

Independent Hospital Pricing Authority

# Consultation Paper on the Pricing Framework for Australian Public Hospital Services 2019-20

June 2018



IHPA

**Consultation Paper on the Pricing Framework for  
Australian Public Hospital Services 2019-20 – June 2018**

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# Table of contents

Glossary .....	3
1. Introduction .....	4
2. Pricing guidelines.....	5
3. Scope of public hospital services .....	7
4. Classifications used by IHPA to describe public hospital services.....	10
5. Data collection .....	19
6. Setting the National Efficient Price for activity based funded public hospitals .....	22
7. Setting the National Efficient Price for private patients in public hospitals ..	28
8. Treatment of other Commonwealth programs .....	31
9. Setting the National Efficient Cost.....	32
10. Innovative funding models .....	35
11. Pricing and funding for safety and quality.....	37

# Glossary

<b>ABF</b>	Activity Based Funding
<b>ACHI</b>	Australian Classification of Health Interventions
<b>ACS</b>	Australian Coding Standards
<b>AECC</b>	Australian Emergency Care Classification
<b>ANACC</b>	Australian Non-Admitted Care Classification
<b>AMHCC</b>	Australian Mental Health Care Classification
<b>AN-SNAP</b>	Australian National Subacute and Non-Acute Patient classification
<b>AR-DRG</b>	Australian Refined Diagnosis Related Groups
<b>ATTC</b>	Australian Teaching and Training Classification
<b>COAG</b>	Council of Australian Governments
<b>DRG</b>	Diagnosis Related Group
<b>HAC</b>	Hospital Acquired Complication
<b>Heads of Agreement</b>	Heads of Agreement between the Commonwealth and the States and Territories on public hospital funding and health reform
<b>ICD-10-AM</b>	International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification
<b>IHPA</b>	Independent Hospital Pricing Authority
<b>LHN</b>	Local Hospital Network
<b>MBS</b>	Medicare Benefits Schedule
<b>MDCC</b>	Multidisciplinary Case Conferences
<b>NEC</b>	National Efficient Cost
<b>NEP</b>	National Efficient Price
<b>NHCDC</b>	National Hospital Cost Data Collection
<b>NWAU</b>	National Weighted Activity Unit
<b>Pricing Framework</b>	Pricing Framework for Australian Public Hospital Services
<b>The Addendum</b>	Addendum to the National Health Reform Agreement
<b>The Commission</b>	Australian Commission on Safety and Quality in Health Care
<b>The Standards</b>	Australian Hospital Patient Costing Standards

# 1. Introduction

The *Consultation Paper on the Pricing Framework for Australian Public Hospital Services 2019-20* (Pricing Framework Consultation Paper 2019-20) is the primary consultation mechanism for the Independent Hospital Pricing Authority (IHPA). It provides an opportunity for the public to comment on the development and refinement of the national activity based funding (ABF) system, including data collection, classification systems and policy decisions which underpin the National Efficient Price and National Efficient Cost Determinations 2019-20 (NEP19 and NEC19).

IHPA continues to incorporate safety and quality into the pricing and funding of public hospital services in order to improve health outcomes, avoid funding unnecessary or unsafe care and decrease avoidable demand for public hospital services. This work is set out in the [Addendum to the National Health Reform Agreement](#) (the Addendum) which required implementation of pricing and funding approaches for sentinel events and hospital acquired complications from 1 July 2017 and 1 July 2018 respectively. The Addendum also requires the development of an approach for avoidable readmissions which will be considered by health ministers and is canvassed in Chapter 11 of the Pricing Framework Consultation Paper 2019-20.

Likewise, IHPA continues to review and refine the National Pricing Model. In 2018, IHPA will undertake a review of the fundamental approach underlying the pricing model to ensure the most robust and up to date techniques continue to be employed in determining the NEP.

This Pricing Framework Consultation Paper 2019-20 builds on previous work in this area and should be read in conjunction with the following documents:

- [Pricing Framework for Australian Public Hospital Services 2018-19](#)
- [National Efficient Price Determination 2018-19](#)
- [National Efficient Cost Determination 2018-19](#)

Submissions close at 5pm on Thursday, 12 July 2018.

Submissions should be emailed to IHPA Secretariat at [submissions.ihpa@ihpa.gov.au](mailto:submissions.ihpa@ihpa.gov.au).

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

The Pricing Framework 2019-20 will be released in November 2018 prior to publication of the NEP19 and NEC19 Determinations in early March 2019. This timing provides an additional layer of transparency and accountability by making available the key principles, scope and approach adopted by IHPA to inform the pricing decisions included in the NEP and NEC Determinations.

## 2. Pricing guidelines

### 2.1 Overview

IHPA must balance a range of national policy objectives in undertaking its work. This role requires IHPA to exercise judgement on the weight to be given to different policy objectives. In order to clarify IHPA's decision making regarding policy choices, IHPA has developed a set of Pricing Guidelines to explain the key decisions in the Pricing Framework.

The Pricing Guidelines signal IHPA's commitment to transparency and accountability in how it undertakes its work (see **Box 1**). The decisions made by IHPA in pricing in-scope public hospital services are evidence-based and use the latest costing and activity data supplied to IHPA by states and territories.

Whilst these Pricing Guidelines are used to explain the key decisions made by IHPA in the annual Pricing Framework, they can also be used by governments and other stakeholders to evaluate whether IHPA is undertaking work in accordance with the explicit policy objectives included in the Pricing Guidelines.

IHPA considers that the Pricing Guidelines are working well and therefore no changes are proposed for the Pricing Framework 2019-20.

### Box 1: Pricing Guidelines

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

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

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

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

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

- **Fostering clinical innovation:** Pricing of public hospital services should respond in a timely way to introduction of evidence-based, effective new technology and innovations in the models of care that improve patient outcomes.
- **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.

# 3. Scope of public hospital services

## 3.1 Overview

In August 2011 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 (COAG) assigned IHPA the task of determining whether a service is ruled 'in-scope' as a public hospital service, and therefore eligible for Commonwealth Government funding under the [National Health Reform Agreement](#).

## 3.2 Scope of public hospital services and General List of eligible services

Each year, IHPA publishes the 'General List of In-Scope Public Hospital Services' (the General List). 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](#) and Clauses A9-A17 of the National Health Reform Agreement, the General List 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 eligibility of a public hospital service for inclusion on the General List is independent of the service setting in which it is provided (e.g. whether the service is provided at a hospital, in the community or in a person's home). This policy decision ensures that the Pricing Framework supports best practice provision of appropriate site of care.

The Pricing Authority (i.e. the IHPA Board) determines whether specific services proposed by states and territories are in-scope and eligible for Commonwealth funding based on decision criteria and through reviewing supporting empirical evidence provided by jurisdictions.

The process IHPA follows in assessing services and the decision criteria and interpretive guidelines used by the Pricing Authority are outlined in the [Annual Review of the General List of In-Scope Public Hospital Services](#) policy. Services which are not yet in operation or which meet the criteria but do not have supporting empirical evidence will not be added to the General List.

In 2017, the Pricing Authority considered an application from Queensland for the inclusion of community-based child and adolescent mental health services on the General List for 2018-19. IHPA commissioned an independent review which analysed public hospital data provided by jurisdictions to determine whether there was a direct relationship between these services and public hospital admissions. The review did not find sufficient evidence to include community-based child and adolescent mental health services on the General List for 2018-19.



IHPA will consider alternative assessment methodologies for community-based child and adolescent mental health services to determine whether there is a sufficient relationship between service provision and hospital avoidance for inclusion on the General List for 2019-20.

### 3.2.1 Policy review of the General List of In-Scope Public Hospital Services

Recent applications by jurisdictions for the inclusion of services on the General List have demonstrated the need for a review of the decision criteria and application process. As a first step, IHPA has replaced Appendix B of the General List policy with a simpler application form to improve the 2019-20 assessment process and allow IHPA to better analyse submissions.

In 2018-19, IHPA will undertake a comprehensive review of the General List decision criteria and the process of applying to have a service considered for inclusion on the list to inform future years.

The criteria and interpretive guidelines are presented in **Box 2**. The General List and A17 List were last published as part of the [NEP18 Determination](#) in early March 2018.

#### Consultation question

- What changes, if any, should be made to the criteria and interpretive guidelines in the *Annual Review of the General List of In-Scope Public Hospital Services* policy?

#### Box 2: Scope of public hospital services and General List of eligible services

In accordance with Section 131(f) of the *National Health Reform Act 2011* and Clauses A9 – A17 of the National Health Reform Agreement, the scope of 'Public Hospital Services' eligible for Commonwealth funding under the Agreement are:

- All admitted programs, including hospital in the home programs and forensic mental health inpatient services.
- All Emergency Department services.
- Non-admitted services as defined below.

##### Non-admitted services

This listing of in-scope non-admitted services is independent of the service setting in which they are provided (e.g. at a hospital, in the community, in a person's home). This means that in-scope services can be provided on an outreach basis.

To be included as an in scope non-admitted service, the service must meet the definition of a 'service event' which is:

An interaction between one or more healthcare provider(s) with one non-admitted patient, which must contain therapeutic/clinical content and result in a dated entry in the patient's medical record.

Consistent with Clause A25 of the Agreement, IHPA will conduct analysis to determine if services are transferred from the community to public hospitals for the dominant purpose of making those services eligible for Commonwealth funding.

There are two broad categories of in-scope, public hospital non-admitted services:

- A. Specialist Outpatient Clinic Services
- B. Other Non-admitted Patient Services and Non-Medical Specialist Outpatient Clinics

### **Category A: Specialist outpatient clinic services – Tier 2 Non-Admitted Services Classification – Classes 10, 20 and 30**

This comprises all clinics in the Tier 2 Non-Admitted Services classification, classes 10, 20 and 30, with the exception of the General Practice and Primary Care (20.06) clinic, which is considered by the Pricing Authority as not to be eligible for Commonwealth funding as a public hospital service.

### **Category B: Other non-admitted patient services and non-medical specialist outpatient clinics (Tier 2 Non-Admitted Services Class 40)**

To be eligible for Commonwealth funding as an Other Non-admitted Patient Service or a Class 40 Tier 2 Non-admitted Service, a service must be:

- directly related to an inpatient admission or an Emergency Department attendance; or
- intended to substitute directly for an inpatient admission or Emergency Department attendance; or
- expected to improve the health or better manage the symptoms of persons with physical or mental health conditions who have a history of frequent hospital attendance or admission.

