology for calculating inlier bounds for Diagnosis Related Group length of stay for the NEP Determination 2022–23 (NEP22). IHPA will consult with jurisdictions through its Jurisdictional and Technical Advisory Committees as part of the NEP22 development process. For technical information relating to the proposed change, please refer to the Fundamental Review on IHPA's [website](#).

7.2. Harmonising price weights across service settings

The Pricing Guidelines include System Design Guidelines to inform options for the design of activity based funding and block funding arrangements, including an objective for price harmonisation whereby pricing should facilitate best practice provision of appropriate site of care.

IHPA already harmonises a number of price weights across the admitted acute and non-admitted settings to ensure that similar services are priced consistently across settings. For example, IHPA harmonises price weights for gastrointestinal endoscopes as well as interventional imaging. 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.

In the Consultation Paper IHPA identified that it was exploring harmonisation for two Australian Refined Diagnosis Related Group codes and their Tier 2 Non-Admitted Services Classification clinic counterparts. These were:

- L61Z – Haemodialysis with 10.10 – Dialysis
- R63Z – Chemotherapy with 10.11 – Chemotherapy

IHPA's decision

IHPA notes that in principle if the same service is being delivered in the admitted and non-admitted setting then price harmonisation is appropriate. However, in this instance IHPA will consult further with jurisdictions on potential unintended consequences of pursuing price harmonisation for dialysis and chemotherapy.

IHPA will not progress with harmonising dialysis and chemotherapy for NEP21.

Next steps and future work

IHPA will consult with jurisdictions through its Jurisdictional and Technical Advisory Committees to consider further investigation of price harmonisation for dialysis and chemotherapy. IHPA will also consider other services for price harmonisation for NEP22.

7.3. Setting the national efficient price for private patients in public hospitals

Public hospitals may receive revenue for delivering patient care from funding sources other than through the NHRA. For example, patients admitted to public hospitals may opt to use their private health cover. Clauses A13, A43 and A44 of the Addendum set new parameters for how funding for private patients in public hospitals should be considered.

Prior to NEP21, IHPA applied two adjustments for private patients. These were:

- 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
- The Private Patient Accommodation Adjustment: further reduces the National Weighted Activity Unit (NWAU) for a private patient by accounting for the Default Bed Day benefit paid by the insurer to the hospital.

However, each state and territory has different arrangements in place to determine the payments made to public hospitals to treat private patients. The Addendum states that IHPA must calculate a reduced price, taking into account all of the other revenue sources available to the hospital.

For the purpose of implementing the clauses in the Addendum, IHPA defines financial neutrality (per clause A13) and payment parity (per clause A44) in terms of revenue per NWAU, (excluding private patient adjustments). That is:

The sum of revenue a local hospital network (LHN) receives for public patient National Weighted Activity Unit (NWAU) (Commonwealth and state or territory activity based funding (ABF) payments) should be equal to payments made for a LHN service for private patient NWAU (Commonwealth and state or territory ABF payments, insurer payments and Medicare Benefit Schedule (MBS) payments).

To determine funding under the Addendum, IHPA will use up to date insurer benefit and jurisdiction payment data from the Hospital Casemix Protocol (HCP) data set at the time of reconciliation by the Administrator of the National Health Funding Pool (the Administrator). However, whilst HCP data is suitable for use in pricing services for private patients in public hospitals, it is not currently suitable for reconciliation purposes and is not reported in a practicable timeframe for this purpose. IHPA understands that the Commonwealth is working with states and territories to resolve this.

7.3.1. State-specific Private Patient Service Adjustments

As an interim approach, IHPA will calculate state-specific Private Patient Service Adjustments prospectively.

In the event that revenue paid to a LHN does not meet the neutrality definition above, the Administrator will be required to make additional deductions to Commonwealth payments to ensure that neutrality is achieved. This approach is necessary given the different local funding models to manage private patients in each jurisdictions' hospitals.

Adopting this definition allows IHPA and the Administrator to transparently assess whether funding arrangements within each state and territory are financially neutral with regards to private patients in public hospitals when calculating Commonwealth funding.

IHPA's decision

For NEP21, IHPA will implement state-specific private patient adjustments, and provide support to the Administrator in calculating further adjustments that may be required to achieve funding neutrality as required under the Addendum.

Next steps and future work

IHPA will work with jurisdictions to implement this updated methodology for calculating NWAU payments for private patients in public hospitals. IHPA will work with all jurisdictions to improve the quality and timeliness of the HCP data sets so that they can be used in the reconciliation process in future years.

7.4. Costing private patients in public hospitals and the private patient correction factor

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

The private patient correction factor was introduced as an interim solution for the issue of missing private patient costs in the NHCDC. The 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.

The implementation of Australian Hospital Patient Costing Standards Version 4.0 should have addressed the issue of missing costs in the NHCDC, meaning the private patient correction factor is no longer required. Stakeholders have previously supported phasing out the private patient correction factor when feasible. While the majority of jurisdictions continue to support phasing out the private patient correction factor, they note that the process of accounting for all missing costs in the NHCDC is ongoing.

IHPA's decision

IHPA will retain the private patient correction factor for NEP21 in all states and territories except the Northern Territory, where it will be removed.

Next steps and future work

IHPA will continue to investigate phasing out the private patient correction factor in remaining states and territories for NEP22.

8

Data collection

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 national efficient price (NEP) and national efficient cost Determinations.

Guided by the single submission, multiple use concept, IHPA is committed to the principle of data rationalisation as outlined in the Addendum to the National Health Reform Agreement 2020–25.

IHPA continues to advocate for the routine collection of the Individual Hospital Identifier (IHI) to provide greater transparency of the patient journey and to support implementation of new funding models. The limitations associated with the current lack of an IHI is addressed in greater detail in Chapter 11.

In the [Pricing Framework for Australian Public Hospital Services 2020–21](#), IHPA outlined its intention to make the National Benchmarking Portal (NBP) publicly available. IHPA is continuing to work to deliver this in 2021.

8.1. 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. Only patient level data is used by IHPA to determine the price weights in the NEP Determination.

The Administrator of the National Health Funding Pool (the Administrator) has advised his intention to phase out aggregate non-admitted activity reporting for funding and reconciliation purposes from 1 July 2021. IHPA supports the Administrator's proposal.

IHPA's decision

IHPA will only use the patient level data reported through the Non-Admitted Patient National Best Endeavours Data Set for activity based funding purposes from 1 July 2021. IHPA only uses patient level data to determine the price weights in the NEP Determination.

IHPA will make the NBP publicly available in 2021.

Next steps and future work

IHPA is continuing to work with jurisdictions and other stakeholders to ensure that a publicly available NBP works to enhance policy decisions and improve patient outcomes, while offering appropriate privacy protections.

IHPA will continue to work with jurisdictions, other national agencies and national data committees to progress the inclusion of the IHI in the national data collections.



9

Treatment of other Commonwealth programs

9

Treatment of other Commonwealth programs

To prevent a public hospital service being funded twice, clause A9 of the Addendum to the National Health Reform Agreement (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
- Pharmaceutical Reform Agreements – Efficient Funding of Chemotherapy (Section 100 funding).

The Australian Hospital Patient Costing Standards 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.

IHPA's decision

For the National Efficient Price Determination 2021–22, IHPA proposes no changes be made to the treatment of other Commonwealth programs.

10

Setting the national efficient cost

Setting the national efficient cost

IHPA developed the national efficient cost (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 activity based funding (ABF) rather than block funded amounts, increasing transparency of costs.

10.1. The ‘fixed-plus-variable’ model

Both ABF and block funding approaches cover services that are within the scope of the National Health Reform Agreement. 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.

In 2019, IHPA worked with its Small Rural Hospital Working Group to develop a ‘fixed-plus-variable’ model where the total modelled cost of each hospital is 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.

The new model addresses two key objectives. It removes the potential financial disincentive when shifting services from an ABF hospital to one that is block-funded. It is also more responsive to changes in activity levels in block-funded hospitals.

IHPA introduced the ‘fixed-plus-variable’ model for the NEC Determination 2020–21.

IHPA’s decision

IHPA will continue to use the ‘fixed-plus-variable’ model for NEC Determination 2021–22.

11

Alternative funding models

Activity based funding (ABF) has proved to be a very effective funding mechanism since it was introduced nationally for Australian public hospitals in 2012. ABF provides transparency of funding and allows the comparison of variation in cost across public hospitals nationally. This has led to improved technical efficiencies in the delivery of public hospital services.

Australian governments and health providers are increasingly recognising the need for integrated health care across the entire health system, with a greater focus on hospital admission-avoidance programs and funding that incentivises improving patient outcomes at an efficient cost.