Jurisdictions have been invited to propose services that will be included or excluded from Category B “Other Non-admitted Patient Services”. Jurisdictions will be required to provide evidence to support the case for the inclusion or exclusion of services based on the three criteria above.

The following clinics are considered by the Pricing Authority as not to be eligible for Commonwealth funding as a public hospital service under this category:

- Commonwealth funded Aged Care Assessment (40.02)
- Family Planning (40.27)
- General Counselling (40.33)
- Primary Health Care (40.08)

#### **Interpretive guidelines for use**

In line with the criteria for Category B, community mental health, physical chronic disease management and community based allied health programs considered in-scope will have all or most of the following attributes:

- Be closely linked to the clinical services and clinical governance structures of a public hospital (for example integrated area mental health services, step-up/step-down mental health services and crisis assessment teams);
- Target patients with severe disease profiles;
- Demonstrate regular and intensive contact with the target group (an average of eight or more service events per patient per annum);
- Demonstrate the operation of formal discharge protocols within the program; and
- Demonstrate either regular enrolled patient admission to hospital or regular active interventions which have the primary purpose to prevent hospital admission.

#### **Home ventilation**

A number of jurisdictions submitted home ventilation programs for inclusion on the General List. The Pricing Authority has included these services on the General List in recognition that they meet the criteria for inclusion, but will review this decision in the future once the full scope of the National Disability Insurance Scheme is known.

# 4. Classifications used by IHPA to describe public hospital services

## 4.1 Overview

In order to determine the National Efficient Price (NEP) for services funded on an activity basis, IHPA must first specify the classification systems, counting rules, data and coding standards, as well as the methods and standards for costing data.

Classification systems provide the hospital sector with a nationally consistent method of classifying all types of patients, their treatment and associated costs in order to better manage, measure and fund high quality and efficient health care services.

Classification systems are a critical element of activity based funding (ABF) as they group patients who have similar conditions and cost similar amounts per episode (i.e. the groups are clinically relevant and resource homogenous).

## 4.2 Australian Refined Diagnosis Related Groups classification

For NEP18 IHPA used the [Australian Refined Diagnosis Related Groups](#) (AR-DRG) Version 9 classification system to price admitted acute patient services. The new version simplifies the classification structure, enhances its clinical coherence, aligns with current clinical practice and promotes a reliance on patient characteristics by removing administrative variables which were used as proxies for complexity. AR-DRG Version 9 uses the Tenth Edition of the [International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification](#) (ICD-10-AM) and the Australian Classification of Health Interventions (ACHI) for the underlying diagnosis and intervention coding.

IHPA will continue to use AR-DRG Version 9 to price admitted acute patient services for NEP19 underpinned by ICD-10-AM/ACHI Eleventh Edition.

IHPA commenced development of the Eleventh Edition of ICD-10-AM/ACHI and AR-DRG Version 10 in 2017. AR-DRG Version 10 is being developed in-house by IHPA to leverage and build upon existing capabilities of IHPA's workforce. The [Australian Consortium for Classification Development](#) remains responsible for updates to the Eleventh Edition of ICD-10-AM and ACHI.

IHPA undertook targeted stakeholder consultation on the work program to identify and prioritise areas for consideration in Version 10.

In response to prior Pricing Framework Consultation Papers, stakeholders have recommended reducing the degree of change between AR-DRG classification versions to ensure funding stability for health services. IHPA has focused its refinement work for AR-DRG Version 10 to a few high priority areas to address these concerns, while noting that regular revisions are required to ensure that it maintains currency and reflects changes in costs.

Major work on the classification has included a review of the diagnoses that contribute to complexity within the complexity model. Other areas include consideration of a proposal to differentiate caesarean section deliveries according to whether they are performed prior to the commencement of labour or following the commencement of labour, a review of new health technology submissions and other updates sourced through public submissions.

IHPA undertook a [public consultation](#) on the proposed changes for AR-DRG Version 10 from May to June 2018. Stakeholder feedback will be considered in finalising the classification. The Australian Consortium for Classification Development will undertake consultation on the Eleventh Edition of ICD-10-AM and ACHI classification systems from July to September 2018.

#### 4.2.1 Recording of additional diagnoses

The [Australian Coding Standards](#) (ACS) provides guidance to clinical coders to ensure that sound coding convention is applied when assigning diagnosis and intervention codes. 'ACS 0002 *Additional diagnoses*' is a standard which aims to ensure that clinical coders are reporting data on patients' additional diagnoses consistently and that only conditions which are significant to the episode of care are assigned as additional diagnoses and reported in national data sets.

Despite the national standard and regular revision, determining significance can be relatively subjective. The implementation of ABF coincided with improved capture of diagnosis and procedural information for public hospital care. The increased reporting of additional diagnoses may not always be consistent with the principle of ACS 0002 to assign codes for conditions that are 'significant' to the episode of care. In some circumstances, this may lead to an increase in the complexity level assigned to an episode of care in the AR-DRG classification system.

IHPA and the Australian Consortium for Classification Development is revising 'ACS 0002 *Additional diagnoses*' for the Eleventh Edition to make the standard more explicit as to what deems a condition to be significant for code assignment in an admitted acute episode of care. Proposed changes will be canvassed in public consultation during the second half of 2018.

#### 4.2.2 Phasing out support for older classification versions

In the Pricing Framework Consultation Paper 2018-19, IHPA sought feedback on an intention to phase out support for old AR-DRG classification versions with sufficient lead time for the private sector. This reflected the complexity and difficulty of mapping across older versions and classification improvements not being realised by hospitals or health funds using older versions.

IHPA has undertaken targeted consultation with representatives from private hospital and health insurer groups on an intention to cease support for versions of the AR-DRG classification system prior to AR-DRG V6.X from 1 July 2019, which is the release date of AR-DRG Version 10. Stakeholders have supported phasing out AR-DRG classification versions up to and including Version 4.2 from 1 July 2019. However, a number of stakeholders recommended an additional lead time prior to phasing out support for Version 5.

IHPA ceasing support for AR-DRG versions prior to AR-DRG V6.X would mean IHPA would no longer:

- Implement mapping fixes, or provide amended grouper specifications or grouper certification for old versions to adjust for coding changes that have a significant impact on DRG grouping.
- Undertake impact analysis of coding or DRG changes on old versions.
- Accept public or other submissions specific to an old version.
- Publish cost reports that contain old versions.
- Provide grouper specifications for old versions to grouper vendors.

- Provide manuals or publications for old versions.

IHPA considers that the proposed date provides the private sector with sufficient lead time to move to more recent AR-DRG classification versions and will allow organisations to benefit from their increased clinical currency and statistical accuracy in classifying patient care.

IHPA's final decision will be informed by further discussion with the private sector. Phasing out support will not preclude hospitals from using older AR-DRG versions to classify patient care.

### 4.2.3 AR-DRG development cycle

AR-DRG development currently occurs on a biennial basis, with an updated AR-DRG version released every two years. Updates ensure the AR-DRG classification remains clinically relevant, maintains currency with clinical terminology and practice and is fit for purpose for the ABF system.

Development of a new AR-DRG version commences immediately after the release of the previous version. This means that changes in the previous version are not able to be assessed when a new version is being developed. It also means that the data used to develop the new AR-DRG version is based on data which is reported using the previous ICD-10-AM/ACHI edition.

While this may suggest that the development cycle is fast paced, the timeframe for classification changes to be implemented and to flow from ICD-10-AM/ACHI to the AR-DRG classification can be lengthy. Furthermore, if a request for a new intervention code is received too late in the ACHI development cycle the time interval for consideration in the AR-DRG classification is lengthier.

Increasing the length of the development cycle is likely to cause greater instability as significant changes to the classification are required to reflect changes in models of care and hospital costs.

A balance is required between updating the AR-DRG and ICD-10-AM/ACHI classifications in light of changes to clinical practice and terminology and the stability of the classifications for health services. IHPA seeks stakeholder views on the appropriate timing of the development cycle.

#### Consultation question

- How could 'Australian Coding Standard 0002 *Additional Diagnoses*' be amended to better clarify what is deemed a significant condition for code assignment?
- Do you support the proposed timeframe to phase out support for AR-DRG classification versions prior to AR-DRG Version 6.X from 1 July 2019?
- Do you support the current biennial AR-DRG development cycle. If not, what is a more appropriate development cycle?

## 4.3 Australian National Subacute and Non-Acute Patient classification

For NEP18 IHPA used the [Australian National Subacute and Non-Acute Patient](#) (AN-SNAP) Version 4 classification system to price admitted subacute and non-acute services. However, per diem prices were retained for paediatric palliative care due to insufficient cost and activity data.

IHPA will continue to use AN-SNAP Version 4 to price subacute services for NEP19. Subacute and non-acute services which are not classified using AN-SNAP will be classified using DRGs.

IHPA will also continue to review whether there is sufficiently robust activity and cost data to price paediatric palliative care services using the AN-SNAP classification for NEP19, noting that there has historically been a very low volume of costed paediatric palliative care episodes.

### 4.3.1 Developing AN-SNAP Version 5

IHPA is continuing to develop the next version of the AN-SNAP classification. The [AN-SNAP Version 4 final report](#) highlighted a key limitation to developing prior versions which has been a lack of data to assess options for making major structural changes to the classification. Considerable progress has since been made by states and territories in the collection of subacute activity and cost data which may support improvements for AN-SNAP Version 5.

IHPA is working with jurisdictional and clinical stakeholders through its Subacute Care Working Group to identify areas for improvement in AN-SNAP Version 5. Potential areas for consideration include:

- Investigating improvements using the existing primary grouping variables in the rehabilitation, palliative care and non-acute branches of the AN-SNAP classification.
- Reviewing the measure of patient cognitive impairment in the geriatric evaluation and management branch of the classification to improve its performance.
- Investigating the relationship between the psychogeriatric care type and the Australian Mental Health Care Classification as well as with other care types.

#### Consultation question

- What areas should be considered in developing Version 5 of the Australian National Subacute and Non-Acute Patient classification?

## 4.4 Tier 2 Non-Admitted Services classification

### 4.4.1 Refinement of the Tier 2 Non-Admitted Services classification

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

For NEP19, IHPA will continue to use the Tier 2 Non-Admitted Services classification for pricing non-admitted services as work on a new non-admitted care classification continues.

IHPA is working with jurisdictions to consider a proposal in response to the Pricing Framework Consultation Paper 2018-19 to include a 'first service event' indicator in the non-admitted data collections. Initial analysis using prior costing study data indicates a cost difference between initial and subsequent service events. The indicator could support service planning, analysis and classification development. However, IHPA notes stakeholder feedback regarding the administrative burden of new reporting requirements.

### 4.4.2 Home ventilation services

Non-admitted home ventilation services transitioned from block funding to ABF in 2015-16. The price was determined based on a 2015 [costing study](#) for home-delivered services. The costing study considered the costs of patients who required ventilation for 18 hours or more per day.

Version 4 of the Tier 2 Non-Admitted Services classification was introduced in 2015-16 and expanded the home-delivered ventilation class (10.19) to also include patients who are dependent on ventilation at night and who, without ventilator support, would be at risk of imminent hospitalisation. As the price was based on a costing study which predated the expanded clinic definition, patients who were ventilated for less than 18 hours were overpriced.

In 2017, IHPA identified anomalies in the reporting of activity and costs for home ventilation services which were likely attributable to the 2015-16 changes. The Pricing Framework 2018-19 advised that the services will be block funded in 2018-19 based on actual costs as reported by jurisdictions and that work would commence to return home ventilation to ABF in the future.

In response to the Pricing Framework Consultation Paper 2018-19, stakeholders were generally supportive of investigating a split in the home ventilation class to account for cost differences in the complexity of services provided. IHPA is considering a split between people who require continuous ventilation for over 18 hours and those who require ventilation for 18 hours or less. The introduction of a new home ventilation class will allow IHPA to more accurately price home ventilation services by allowing high cost and low cost services to be differentiated. IHPA is also investigating whether there is sufficient activity and cost data to support different classes for paediatric and adult home ventilation patients.

#### **4.4.3 Multidisciplinary case conferences where the patient is not present**

For NEP18, IHPA introduced new Tier 2 Non-Admitted Services classes and shadow price weights for multidisciplinary case conferences (MDCCs) where the patient is not present. The change was made to better account for the important role of MDCCs in clinical care and given strong stakeholder support.

A shadow price weight for the medical-led MDCC class (20.56) was included in the NEP18 Determination. The shadow price was determined based on cost data from a [2016 costing study](#) on MDCCs where the patient is not present. The shadow price is intended to provide an indicative cost for service planning purposes.

IHPA was unable to determine a shadow price weight for the allied health-led MDCC class (40.62) due to insufficient cost information in the 2016 study to model an indicative cost. IHPA will work with jurisdictions to obtain the data to determine a shadow price for the allied health-led MDCC class for 2019-20.

In the meantime, IHPA intends to continue to shadow price the medical-led MDCCs where the patient is not present.

#### **4.4.4 Development of the Australian Non-Admitted Care Classification**

IHPA is developing a new Australian Non-Admitted Care Classification (ANACC) that will better describe patient characteristics and the complexity of care in order to more accurately reflect the costs of non-admitted services. The new classification would account for changes in how care is delivered as services transition to the non-admitted setting, as new electronic medical records allow for more detailed data capture and as funders test new funding models which span multiple settings.

IHPA's analysis of existing national data and prior costing studies indicates that there is the potential to use diagnosis-type and intervention-type variables to classify non-admitted care in the future. However, there is currently limited patient diagnosis and intervention information reported for non-admitted patients as outpatient information systems are immature in many centres and reporting is inconsistent.

IHPA undertook public consultation from February to April 2018 to inform ANACC development. The [consultation paper](#) described the non-admitted care landscape, changes to the types of services provided across settings, innovations in models of care and the impacts of digital transformation on data reporting. The consultation paper also canvassed classifying variables informed by an initial review of cost drivers including patient presenting problem, diagnoses and intervention groupings. Complexity variables were also canvassed including age, comorbidities,

multidisciplinary care, first or follow-up visit and provider type. 27 submissions were received including from jurisdictions, peak bodies, clinicians and the public.

A national costing study is planned for 2019 to collect non-admitted (including non-admitted subacute) activity and cost data and test the shortlist of variables and potential classification hierarchies. IHPA will work closely with its advisory committees to define the scope and select a representative sample of outpatient clinics in Australia. The outcomes of the costing study will underpin the development of a final hierarchy and end classes for the classification.

Alongside the costing study, new data specifications will be discussed with IHPA's advisory committees to start capturing patient-centred variables within national non-admitted data sets.

Informed by the public consultation, IHPA intends to develop a strategic plan in 2018 that will outline the path for ANACC development, implementation and pricing.

## 4.5 Emergency care classification

IHPA currently uses the [Urgency Related Groups](#) and [Urgency Disposition Groups](#) classification systems to classify presentations to emergency departments and emergency services for ABF purposes. IHPA acknowledges that the classification of emergency care should have a stronger emphasis on patient factors, such as diagnosis, compared to the current focus on triage category. IHPA therefore commenced work on the Australian Emergency Care Classification (AECC) in 2015.

A [costing study](#) was conducted in 2016 in ten Australian emergency departments, representative of the different sizes and roles of emergency departments, to inform development of the AECC. The activity and cost data collected from the study have enabled the development of a version of the AECC that was subsequently refined for internal and external stakeholder consultation.

IHPA undertook [public consultation](#) on the draft classification system and data requirements in late 2017. The draft AECC introduced major diagnostic groupings as the basis for classifying emergency presentations, with further splits by complexity based on a combination of factors including diagnosis, episode end status, triage category and transport mode.

Feedback on the consultation paper supported the move towards a diagnosis-based classification that incorporates patient complexity and regarded the draft classification structure as appropriately representing emergency care. A workshop was also held in early 2018 to refine key aspects of the classification including clarifying the categories not split by a diagnosis, refining the major diagnostic groupings and complexity splits.

IHPA is finalising Version 1 of the AECC, with the final report to be published on IHPA's website in late 2018. The pricing of emergency department care for NEP19 is discussed in Chapter Six.

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

Improvements in the reporting of diagnosis information in emergency department and emergency services will support future versions of the AECC. Introduction of the Short List from 2018-19 is intended to drive consistency in diagnosis reporting and replace inconsistencies whereby states and territories have developed localised short lists and use different classifications. IHPA has finalised its interoperability tool between the ICD-10-AM and [SNOMED CT-AU](#) classifications which will also support greater consistency in the reporting of principal diagnosis data nationally.



## 4.6 Teaching, training and research

### 4.6.1 Australian Teaching and Training Classification

Teaching, training and research activities represent an important role of the public hospital system alongside the provision of care to patients. However, there is currently no acceptable classification system for teaching, training and research to allow for the activities to be priced.

Teaching and training activities are therefore currently block funded except where teaching and training is 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 investigated whether the key technical requirements for ABF could be met for teaching, training and research, including through a comprehensive [costing study](#) in 2015-16. The study concluded that it was feasible to develop a teaching and training classification.

IHPA has since undertaken a program of work to develop the first version of the Australian Teaching and Training Classification (ATTC). The ATTC will assist health services with the administrative management of teaching and training in hospitals, improve statistical reporting, enable quality improvement initiatives and improve the transparency and efficiency of funding.

ATTC development has been informed by the costing study and stakeholder consultation. The major classification variables have been identified as profession and training stage. [Public consultation](#) on a draft ATTC occurred in late 2017 and stakeholders were broadly supportive, but requested a greater level of granularity for specialties within each profession.

While the costing study did identify other variables which were predictors of costs, small sample sizes meant that stable classes could not be determined. Classification refinement to incorporate these variables will require further activity and cost data collection by jurisdictions.

A key challenge in the implementation of the ATTC is the availability of activity and cost data. 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 jurisdictions over this time and these improvements are expected to continue.

Version 4 of the *Australian Hospital Patient Costing Standards* was published in February 2018 and includes a [Costing Guideline](#) outlining how to identify and record expenses relating to direct and indirect teaching and training activities. It is intended that the Costing Guideline will support states and territories in improving the collection and reporting of these costs to support future refinement of the ATTC and an appropriate timeline for pricing these activities. IHPA will work with jurisdictions during 2018 to determine an implementation schedule for reporting cost data.

### 4.6.2 Classifying research activities

Research activities are block funded given the absence of an appropriate ABF classification system. Research activities which are reportable for IHPA's purposes refer to a public health service's contribution to maintain research capability rather than research which is funded from another source.

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

IHPA intends to put work to develop a research classification on hold given insufficient data at this stage and the relatively low expenditure associated with these activities relative to teaching and training in public hospitals.

## 4.7 Australian Mental Health Care Classification

IHPA has developed the [Australian Mental Health Care Classification](#) (AMHCC) to classify and price mental health services across admitted and non-admitted settings. The classification provides a clinically meaningful way of classifying mental health care to better predict the actual cost of delivering mental health services than the previous AR-DRG classification. A key aspect of the classification is the inclusion of a new clinician-rated measure of 'mental health phase of care'.

Classification development was informed by the outcomes of a [2014-15 costing study](#), two public consultation processes in [early](#) and [late 2015](#), clinical advice and an expert reference group of mental health care and data specialists. The proposed classification was also piloted in late 2015 at a small number of sites nationally to test the clinical acceptability, explanatory power and to identify the system changes which were necessary to support implementation.

Version 1 of the AMHCC was finalised in early 2016 and is published on [IHPA's website](#). It was implemented for data collection on a best endeavours basis from 1 July 2016.

### 4.7.1 Refining Mental Health Phase of Care

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 found that the 'phase of care' instrument had poor to fair inter-rater reliability in its current form. However, clinicians did find the instrument to be useful in clinical practice and advised that it provides an opportunity to ensure consistency in service provision. The study's report recommended a comprehensive review and refinement of the 'phase of care' instrument to improve the clarity and decrease ambiguity in the application and reporting of 'phase of care'.

IHPA has engaged a number of mental health clinicians to undertake a clinical refinement project which will review and enhance the 'phase of care' instrument. The project aims to improve the usability, applicability and exclusivity of each 'phase of care' to support implementation of the AMHCC. The project includes interviews and focus groups with clinicians across a broad range of settings and specialties to seek advice on how the instrument can be improved.