States and territories are adopting their own approaches to patient-centred care through policies focussing on pathways of care and organisational change. This is particularly evident in New South Wales with its leading better value care initiative. However, the key challenge is adaptation of existing funding models that were not designed with flexibility in mind.

As outlined in the Pricing Framework for Australian Public Hospital Services 2020–21, IHPA has continued to investigate alternative funding models with a view to explore how the ABF system can incorporate funding options for more innovative patient-centred models of care.

11.1. Requirements under the Addendum

The Addendum to the National Health Reform Agreement 2020–25 (the Addendum) provides the foundation for IHPA to support work in investigating innovative models of care and trialling new funding arrangements.

The Addendum provides that the Commonwealth, states and territory governments will work together to explore trials of new and innovative approaches to public hospital funding, to improve efficiency and health outcomes. Specifically, Australian governments have agreed to:

- focus on the outcomes that matter to patients
- improve patient equity
- improve clinical outcomes
- deliver best-practice clinical care
- focus on the entire patient journey.

Under clauses A97–A101 of the Addendum, states and territories may enter into a bilateral agreement with the Commonwealth to seek a trial of an innovative funding model. The Addendum requires IHPA to develop a funding methodology for the Council of Australian Governments Health Council (CHC) for approval by April 2021 that does not penalise states undertaking trials of innovative models of care.

Further, should a trial be proposed, IHPA will be required to advise CHC on the application of the above-mentioned funding methodology and any issues it foresees with the proposed trial with regard to the national funding model. This advice would inform CHC consideration on the trial and any CHC decision on the continuation of the model for a further period of trial or translation as a permanent model of care.

11.2. Innovative funding models being explored by IHPA

IHPA has developed a roadmap in consultation with its key advisory committees that sets out different funding models and their applicability to different conditions and care pathways. ABF remains the most appropriate funding model for one-off acute episodes of care usually in a hospital setting (for example, a tonsillectomy). The other major funding models under consideration are:

- Bundled payments/pricing:

When episodes of care are delivered across multiple settings, or over longer periods, bundled payments may provide increased incentives for providers to address efficiency in innovative ways. The main criteria for identifying where bundled payments may be appropriate is a clear, well-defined care pathway that spans multiple care settings (for example maternity care, stroke or hip replacement).

- Capitation payments:

A per-person funding model pays a provider or fund holder for the care of a patient for a defined period, where the provider is accountable for all services consumed by the patient for that period. Capitation models typically work well for chronic conditions where the care pathway is not well defined and may extend over many years (for example chronic obstructive pulmonary disease).

11.2.1. IHPA's approach and initial findings

IHPA has conducted some initial analysis of activity data to identify the patient services that may be suitable under the considered funding models. Selected Adjacent Diagnoses Related Groups (ADRGs) were assigned potential funding models using the following approach:

- A high level literature review was conducted to identify ADRGs where bundling or capitation funding have been applied both within Australia and internationally.
- Findings of the literature review were then supplemented by preliminary advice from classification experts within IHPA to further identify ADRGs where bundling or capitation may be suitable.
- Analysis of 2018–19 data was undertaken to identify reporting patterns within those ADRGs identified through the literature review and classification advice. These reporting patterns were then used to identify other ADRGs where bundling or capitation may be suitable.

As expected, a large number of ADRGs are well suited to ABF. For example, appendectomy was identified as being suited to ABF both by the literature review and advice from classification experts within IHPA, due to the generally urgent, short term, one-off acute care delivered to these patients. The predominance of unique patients and minimal activity in other streams were used to identify other ADRGs best suited to ABF. Initial analysis also identified several ADRGs as being potentially suitable for bundled payments or capitation payments, however further analysis will need to be undertaken to determine which ADRGs are amenable to which funding options.

11.3. Development of a framework for future funding models

IHPA is developing a framework to guide work to investigate the feasibility of future funding models at a national level. The framework will provide clear guidance to Australian governments as well as the Pricing Authority in determining its approach to trialling different funding models and how IHPA will facilitate this work. The key objectives of the framework are to:

- promote consideration of different funding models at the national level
- determine system design considerations, critical success factors and a pathway to implementation for any proposed funding models under the current ABF framework
- build on existing work to progress a national capitation model for complex chronic care and identify clinical cohorts and care types that would be amenable to a bundled pricing model
- guide IHPA's approach in how it works with states, territories and clinicians
- establish IHPA's remit and responsibilities in setting incentives that encourage better health outcomes and patient experiences as outlined in the Addendum
- provide reports to CHC as required regarding the outcomes of trials and their applicability to the national funding model.