The clinical refinement project will conclude in November 2018 and inform training materials and development of AMHCC Version 2.

### 4.7.2 Consultation-liaison psychiatry

In response to the Pricing Framework 2018-19, the Royal Australian and New Zealand College of Psychiatrists requested consideration of how the ABF classification systems can better account for consultation-liaison psychiatry services. These services are provided in hospitals, such as on the ward or in the emergency department, to patients receiving treatment for physical conditions.

Identifying consultation-liaison psychiatric care is challenging using admitted hospital data which is largely centred on patient characteristics. The reporting of mental health comorbidities may suggest that consultation-liaison care was provided, however this cannot be confirmed in the absence of an intervention code. Codes for mental health interventions were significantly revised and expanded from 1 July 2017. While their use is encouraged in specialist mental health care facilities and units, and their use is not restricted solely to mental health episodes of care, their assignment is not mandatory in either context.

The NEP Determination includes an adjustment for admitted acute patients who have a principal diagnosis which is not mental health-related and have one or more Total Psychiatric Care Days

(the Specialist Psychiatric Age Adjustment). However, consultation-liaison psychiatric care would commonly be provided in a general ward (instead of designated psychiatric unit) which would not be eligible.

IHPA intends to analyse national data sets to determine whether the delivery of mental health care to patients admitted for a non-mental health diagnoses is adequately accounted for in the ABF classification systems and National Pricing Model.

ACHI Tenth Edition (implemented from 1 July 2017) categorises information about initial and follow-up psychiatric assessment as well as therapies for patients in hospital with physical illness and should provide a richer source of information for understanding liaison services in the activity data sets. Additional data will be sourced from jurisdictions if required. Clinical stakeholders and peak bodies will be consulted as part of this work.

# 5. Data collection

## 5.1 Activity data

### 5.1.1 Phasing out aggregate non-admitted data reporting

Jurisdictions are required to submit public hospital activity at the patient level wherever possible. IHPA uses the patient level data to determine the price weights in the National Efficient Price (NEP) Determination. While jurisdictions have increased the reporting of patient level non-admitted service events since 2012-13, it has not accounted for all services delivered by jurisdictions. IHPA has allowed for aggregate non-admitted data reporting by jurisdictions 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 a new patient-centred non-admitted care classification.

IHPA proposes to phase out the collection of aggregate non-admitted data as reported through the Non-Admitted Patient Care Aggregate National Minimum Data Set (for hospital services) and National Best Endeavours Data Set (for Local Hospital Network services) from 1 July 2019.

### 5.1.2 Individual Healthcare Identifier

In the Pricing Framework 2018-19, IHPA advised that its work to develop a bundled pricing approach for maternity care had concluded that a single person identifier was a precondition to implementation. A robust person identifier would allow IHPA to accurately identify service delivery to patients across settings of care, financial years and hospitals.

The [Individual Healthcare Identifier](#) is an existing person identifier that could be included in national data sets. The Identifier underpins the My Health Record program managed by the Australian Digital Health Agency. By the end of 2018, every Australian will have a My Health Record unless they choose not to have one. In response to the Pricing Framework Consultation Paper 2018-19, most stakeholders supported including the Identifier in national data sets.

Linked patient data would provide broad benefits to the health system, allowing hospitals to review care pathways and develop value-based healthcare proposals. The Identifier would support IHPA's existing work including:

- Development of the Australian Non-Admitted Care Classification, by allowing consideration of a unit of count which is broader than one patient attendance.
- Implementation of the Australian Mental Health Care Classification, by providing a more robust identifier for service delivery to mental health consumers within a phase of care.
- Analysis to support a pricing or funding approach for avoidable hospital readmissions as discussed in Chapter 11.
- Consideration of innovative funding models, such as bundled pricing.

IHPA is undertaking consultation with jurisdictions, national data committees, the Australian Digital Health Agency and other national bodies to determine the feasibility of including the Individual Healthcare Identifier in national data sets. IHPA is working towards this being implemented from 1 July 2019.

## 5.2 National Hospital Cost Data Collection

IHPA primarily relies on the National Hospital Cost Data Collection (NHCDC) to develop the NEP and the price weights for the funding of public hospital services on an activity basis and to develop the NEC for block funded hospitals.

### 5.2.1 Australian Hospital Patient Costing Standards

Data submissions by jurisdictions to the NHCDC are informed by the *Australian Hospital Patient Costing Standards* (the Standards). The Standards provide direction for hospital patient costing and are intended to improve consistency in the reporting of hospital costs. The Standards are evolving guidelines that will continue to be updated as new costing processes develop.

[Version 4 of the Standards](#) was published in February 2018. The Standards have been restructured to incorporate a set of overarching principles to guide the costing process and to include business rules which provide detailed guidance from the costing practitioners' perspective on how a costing standard can be translated into action, while taking into account practical and operational constraints within organisations. It is intended that the changes to the Standards will result in greater consistency in activity based costing for future rounds of the NHCDC.

Version 4 of the Standards has also sought to address stakeholder issues which were raised in response to previous Pricing Framework Consultation Papers. These include accounting for the costs of interpreter services, private patient medical expenses, teaching and training and posthumous care.

Version 4 of the Standards will inform the costing of public hospital services from 2017-18 (Round 22) of the NHCDC. Once implemented, IHPA intends to evaluate compliance with the new aspects of the Standards through its annual [NHCDC Independent Financial Review](#).

## 5.3 Access to public hospital data

IHPA is committed to transparency and open access to information as well as obligations to respect and maintain confidential, commercially valuable and personal information.

A significant amount of public hospital data and related information is accessible via IHPA's website. This includes the [NHCDC Cost Report](#) and [NEP](#) and [NEC Determinations](#). IHPA cost data is also available on the Australian Institute of Health and Welfare's [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*. The Chair of the Pricing Authority or a delegate may release data to specified government agencies where it would assist them in performing their functions, as well as to other third parties where it would benefit the conduct of research. In deciding to release data, IHPA always ensures adequate steps are taken to protect patient privacy. Further information is contained in the [Information Release Policy](#). The releases have led to research publications which have added value to public discussion on health policy as well as policymaking.

### 5.3.1 Benchmarking

The [National Benchmarking Portal](#) was developed in 2016 as a secure web-based application allowing users to analyse hospital activity and cost information around the country and compare against similar hospitals, including for hospital acquired complications (HACs). Jurisdictions

control access to the Portal, and in many cases have granted access to Local Hospital Networks and hospital managers to enable benchmarking against similar hospitals nationally.

IHPA continues to improve the capabilities of the Portal. In 2018, IHPA will include the HAC Adjustment on the Portal to highlight the risk-adjusted impact of potentially preventable HACs on hospital costs. The Portal will also include actual HAC rates for hospitals. This information will support system and hospital managers in identifying areas for improvement in safety and quality.

### 5.3.2 Broadening access to data

IHPA considers that broadening access to its data and greater publication of analysis using the data would benefit work to develop and evaluate health policy and programs by researchers, clinical groups and peak bodies and would serve the interests of transparency.

IHPA is considering a range of options to broaden access to its data, including:

- Public access to the National Benchmarking Portal: The Portal includes extensive hospital-level information on hospital activity and its costs, as well as safety and quality indicators. IHPA could broaden access to the Portal beyond its current users which are state and territory health departments. Rigorous safeguards would be required to ensure that the data is appropriately managed and the data is used only for research purposes.
- Publications using IHPA data: IHPA publishes a limited number of reports annually which include or analyse hospital data, such as the NHCDC Cost Report or costing studies informing classification development. IHPA could undertake and publish research analysing different aspects of the data to what is currently available. For example, IHPA could report on the cost of HACs and avoidable hospital readmissions at the hospital level or report on the drivers of cost variation in emergency departments.

IHPA's consideration of how to broaden access to the data, while ensuring patient privacy and appropriate use, will be led by feedback in response to the Pricing Framework Consultation Paper.

#### Consultation question

- Should access to the public hospital data held by IHPA be widened? If so, who should have access?
- What analysis using public hospital data should IHPA publish, if any?

# 6. Setting the National Efficient Price for activity based funded public hospitals

## 6.1 Technical improvements

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

IHPA will consider any new technical improvements suggested by jurisdictions and other stakeholders in the development of the National Efficient Price 2019-20 (NEP19).

### 6.1.1 Pricing of emergency care

IHPA foreshadowed in the Pricing Framework 2018-19 an intention to price or shadow price emergency department services using the Australian Emergency Care Classification (AECC) for NEP19.

The AECC will be finalised in late 2018. While new data items may be required for the AECC in the future, Version 1 of the classification can be implemented using existing data collections.

A quality assurance process will be undertaken in December 2018 and January 2019 to check and validate Version 1 of the AECC including the complexity model in the classification.

Following this process, IHPA will use available cost data with a view to pricing emergency department services using the AECC for either NEP19 or NEP20.

### 6.1.2 Pricing of mental health care

IHPA foreshadowed in prior Pricing Frameworks an intention to price mental health services using the Australian Mental Health Care Classification (AMHCC) as it more accurately reflects the costs and care delivered to mental health consumers. This requires that cost and activity data is reported at the 'phase of care' level.

The 2017-18 and 2018-19 Consultation Papers advised that IHPA was investigating a proxy for 'phase of care' to price mental health services using the AMHCC prior to phase level cost data being reported by states and territories.

IHPA has investigated a number of potential proxies including episode care type, length of stay, the 'program type' data item collected in the [National Outcomes and Casemix Collection](#) (NOCC) and the number of times that the [Health of the Nation Outcome Scales](#) (HoNOS) was undertaken or significant changes in HoNOS as indicative of multi-phase episodes.

No robust proxy for 'phase of care' has been identified to price even a subset of mental health consumers. Clinical and other stakeholders are not supportive of further investigating proxies.

IHPA does not intend to continue to investigate proxies for 'phase of care' as some costed mental health activity inclusive of 'phase of care' is expected to be reported in Round 21 (2016-17) of the National Hospital Cost Data Collection (NHCDC) to inform development of shadow price weights.

IHPA will only price or shadow price mental health services using the AMHCC for NEP19 if the 2016-17 cost data is robust enough to support it.

IHPA will also seek to align the pricing and classification of mental health with other policy frameworks and initiatives by Australian governments. For example, IHPA will be mindful of developments regarding the [National Mental Health Service Planning Framework](#) and associated documents which guide strategic planning and future investment in the mental health system.

### 6.1.3 Alternative geographical classification systems

Remoteness has been shown to be a significant cost driver for the provision of public hospital services and is considered in both the NEP model and the NEC model as one of a variety of factors. IHPA's approach to determining remoteness is to use the Australian Bureau of Statistics' [2011 Australian Statistical Geography Standard Remoteness Area \(ASGS-RA\) classification](#).

The Northern Territory has proposed an alternative approach for determining patient and hospital remoteness. The simplified methodology is based on population density and spatial distance and is outlined in a [2008 research paper](#).<sup>1</sup> It has been suggested this more intuitive and statistically straightforward approach could better account for the fixed costs incurred due to geographic remoteness than the current ASGS-RA model. Subject to stakeholder feedback, IHPA intends to review this alternative remoteness classification ahead of developing NEP19 and NEC19.

### 6.1.4 Fundamental review of the National Pricing Model

In response to previous Pricing Frameworks, stakeholders have repeatedly recommended that IHPA consider alternative approaches to calculating the NEP, which may better deliver on the objectives in the National Health Reform Agreement.

This issue was last considered in the [Pricing Framework 2015-16](#) where different approaches were canvassed including continuing to set the NEP at the average cost, excluding high cost hospitals or excluding 'avoidable costs'. IHPA retained the existing approach to setting the NEP based on the national average cost of care. This provides a strong financial incentive for hospital managers to improve the efficiency of hospital care towards the national average.

As public hospital funding arrangements from 2020 are yet to be finalised, IHPA considers it an appropriate time to review the methodology underpinning the National Pricing Model.

IHPA has therefore commenced a 'first principles' independent review of the National Pricing Model. The review will question the assumptions and technical approaches, which were adopted early in the development of the NEP and whether they remain best practice.

The review will involve:

- A comprehensive literature review of current data analysis and statistical modelling techniques, focusing on the suitability and applicability for pricing public hospital services.
- Using evidence from the literature review to undertake a review of the processes used in the development of pricing models underpinning the NEP. This includes, but is not limited to:
  - data preparation;
  - price weights for care streams;
  - suitability of adjustments;

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<sup>1</sup> Zhao Y & Guthridge S (Dec 2008). 'Rethinking remoteness: a simple and objective approach', *Geographical research*, 46(4): 413-420.



- stabilisation policies;
  - calculation of the reference cost;
  - indexation rate; and
  - back-casting.
- Producing a list of recommendations to improve the processes and statistical techniques used in the NEP development.

The review will conclude in early 2019 and will be discussed in the Pricing Framework Consultation Paper 2020-21.

### Consultation question

- What are the advantages and disadvantages of changing the geographical classification system used by IHPA?
- What areas of the National Pricing Model should be considered as a priority in undertaking the fundamental review?
- Should IHPA consider any further technical improvements to the pricing model used to determine the National Efficient Price for 2019-20?

## 6.2 Adjustments to the National Efficient Price

### 6.2.1 Overview

Section 131(1)(d) of the *National Health Reform Act 2011* 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 National Health Reform Agreement additionally states that IHPA “must have regard to legitimate and unavoidable variations in wage costs and other inputs which affect the costs of service delivery including hospital type and size; hospital location, including regional and remote status; and patient complexity, including Indigenous status”.

IHPA tests whether there are empirical differences in the cost of providing public hospital services at the national level in order to determine whether there are legitimate and unavoidable variations in the costs of service delivery that may warrant an adjustment to the NEP.

IHPA examines patient-based characteristics in the cost of providing public hospital services as a first priority before considering hospital or provider-based characteristics. This policy reinforces the principle that funding should follow the patient wherever possible.

IHPA will continue to review these existing adjustments, with the aim of discontinuing adjustments associated with input costs or which are facility-based when it is feasible.

IHPA developed the [Assessment of Legitimate and Unavoidable Cost Variations Framework](#) in 2013 to assist state and territory governments in making applications for consideration of whether a service has legitimate and unavoidable cost variations not adequately recognised in the National Pricing Model. If agreed, IHPA considers whether an adjustment to the NEP is warranted. Jurisdictions may propose potential unavoidable cost variations on an annual basis.

IHPA will consider adjustments proposed by stakeholders in their responses to the Pricing Framework Consultation Paper or by jurisdictions as part of the *Assessment of Legitimate and Unavoidable Cost Variations Framework* process.

## 6.2.2 Adjustments to be evaluated for NEP19

### Extension of admitted acute adjustments to other care settings

The Northern Territory has recommended that IHPA standardise adjustments between settings of care where the service is the same, such as renal dialysis and chemotherapy, as per the *Pricing Guidelines*. For example, it is proposed that the Patient Residential Remoteness Area Adjustment should also apply to non-admitted and emergency care as transferring services to these settings currently has a negative financial impact.

Currently adjustment proposals are considered on the basis of empirical evidence. No cost difference had previously been identified based on remoteness for non-admitted or emergency care. In finalising the NEP18 Determination, IHPA did identify a material cost difference for emergency department presentations where the patient lives in a remote or very remote area. To this end the Patient Residential Remoteness Area Adjustment was extended from admitted acute care to include emergency department and emergency services presentations in the [NEP18 Determination](#).

IHPA will continue to investigate whether existing adjustments for admitted acute care can be extended to other care settings, with a particular focus on the non-admitted service stream. Improvements in the quality of cost data for other streams, particularly for non-admitted services, may provide new evidence to support this work for NEP19.

### Harmonising price weights across care settings

The Pricing Guidelines in Chapter 2 guide the policy decisions underpinning the National Pricing Model and were developed following extensive consultation with key stakeholders and the public. The Pricing Guidelines include 'System Design Guidelines' to inform options for the design of ABF and block grant 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 that there is no financial incentive for hospitals to admit patients previously treated on a non-admitted basis due to a higher price for the same service. IHPA seeks advice from its Clinical Advisory Committee when considering whether classes across settings of care are providing a similar type and level of care.

For NEP19, IHPA will investigate whether there is the potential for further harmonisation of price weights across settings. Services which are potentially similar enough to warrant harmonisation include non-admitted and admitted same-day chemotherapy services, renal dialysis and sleep disorders.

IHPA will also consider whether harmonisation is feasible over other care streams, for example non-admitted and subacute services. Same-day non-admitted and subacute services which are potentially similar enough to warrant harmonisation include rehabilitation, palliative care, geriatric evaluation and management and psychogeriatric services.

### Consultation question

- What are the priority areas for IHPA to consider when evaluating adjustments to NEP19?
- What patient-based factors would provide the basis for these or other adjustments? Please provide supporting evidence, where available.
- Do you support price harmonisation for the potentially similar same-day services which are discussed above?
- What other services, which can be provided in different settings of care, could benefit from price harmonisation?

## 6.3 Shadow implementation periods

The Pricing Framework 2018-19 advised that IHPA will shadow major changes to the ABF classification systems. A shadow implementation period provides Australian governments 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.

A shadow implementation period involves determining prices for activity, but with funding implications only in a later year. For example, the non-admitted class for medical-led multidisciplinary case conferences where the patient is not present was shadow priced in NEP18 with the aim of establishing a baseline activity measure for this new Tier 2 clinic.

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

Examples of changes that IHPA intends to shadow price include:

- Changes that require new data items: The quality and completeness of reporting for new data items cannot be determined prior to evaluating the first year of collection. IHPA also recognises that the introduction of new data items may require a lead time to be implemented into the information technology systems of health services.
- New Tier 2 Non-Admitted Services classes: IHPA will shadow new Tier 2 Non-Admitted Services classes to reduce the risk of unintended consequences and to collect activity and cost data to assess its impact. For example, IHPA has shadowed the class for medical-led multidisciplinary case conferences where the patient is not present.

Examples of changes that IHPA does not intend to shadow include:

- Adjustments that utilise existing data items, where the historic data is robust: IHPA will introduce adjustments to account for legitimate and unavoidable costs as identified using robust national data. The impact of new adjustments can be determined using existing data and be considered by jurisdictions prior to the release of the NEP Determination.
- New AR-DRG classification versions: A shadow implementation period would delay the reporting of admitted data using the latest AR-DRG version. This would mean that it could not inform the development of the next AR-DRG version which occurs every two years. The National Pricing Model also stabilises changes in price weights for DRGs across AR-DRG versions which reduces the financial impact on health services.

In response to the Pricing Framework Consultation Paper 2018-19, some stakeholders have recommended that IHPA apply shadow implementation periods to all changes to the ABF

classification systems and National Pricing Model. IHPA notes that shadowing changes may minimise the risk of unintended consequences, but would also delay necessary improvements to the national ABF system such as improved accuracy in the classification and pricing of services.

IHPA will work with stakeholders to develop criteria that provide the parameters around whether to apply a shadow implementation period for any changes.

**Consultation question**

- When should IHPA implement a shadow period for ABF classification systems and the National Pricing Model?

# 7. Setting the National Efficient Price for private patients in public hospitals

## 7.1 Overview

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

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

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

## 7.2 Costing private patients in public hospitals

The collection of private patient medical expenses is problematic in the National Hospital Cost Data Collection (NHCDC). For example, there is a common practice in some jurisdictions of using Special Purpose Funds to collect associated revenue (e.g. MBS) and reimburse medical practitioners.

These funds generally do not appear in hospital accounts used for costing in the NHCDC. This leads to an under attribution of total medical costs across all patients as costs associated with medical staff are applied equally across public and private patients.

For the National Efficient Price 2018-19 (NEP18) IHPA corrected for this issue by inflating the cost of all patients (the 'private patient correction factor') to account for costs not reported in the NHCDC. The Hospital Casemix Protocol (HCP) data set was used to identify the missing medical costs of private patients.

The use of the correction factor assumes that all private patient costs are missing and that these costs are spread across both private and public patients which is not always the case. For example, some hospitals appear to report specialist medical costs for private patients, whilst others may have costs missing from both public and private patients.

Version 3.1 of the [Australian Hospital Patient Costing Standards](#) states that public hospitals are to report the full costs incurred in the treatment of public and private patients in the NHCDC. While full compliance with the existing Standards would allow for phasing out the correction factor, private patient costs have not been consistently captured across public hospitals to date.