11.4. Individual Healthcare Identifier

A key barrier to more patient-centred funding models is the way that hospital services are classified and the difficulties in tracking a patient across these different settings (for example, admitted acute care or non-admitted care). In 2016, IHPA undertook a program of work to explore a national bundled pricing model for maternity services (intended to cover antenatal, admission for delivery and postnatal services). However, this model was not able to be implemented due to the absence of a nationally consistent unique patient identifier and consequently the inability to gain a comprehensive view of the patient journey through different health settings and sectors.

A unique patient identifier such as the Individual Healthcare Identifier (IHI) is one way to enable a patient to be tracked across the different classification system data sets, and more accurately allow for the pathway of care to be classified and costs attributed accordingly. Further, a patient identifier is a key requirement to ensure that the Commonwealth does not contribute for a patient's care multiple times under alternative funding models (for example, through both ABF and the Medicare Benefits Schedule).

Jurisdictions are working through varying issues relating to the provision of the IHI including privacy concerns, information technology system issues and data accuracy concerns.

IHPA is required to provide advice to CHC on a funding methodology that does not penalise states and territories undertaking trials of innovative models of care. It is anticipated that as part of this advice IHPA will provide a recommendation to CHC that any trial of innovative funding models is contingent on the jurisdictions agreeing to supply the IHI.

IHPA's decision

IHPA will consider feedback to the Consultation Paper and conduct further consultation with jurisdictions in developing a funding methodology that supports innovative funding models for CHC approval by April 2021.

IHPA is proposing to implement the IHI into national data sets on a best endeavours basis from 1 July 2022, and will work with those jurisdictions that are well advanced in order to develop the data specifications and pilot the submission process in 2021.

12

Pricing and funding for safety and quality

Pricing and funding for safety and quality

The Addendum to the National Health Reform Agreement 2020–25 (the Addendum) sees the Commonwealth and state and territory governments recommit to improving Australian health outcomes and decreasing avoidable demand for public hospital services.

IHPA and the Australian Commission on Safety and Quality in Health Care (the Commission) have followed a program of collaborative work to consider the incorporation of safety and quality measures into the national efficient price (NEP) Determination.

IHPA was 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.

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

As per clause A171 of the Addendum, IHPA is required to develop a pricing model for avoidable hospital readmissions for implementation by 1 July 2021.

12.1. Sentinel events

In 2002, Australian Health Ministers agreed on the Australian Sentinel Events List, a national set of sentinel events. Sentinel events are defined by the Commission as a subset of adverse patient safety events that are wholly preventable and result in serious harm to, or death of, a patient.

Since 1 July 2017, IHPA has specified that an episode of care including a sentinel event will not be funded. A zero National Weighted Activity Unit (NWAU) is 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. 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.

IHPA's decision

Per the Addendum (clause A165), IHPA will continue to assign zero NWAU to episodes with a sentinel event for the NEP Determination 2021–22 (NEP21) using Version 2.0 of the Australian Sentinel Events List published on the Commission's [website](#).

12.2. 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.

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. The Commission is responsible for the ongoing curation of the HACs list to ensure it remains clinically relevant.

The Commission published Version 3.0 of the HAC list in January 2020. The list is available on the Commission's [website](#).

IHPA's decision

IHPA will use Version 3.0 of the HAC list for NEP21.

Next steps and future work

IHPA is currently reviewing the risk adjustment methodology for HACs. Following the finalisation of the risk adjustment model for avoidable hospital readmissions, IHPA will consider remodelling the HAC risk adjustment model based on this approach.

12.3. 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 initial hospital admission (the index admission). Reducing the number of avoidable hospital readmissions improves patient health outcomes and decreases avoidable demand for public hospital services.

The Commission was tasked with developing and maintaining a list of clinical conditions considered to be avoidable hospital readmissions. In June 2017, the Australian Health Ministers' Advisory Council approved the list of avoidable hospital readmissions and readmission diagnoses. **Table 2** lists the conditions and condition-specific readmission intervals; further detail can be found on the Commission's [website](#).

Under the Addendum, IHPA is required to develop a pricing model for avoidable hospital readmissions, for implementation from 1 July 2021, following approval from the Council of Australian Governments Health Council (CHC).

The Addendum requires the use of transitional arrangements when developing new costing methodologies, including shadow pricing and reporting for two years or a period agreed upon by the Commonwealth and a majority of states. The shadow period for avoidable hospital readmissions commenced on 1 July 2019, and will be completed by the required implementation date of 1 July 2021.

IHPA also notes that the funding adjustment for avoidable hospital readmissions is subject to back-casting at implementation, as outlined in the Addendum.

Table 2: List of avoidable hospital readmissions and readmission intervals

Readmission condition	Readmission diagnosis	Readmission interval
1. Pressure injury	Stage III ulcer	14 days
	Stage IV ulcer	7 days
	Unspecified decubitus and pressure area	14 days
2. Infections	Urinary tract infection	7 days
	Surgical site infection	30 days
	Pneumonia	7 days
	Blood stream infection	2 days
	Central line and peripheral line associated bloodstream infection	2 days
	Multi-resistant organism	2 days
	Infection associated with devices, implants and grafts	90 days
	Infection associated with prosthetic devices, implants and grafts in genital tract or urinary system	30 days
	Infection associated with peritoneal dialysis catheter	2 days
	Gastrointestinal infections	28 days
	3. Surgical complications	Postoperative haemorrhage/haematoma
Surgical wound dehiscence		28 days
Anastomotic leak		28 days
Pain following surgery		14 days
Other surgical complications		28 days
4. Respiratory complications	Respiratory failure including acute respiratory distress syndromes	21 days
	Aspiration pneumonia	14 days
5. Venous thromboembolism	Venous thromboembolism	90 days
6. Renal failure	Renal failure	21 days
7. Gastrointestinal bleeding	Gastrointestinal bleeding	2 days
8. Medication complications	Drug related respiratory complications/depression	2 days
	Hypoglycaemia	4 days
9. Delirium	Delirium	10 days
10. Cardiac complications	Heart failure and pulmonary oedema	30 days
	Ventricular arrhythmias and cardiac arrest	30 days
	Atrial tachycardia	14 days
	Acute coronary syndrome including unstable angina, STEMI and NSTEMI	30 days
Other	11. Constipation	14 days
	12. Nausea and vomiting	7 days

12.3.1 Funding options

In July 2019, IHPA commenced a shadow period to analyse funding options intended to assist in preventing avoidable hospital readmissions. The shadow period allowed IHPA to assess the activity and funding impacts of the proposed funding options for avoidable hospital readmissions.

The shadow period incorporated the following funding options:

- **Option one:** Deduct the cost of the readmission episode from the index episode.
- **Option two:** Combine the index and readmission episodes and recalculate the funding of the combined episode.
- **Option three:** Adjust funding at the hospital level where actual rates of avoidable readmissions exceed expected rates of avoidable readmissions.

The funding options were analysed using activity data from 2015–16, 2016–17, 2017–18 and 2018–19. The funding impact on total Commonwealth funding across all three funding options was shown to be relatively small.

IHPA's decision

For NEP21, IHPA intends to implement the avoidable hospital readmissions funding adjustment under funding option one due to its ease of application, similarity to the HACs methodology, and less disproportionate impact across jurisdictions, particularly smaller states and territories with fewer Local Hospital Networks (LHNs).

IHPA will seek final approval for all aspects of the proposed pricing model from CHC, as stipulated by the Addendum, for implementation from 1 July 2021.

Next steps and future work

IHPA intends to make avoidable hospital readmission rates available in the National Benchmarking Portal to allow hospitals to access and compare cost and activity data relating to readmissions.

12.3.2 Scope options

A patient's readmission episode may not always occur at the same hospital where they had their original (index) admission episode. The patient may be readmitted to a different hospital in the same LHN or they may be readmitted to a different hospital in a different LHN. Throughout the shadow period, IHPA has undertaken analysis of the three funding options under three scope options (readmissions limited to the same hospital, same LHN or same jurisdiction). The analysis of avoidable hospital readmission episodes by location over the four year period indicated that:

- almost half of all avoidable hospital readmissions (48 per cent) occurred when patients presented to the same hospital within the same LHN
- 26.0 per cent of readmissions occurred in a different hospital in the same LHN
- 12.3 per cent of readmissions occurred in a different LHN in the same state or territory
- 1.5 per cent of readmissions occurred in a different state or territory.

IHPA's decision

For NEP21, IHPA intends to implement the avoidable hospital readmissions funding adjustment to apply where there is a readmission to any hospital within the same jurisdiction.