IHPA intends to retain the correction factor for NEP19 given that private patient costs are not consistently captured across public hospitals.

IHPA will work with states and territories to better identify the treatment of private patient costs in the 2016-17 NHCDC data (Round 21) used for NEP19 and ascertain if any revision needs to be made to the existing methodology used to correct for missing costs.

### 7.2.1 Phasing out the private patient correction factor

The private patient correction factor was introduced as an interim solution for the issue of missing private patient costs in the NHCDC. Submissions in response to the Pricing Framework Consultation Paper 2017-18 supported phasing out the correction factor when feasible.

Version 4 of the Standards was published in February 2018 and includes a [Business Rule](#) relating to the treatment of medical and other expenses found in Special Purpose Funds which are created to manage Rights of Private Practice arrangements. It is intended that the Business Rule will support states and territories in accounting for all expenses contributing toward hospital activities, regardless of their funding source. The Business Rule will inform the costing process for Round 22 (2017-18) of the NHCDC.

IHPA considers that jurisdictions have been given sufficient lead time to ensure that private patient medical costs are captured in the NHCDC. The 'Business Rule for Special Purpose Funds' in Version 4 of the Standards will provide additional guidance to costing managers. IHPA proposes to phase out the correction factor for the 2017-18 costing year and NEP20.

#### Consultation question

- Do you support the proposal to phase out the private patient correction factor for NEP20?

## 7.3 Pricing private patients

IHPA deducts payments made by insurers and the MBS for services delivered to private patients in developing the National Pricing Model. This revenue is deducted to prevent the hospital being paid twice for each private patient – once by the revenue source and a second time by the Commonwealth under the Agreement.

IHPA will continue to apply the Private Patient Service Adjustment, to deduct revenue received for medical hospital services and prostheses, and the Private Patient Accommodation Adjustment, to deduct revenue received for accommodation, for NEP19.

IHPA will also continue to consider proposals to refine the adjustments. For example, IHPA will give further consideration to a New South Wales proposal in response to the Pricing Framework Consultation Paper 2018-19 to split the Private Patient Service Adjustment into two components – prosthesis and medical, to recognise the different characteristics of these costs.

IHPA will continue to investigate whether its private patient adjustments are accurately deducting other sources of revenue. IHPA has compared the total benefits paid on behalf of private patients in 2015-16 (as recorded in the HCP data set) with the deductions included in the NEP15 Determination for private patients. The sample of patients reviewed accounted for around 72.3% of private patients in public hospitals in 2015-16. This analysis showed that the total benefits received in 2015-16 for the sample considered was \$838 million and the total deductions applied for the sample considered was \$823 million. This analysis suggests that the approach to private patient pricing in NEP15 was accurate. IHPA will repeat this exercise once 2016-17 HCP data is available.

IHPA will also undertake investigations to ensure that the adjustments are not having a perverse impact on the delivery of public hospital services to public and private patients. IHPA [commissioned a study](#) to consider this issue in 2016-17, which concluded that the private patient adjustments were not a driver of private health insurance utilisation in public hospitals.

# 8. Treatment of other Commonwealth programs

## 8.1 Overview

Under Clause A6 of the National Health Reform Agreement, IHPA is required to discount funding that the Commonwealth provides to public hospitals through programs other than the Agreement to prevent the hospital being funded twice for the service. The major programs are blood products (funded 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)

IHPA is not proposing to change the treatment of these programs for the National Efficient Price 2019-20 (NEP19).



# 9. Setting the National Efficient Cost

## 9.1 Overview

IHPA developed the National Efficient Cost (NEC) for hospitals with activity levels which are too low to be suitable for funding 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.

IHPA introduced new 'low volume' thresholds in 2015-16 to determine whether a public hospital is eligible to receive block funding. All activity by the hospital is included in the low volume threshold, rather than just admitted acute activity. IHPA will retain this approach for NEC19.

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 and granularity in reflecting the services and activity undertaken by block funded hospitals.

### 9.1.1 Consideration of alternative NEC methodologies

While activity based funding (ABF) and block funding approaches both cover services that are within the scope of the National Health Reform Agreement, a 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. This split in approaches reflects the wide range of hospital sizes across Australia meaning that a National Efficient Price (NEP) based approach would not scale well across smaller hospitals in remote locations and larger hospitals in metropolitan locations.

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

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

In response to the Pricing Framework Consultation Paper 2018-19, IHPA received strong stakeholder support for consideration of alternative methodologies for calculating the efficient cost of block funded hospitals. A number of alternative methodologies have been put to jurisdictions through the Small Rural Hospital Working Group for their consideration including:

- A modified ABF approach with additional adjustments to account for the additional costs of service delivery in small rural hospitals.
- A 'fixed plus variable' model where each hospital receives a fixed funding amount (determined using a number of variables) and a variable ABF style amount.
  - Under this approach, the fixed amount could be determined after taking a number of factors into account.

Subsequent discussions have been supportive of the ‘fixed plus variable’ approaches, which have been adopted in some jurisdictions. The benefit of these models is that block funding would increase to reflect additional activity volumes more continuously.

Potential targeted adjustments for cost drivers are under investigation and it is anticipated that a new model will be run in parallel to the existing model for NEC19. A final decision on the alternative model will be in the Pricing Framework 2019-20.

### Consultation question

- What other models might IHPA consider in determining funding for small rural and remote hospitals?
- What cost drivers should IHPA investigate for rural and remote hospitals for potential inclusion as adjustments in the NEC?

## 9.2 Block funded services

Public hospital services in ABF hospitals are eligible for block funding where the Pricing Authority has determined that they are not able to meet the technical requirements for applying ABF or where they lack the economies of scale which would mean that the service would not be financially viable under ABF.

For NEC18, IHPA determined block funding amounts for teaching, training and research and non-admitted mental health services in ABF hospitals based on jurisdictional advice. IHPA will continue to block fund these services in NEC19 and until such time that ABF classification systems are implemented and using for pricing for these services.

As discussed in Chapter 10, the Pricing Authority determined that specified hospital avoidance programs which are funded on a capitation basis may be eligible for block funding on application.

### 9.2.1 Non-admitted home ventilation services

For NEC18, IHPA transitioned non-admitted home ventilation activity in ABF hospitals from ABF to block funding given significant variance in the reporting of activity and costs across and within jurisdictions. Block funding amounts were determined based on jurisdictional advice.

As discussed in Chapter 4, IHPA is investigating a split in the home ventilation class to account for cost differences in the complexity of services provided. This may allow IHPA to transition home ventilation activity from block funding to ABF for NEC19.

### 9.2.2 Review of block funded services

Expenditure for block funded services in ABF hospitals is determined based on jurisdictional advice in accordance with the National Health Reform Agreement. As state and territory budgets are not finalised prior to publication of the NEC Determination, jurisdictions have the opportunity to revise their block funded amounts later in the year through a [Supplementary NEC Determination](#).

IHPA requires evidence where the growth rate for services exceeds the NEC indexation rate. Evidence can include measures outlined in budget papers, policy and funding guidelines, Local Hospital Network service agreements or other documents which identify specific new programs and investments.

IHPA has commissioned an external party with appropriate expertise to undertake a review of the block funded services (excluding for small rural hospitals) to determine whether the process can be improved. The review will consider the actual costs incurred by states and territories for

block funded services and compare these to the amounts submitted as part of the NEC Determination process. The Pricing Authority will consider the recommendations from the review in September 2018 and any implications for NEC19.

# 10. Innovative funding models

## 10.1 Overview

The Pricing Framework Consultation Paper 2018-19 asked how the national activity based funding (ABF) approach can better accommodate innovative approaches to public hospital funding and the value-based models of healthcare being adopted in Australia and overseas. Stakeholders were strongly supportive of IHPA investigating how the national ABF system can support their implementation. IHPA will continue in 2018 to explore opportunities to improve the national ABF system.

The *Pricing Guidelines*, which guide IHPA's work, state that the pricing approach should respond in a timely way to the introduction of evidence-based, effective new technology and innovations in the models of care that improve patient outcomes. Clause A62 of the National Health Reform Agreement also states that the national ABF system does not preclude exploration and trial of new and innovative approaches to public hospital funding on a limited basis.

The February 2018 [Heads of Agreement between the Commonwealth and the States and Territories on Public Hospital Funding](#) also provides IHPA an opportunity to explore new developments in health funding on a global scale and their impact on providing efficiency and transparency in public health systems.

## 10.2 Block funding for innovative funding programs

Some state and territory governments are developing new funding models for some patient groups to drive the adoption of patient-centred models of care. The amount of funding per patient usually reflects the existing cost of delivering hospital services to these patients and allows health services the flexibility to use the funding in primary and community services to reduce per patient expenditure over time. Examples include bundled payments or capitation funding models.

The Pricing Framework 2018-19 advised that IHPA will consider jurisdictional proposals to block fund patients at the national level to support the introduction of new innovative funding models.

The Victorian 'HealthLinks: Chronic Care' program has been included on the General List of In-Scope Public Hospital Services and IHPA will block fund the program on a trial basis for the National Efficient Price 2018-19 (NEP18) for four Local Hospital Networks. The program is a capitation funding model for patients with chronic disease and aims to reduce avoidable readmissions and presentations to emergency departments. The block funding of these services will be reviewed after twelve months.

## 10.3 International funding models

Healthcare systems around the world are facing rising costs and growing demand for services and policy makers are refocusing health financing arrangements away from payments based on the type and volume of services delivered and towards payments based on the value of care. IHPA is aware of innovative funding systems for healthcare being adopted across Europe and North America which may be relevant to the Australian context.

IHPA will undertake a 'global horizon scan' in 2018 to identify issues, solutions and innovations in health funding across the globe that could be incorporated into the Australian system.

The global horizon scan will include a comprehensive review of international health funding systems and initiatives, identify international initiatives and innovations that may add value and insight into IHPA's work, and advise on the outcomes of funding initiatives that have been trialled overseas. A report which summarises the learning from this project will be finalised in early 2019 and will inform the Pricing Framework Consultation Paper 2020-21.

### **Consultation questions**

- What countries have healthcare purchasing systems which can offer value in the Australian context and should be considered as part of the global horizon scan?