12.3.3 Approach to risk adjustment

The risk adjustment model is constructed on the premise that a patient's likelihood of experiencing a potentially avoidable hospital readmission is the same regardless of the funding option considered. A risk adjustment model has been derived for each readmission condition, which assigns the risk of being readmitted for each episode of care, based on the most statistically significant and best performing risk factors.

IHPA has finalised the risk factors in response to stakeholder feedback, recommendations from IHPA's Clinical Advisory Committee and advice from the University of Melbourne. A discrete set of risk factors has been developed for the risk adjustment model of each readmission category, using the top performing risk factors based on statistical importance and model contribution. This approach captures the statistically important risk factors, while trimming insignificant risk factors by not adhering to an arbitrary number of included risk factors for each readmission category. **Table 3** below lists the risk factors used in each readmission model.

IHPA's decision

IHPA will implement the avoidable hospital readmissions funding adjustment using the finalised sets of risk factors for the risk adjustment model of each readmission category.

Table 3: Risk factors for each readmission category

Readmission category	1. Pressure injury	2. Infections	3. Surgical complications	4. Respiratory complications	5. Venous thromboembolism	6. Renal failure	7. Gastrointestinal bleeding	8. Medical complications	9. Delirium	10. Cardiac complications	11. Constipation	12. Nausea and vomiting
Age group		✓	✓	✓	✓	✓		✓	✓	✓	✓	
Major diagnostic category (MDC)		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Emergency admission flag		✓	✓	✓	✓			✓	✓	✓	✓	✓
Diagnosis-related group (DRG) type		✓	✓					✓	✓	✓	✓	
Gender					✓		✓				✓	✓
Transfer status				✓								
Patient remoteness	✓	✓		✓	✓	✓	✓				✓	✓
Indigenous status		✓		✓				✓				
Obesity					✓							
Hospital Acquired Complication flag								✓				
ICU hours flag								✓				
Malnutrition				✓								
Short stay outlier flag		✓			✓				✓			
Number of procedures in the index episode		✓	✓		✓						✓	
Number of admissions in the past year		✓									✓	
Charlson comorbidity flags:												
Acute myocardial infarction										✓		
Cerebral vascular accident									✓			
Congestive heart failure										✓		
Dementia				✓					✓			
Diabetes								✓				
Diabetes complications		✓				✓		✓		✓		✓
Peptic ulcer							✓					
Pulmonary disease	✓	✓			✓	✓						
Renal disease						✓						
Chronic condition flags:												
Arthritis and osteoarthritis	✓						✓					
Asthma without COPD						✓						
Total number of risk factors:	7	11	5	11	9	10	8	9	10	9	10	6

12.3.4 Individual Healthcare Identifier

Throughout the shadow period, IHPA has evaluated the feasibility of implementing the assessed scope and funding options, with the understanding that currently there is not a national patient identifier available in national data sets used by IHPA.

IHPA's decision

IHPA will use the Medicare PIN to implement the adjustment for avoidable hospital readmissions, with a view to using the Individual Healthcare Identifier as soon as it is available.

Next steps and future work

IHPA recognises the limitations of the Medicare PIN, most notably that the Medicare PIN cannot be provided to jurisdictions, resulting in jurisdictions being unable to replicate analysis which reduces the transparency of any national pricing model.

IHPA will continue to work with jurisdictions to provide as much transparency as possible, through the sharing of linked datasets, where IHPA has the authority to do so.

12.3.5 Readmissions across financial years

IHPA recognises the need to accurately capture and adjust for readmission episodes that occur across financial years. In reviewing 2015–16, 2016–17, 2017–18 and 2018–19 data of all avoidable hospital readmissions within or across financial years, the analysis revealed that while the majority of readmissions occurred within the same financial year, approximately 2.8 per cent occurred across financial years.

Therefore, as part of the implementation of a funding adjustment for readmissions, IHPA notes that it may be necessary for the Administrator of the National Health Funding Pool to make minor funding adjustments post-reconciliation to account for any newly identified readmissions with index episodes in the previous financial year.

12.3.6 Commercial readmissions software

IHPA engaged 3M Australia Pty Ltd to develop a readmissions software tool, based on their existing Potentially Preventable Readmissions software. The software tool is applicable to the nationally admitted patient data set to identify and link avoidable hospital readmissions, and can be used to determine 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 allows investigation of a broader scope of avoidable hospital readmission conditions than the current list.

The project is scheduled for completion at the end of 2021. IHPA will provide updates and seek stakeholder feedback in the *Consultation Paper on the Pricing Framework for Australian Public Hospital Services 2022–23*.



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