# 11. Pricing and funding for safety and quality

## 11.1 Overview

In 2017, all Australian governments signed the Addendum to the National Health Reform Agreement (the Addendum). Through this, parties committed to improve Australians' health outcomes and decrease avoidable demand for public hospital services through reforms including the development and implementation of funding and pricing approaches for safety and quality.

This requires IHPA 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 and avoidable hospital readmissions.

IHPA proposed options for integrating safety and quality into hospital and pricing and funding in the Pricing Framework Consultation Paper 2017-18.

Following consultation feedback and advice to the COAG Health Council, the implementation of pricing and funding for safety and quality has been rolled out on a staged basis.

## 11.2 Sentinel events

Health ministers agreed on a [national set of eight sentinel events](#) in 2002 (the Australian Sentinel Events List). Sentinel events are defined as "...adverse events that occur because of hospital system and process deficiencies, and which result in the death of, or serious harm to, a patient". The establishment of sentinel event reporting arrangements aimed to facilitate a safe environment for patients by reducing the frequency of these events.

As detailed in the Pricing Framework 2017-18, an episode of care (across care streams) where a sentinel event occurs will not be funded in its entirety from 1 July 2017, applying to hospitals where the services are funded on an activity basis and hospitals where services are block funded.

For the National Efficient Price 2019-20 (NEP19), IHPA will continue to assign zero National Weighted Activity Unit (NWAU) for episodes with a sentinel event.

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. The Australian Commission on Safety and Quality in Health Care (the Commission) is developing a data set specification for nationally consistent reporting of sentinel events in future years.

### 11.2.1 Review of the Sentinel Events List

The Commission has concluded its review of the Australian Sentinel Events List. The list is being refined based on clinical advice to ensure each sentinel event meets the definition and criteria of a sentinel event. Public consultation on the review concluded in June 2017.

The draft Version 2 of the Australian Sentinel Events List is currently under consideration by the COAG Health Council. The Commission is preparing a user guide, which will include case studies relating to each of the sentinel events in the revised list.

IHPA will consider how to implement any changes to the Australian Sentinel Events List into the NEP and National Efficient Cost (NEC) Determinations once the list has been approved.

## 11.3 Hospital acquired complications

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 16 HACs was developed by a [Joint Working Party](#) of the Commission and IHPA. The list and their definitions is available on the [Commission's website](#). The Commission is responsible for the ongoing curation of the list to ensure it remains clinically relevant.

### 11.3.1 Introduction of the HAC Adjustment

As detailed in the Pricing Framework 2018-19, funding will be reduced for any episode of admitted acute care where a HAC occurs from 1 July 2018. 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, gender, diagnosis related group type (medical, surgical, other), major diagnostic category, Charlson score<sup>2</sup>, intensive care unit status, admission status and transfer status.

Further information on the HAC funding approach is included in the [NEP18 Determination](#) and the [National Pricing Model Technical Specifications 2018-19](#).

For NEP19, IHPA will continue to implement the HAC Adjustment.

The HAC Adjustment is just one element to a range of policies agreed to by Australian governments to improve safety and quality in public hospitals. For example, the Commission has developed [a range of tools](#) to support local monitoring of HACs and quality improvement strategies. These include specifications and groupers that services can download and use to monitor HACs using their administrative data. It also includes the HACs Information Kit, which outlines activities that services can implement in order to minimise the occurrence of HACs.

Together with the Commission, IHPA has also developed an [animation](#) to explain the secondary uses of patient medical records. It aims to encourage clear, accurate and complete documentation in patient medical records. IHPA is also in the process of developing a mobile application to provide support to clinical staff in correct clinical documentation in medical records.

The HACs list will be reviewed regularly. The Commission's website will provide information on this work including opportunities for public feedback on refinements to the HAC list.

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<sup>2</sup> The Charlson score is a comorbidity index that predicts the one year mortality for a patient who may have a range of comorbid conditions.

## 11.4 Avoidable 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, referred to throughout this paper as the 'index admission'. Reducing unplanned readmissions is desirable from a patient quality of care perspective, as well as from the perspective of avoiding unnecessary costs.

Clause I74 of the Addendum requires IHPA to determine an appropriate pricing or funding model for avoidable hospital readmissions. No funding implementation date was set for this work.

The funding or pricing approach is based on a list of avoidable hospital readmissions, including suitable condition-specific timeframes for each condition, to be developed by the Commission. The Commission has finalised the list of avoidable hospital readmissions and condition-specific intervals which are available on the [Commission's website](#).

### 11.4.1 Australian and international policy context of pricing and funding models to reduce avoidable hospital readmissions

The objective of interventions targeting avoidable readmissions is to provide incentives for hospitals and clinicians to identify areas for quality improvement. This can include tackling issues such as the rate of complications and other adverse events arising during the index admission, as well as improving discharge planning, care coordination and the provision of health and other support services in the community.

A wide range of non-financial interventions are in use in Australia and other countries to reduce avoidable hospital readmissions. This includes:

- Setting targets to reduce avoidable hospital readmissions;
- Providing benchmark information back to hospitals and clinicians on their rate and types of avoidable hospital readmissions;
- The introduction of care coordinators and nurse navigators who coordinate admission to hospital and facilitate discharge and linkages to community care for high needs patients;
- The establishment of learning communities and other improvement networks that share case studies about successful interventions and identify new opportunities for practice change and system improvement; and
- Public reporting on rates of either all-causes or specific types of avoidable hospital readmissions.<sup>3</sup>

IHPA recognises that pricing and funding approaches to reduce avoidable hospital readmissions should be part of a comprehensive strategy that also includes non-financial interventions such as those listed above.

Funding approaches to avoidable hospital readmissions are also used extensively in other countries. Examples include:

- **Denmark:** Hospital reimbursement may be reduced at a regional level for hospitals that increase their 'treatment intensity', measured as the sum of the Diagnosis Related Group (DRG) value divided by the total number of patients. This approach provides an indirect incentive to reduce readmissions. Some types of readmissions are also funded through block grants, again creating an indirect incentive to reduce readmissions.

<sup>3</sup> Project Health 2018, *Environmental scan and literature review to inform policy in relation to avoidable hospital readmissions*, Sydney: Australian Commission on Safety and Quality in Health Care.



- **Germany:** Under Germany's DRG funding model, readmissions are merged with the index admission for reimbursement purposes. The hospital is only paid for the 'new' merged index admission and readmission. This can change the payment for the index admission as diagnoses, procedures and length of stay associated with the readmission are included and may result in a reclassification with a higher payment for the merged admissions than the index admission alone. There is no separate payment for the readmission.
- **England:** In 2011 a policy of non-payment of any readmissions occurring within 30 days of discharge from an elective admission was implemented. Since 2012 this policy has been modified to use locally set benchmark rates of hospital readmissions, with non-payment applying to readmissions above hospital-specific readmission rates. The implementation of this policy at local level also involves a clinical review process to determine the avoidability of the readmission.
- **United States (Medicare population):** The Hospital Readmission Risk Reduction Program for US Medicare patients also relies on benchmarks which are determined as expected risk-adjusted readmission rates for each hospital. Hospitals with readmission levels higher than their benchmark rate are financially penalised by a fixed percentage amount across all their admitted patient episodes (1% in 2013, 2% in 2014 and 3% in 2015). Conditions selected for inclusion in the program are based on the primary discharge diagnosis<sup>4, 5</sup>

#### 11.4.2 Definitional approach and list of avoidable hospital readmissions

IHPA and the Commission commenced work on the development of an Australian list of avoidable hospital readmissions in response to a Ministerial Direction issued to IHPA in August 2016. This Ministerial Direction specified that an avoidable hospital readmission was a readmission to hospital:

*For a condition or conditions arising from complications of the management of the original condition.*

This definition formed the basis of the Australian Health Ministers' Advisory Council's (AHMAC's) request to the Commission to develop:

*A list of clinical conditions that arise from complications of the management of the original condition, that can be considered avoidable hospital readmissions, including identifying suitable condition-specific timeframes for each of the identified conditions.*

This focus on readmissions arising from complications experienced in the index admission resulted in the Commission including many conditions that overlap with HACs in its list of avoidable hospital readmission conditions. To develop its list, the Commission undertook cycles of analysis and clinical review using the Admitted Patient Care National Minimum Data Set to identify avoidable readmissions. The criteria used by the Commission were that clinical conditions had to be:

- **Related** to the index admission;
- **Avoidable** by improved clinical management in the index admission and/or suitable discharge planning and follow-up; and
- **Measurable** through coded data generated from the patient medical record.

<sup>4</sup> Kristensen SR, Bech M and W Quentin 2014, 'A roadmap for comparing readmission policies with respect to Denmark, England, Germany and the United States', *Health Policy*, 119: 264-273.

<sup>5</sup> McIlvannan CK, Eapen ZJ and LA Allen 2015, 'Hospital readmissions reduction program', *Circulation*, 131(20): 1796-803.

In June 2017, AHMAC approved the list of avoidable hospital readmissions developed by the Commission. **Table 1** presents the AHMAC approved list of 11 avoidable hospital readmissions and readmission diagnoses, together with the condition-specific readmissions intervals (these intervals are further discussed in Section 11.4.4). The first 10 avoidable hospital readmission conditions are also included in the HAC list. The ‘other’ avoidable hospital readmission conditions – constipation and nausea and vomiting – were included as they satisfied the specified criteria and they had high prevalence rates among readmissions.

**Table 1 List of Avoidable Hospital Readmissions**

Readmission condition	Readmission diagnosis	Readmission interval
1. Pressure injury	Stage III ulcer	14 days
	Stage IV ulcer	7 days
2. Infection	Unspecified decubitus and pressure area	14 days
	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	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	28 days
	Surgical wound dehiscence	28 days
	Anastomotic leak	28 days
	Cardiac vascular graft failure	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
11. Other	Constipation	14 days
	Nausea and vomiting	7 days

### 11.4.3 Relationship between avoidable hospital readmissions and hospital acquired complications

While there is overlap with the list of conditions on the HAC list, an avoidable hospital readmission is not equivalent to a HAC due to differences in their timing and their impact on a hospital admission, as follows:

- By definition, a HAC is a complication that occurs during a hospital admission. The HAC is not the same as the diagnosis responsible for the hospital admission. Patients will have been admitted to a hospital with a principal diagnosis that may be unrelated to the complication that subsequently occurs during their hospital admission.
- In general, an avoidable hospital readmission is defined as the condition that is the principal diagnosis that is already present when the patient is readmitted to a hospital. The two exceptions to the principal diagnosis-only rule in **Table 1** are infection with a multi-resistant organism and hypoglycaemia. Based on clinical advice, the Commission recommended that these two conditions should be identified as avoidable hospital readmissions using both the principal and additional diagnosis.

Based on these definitions, it is theoretically possible that some patients may experience both a HAC in their index admission and a subsequent avoidable hospital readmission. However, analysis has indicated that this situation (experiencing both a HAC and an avoidable hospital readmission) occurs at relatively low frequency.

Analysis based on 2015-16 admitted patient episodes found that:

- There were fewer avoidable hospital readmissions (54,000, excluding constipation, nausea and vomiting<sup>6</sup>) than HACs (124,000).
- Of the 124,000 episodes with a HAC in the index admission, only 1.9% went on to have an avoidable hospital readmission in their next hospital admission.
- Of the 54,000 avoidable hospital readmission episodes, 4.3% had experienced a HAC in the index admission.

The results indicate that about 95% of avoidable hospital readmission episodes were not preceded by an admission that included a HAC. These findings indicate that funding adjustments for avoidable hospital readmissions and HACs can be implemented separately from each other. This allows a more transparent and discrete approach to the development of funding adjustments for avoidable hospital readmissions.

### 11.4.4 Approach to measurement of avoidable hospital readmissions

Based on the Commission's list of conditions considered to be avoidable hospital readmissions, several additional elements must be specified as part of their measurement. These elements comprise:

- Readmission intervals;
- Scope of included and excluded services;
- Readmissions to the same hospital or other hospitals; and
- Readmissions within or across financial years.

Each of these elements is examined below.

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<sup>6</sup> Excludes constipation, nausea and vomiting as these conditions are not included in the HAC list and therefore not comparable for this analysis.

## Readmission intervals

AHMAC requested that the Commission develop condition-specific readmission intervals for avoidable hospital readmissions (see **Table 1**). The rationale for the readmission intervals was developed with input from a panel of clinical and consumer experts, involving assessment of a wide range of factors (see **Box 3**).

### Box 3 Development of condition-specific readmission intervals

The Australian Commission on Safety and Quality in Health Care undertook the development of condition-specific readmission intervals for avoidable hospital readmissions. The types of factors used in setting condition-specific readmission intervals are explained below, with some illustrative examples. However, it is important to note that multiple factors were sometimes assessed for individual conditions to determine the most suitable readmission intervals.

- **Alignment with internationally accepted readmission intervals:** An example is venous thromboembolism (VTE). In the United Kingdom, the accepted definition of hospital-associated VTE is up until 90 days post discharge. The panel considered that alignment with this readmission interval was desirable in the Australian list.
- **Alignment with existing Australian indicator definitions:** Examples include central line and peripheral line associated blood-stream infections and infection with a multi-resistant organism. The Commission already has surveillance indicator definitions for both these conditions which are based on patients that have been discharged within 48 hours. Accordingly, two days was set as the readmission interval for these conditions.
- **Clinical evidence on the pathophysiology of conditions:** An example is Stage III ulcers. The panel noted that Stage III ulcers could take from one to three weeks to develop, with this pathophysiology supporting a 14-day period where the readmission could be reasonably attributed to the index admission.
- **Ability to distinguish between hospital-related and community-related conditions:** An example is gastrointestinal bleeding. The panel considered that a short readmission interval of two days would identify patients who were discharged prior to being stabilised or for whom there was inadequate risk assessment. There is a high incidence of this condition in the community. A longer readmission interval would capture patients whose condition occurred in the community, rather than being attributable to their index admission.
- **Analysis on the distribution of readmissions after discharge:** An example is hypoglycaemia. The panel reviewed the trends in readmissions for this condition which plateaued after four days. This suggested that a longer readmission interval would capture readmissions due to factors not attributable to the hospital.

**Table 1** shows that the condition-specific readmission intervals recommended by the Commission range from two days for readmissions for several different types of infection (infection associated with peritoneal dialysis catheter, blood stream infection, central line and peripheral line associated bloodstream infection, or infection with a multi-resistant organism) to 90 days (for venous thromboembolism and infection associated with devices, implants and grafts).

### Scope of included and excluded services

IHPA has previously noted that it intends to develop pricing models for quality and safety that can be applied as broadly as possible across all public hospital services for all patients. Within this commitment, IHPA recognises that some indicators of quality and safety are only relevant to admitted patient services (for example, the neonatal birth trauma HAC).

For avoidable hospital readmissions, IHPA has also taken advice from the Commission as to exclusions required to increase the likelihood that readmissions are, in fact, avoidable. It has also

attempted to ensure that there is consistency in the scope of included services across HACs and avoidable hospital readmissions.

The Commission's advice recommends to:

1. **Include** all relevant acute admitted episodes in ABF hospitals. This is consistent with the approach to measuring HACs.
2. **Exclude** selected services that indicate readmissions were planned and/or not avoidable due to actions that could be taken by the hospital responsible for the index admission. As there is no data element that measures whether admissions are planned or unplanned, urgency status is currently used as a proxy. Accordingly, it is proposed to count as readmission episodes only episodes with an urgency status of emergency. In addition, it is proposed to exclude index admissions where the separation mode was 'discharged against medical advice'.
3. **Exclude** selected clinical conditions where readmissions are considered to be part of expected and appropriate care and/or conditions where it is not readily possible to determine which readmissions are avoidable and which occur due to natural disease progression. It is proposed to exclude admitted episodes (both the index admission and any readmissions) for the following conditions: oncology, haematology, chemotherapy, dialysis, neonatal care and palliative care. Readmissions for child birth are also excluded.

### Readmissions to the same hospital or other hospitals

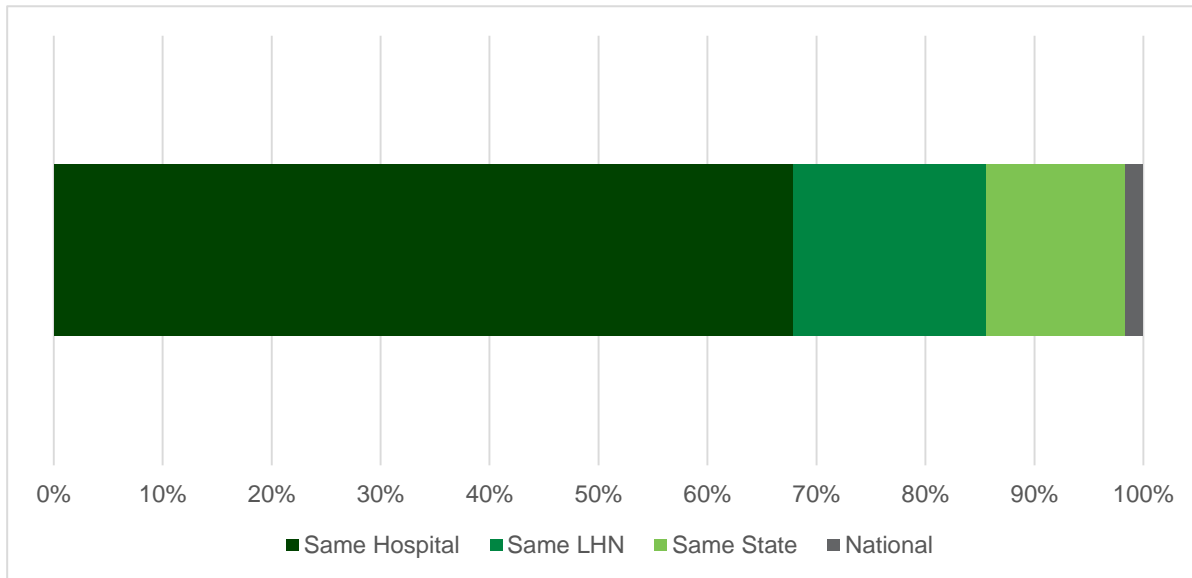
The measurement of readmissions requires the ability to uniquely identify an individual patient across multiple admitted patient episodes. This is generally straightforward for readmissions to the same hospital but requires a unique patient identifier for readmissions to a different hospital.

From a policy perspective, the objective should be to reduce all avoidable readmissions regardless of whether patients are readmitted to the same or another hospital. There should be incentives so that the initial treating hospital (in which the index admission occurred) effectively manages any complications, does not discharge patients too quickly, and ensures that patients are referred to necessary post-discharge services in the hospital or community settings.

The distribution of location of avoidable readmissions in 2015-16 is shown at a national level in **Figure 1**. It indicates that the majority of avoidable readmissions (five out of every six readmissions) occurred when patients presented to either the same hospital or a hospital within the same Local Hospital Network. About 13% of readmissions occurred to a different Local Hospital Network in the same state, while 1.6% of readmissions were to interstate hospitals.

**Figure 1** provides support to IHPA's proposal (first foreshadowed in the Pricing Framework Consultation Paper 2017-18) that pricing and funding models should be based on avoidable hospital readmissions occurring within the same hospital and/or another hospital within the same Local Hospital Network. This is also desirable from an implementation perspective as funding adjustments are intended to target the initial treating hospital in which the index admission occurred. The introduction of pricing or funding incentives that required funding adjustments between different Local Hospital Networks or different states would be complex and reduce the transparency of the pricing or funding signal for individual hospitals and clinicians.

**Figure 1 Share of avoidable readmissions by location of readmission, 2015-16**



Previous consultation feedback in 2017-18 on this issue was mixed. Some groups were interested in measuring avoidable hospital readmissions more broadly including extending the measurement of readmissions across public and private hospitals. IHPA does not have access to private hospital data, so this approach is not feasible. Jurisdictions and health services noted the need to be able to replicate IHPA’s measurement of readmissions, suggesting a narrower approach (either within the same hospital or same Local Hospital Network).

**Consultation questions**

- Do you agree with the proposal that pricing and funding models for avoidable hospital readmissions should be based on readmissions within the same Local Hospital Network (either to the same hospital or to another hospital within the same Local Hospital Network)?
- Do you prefer an alternative scope for measuring avoidable hospital readmissions and, if so, how would this be measured?
- What evidence or other factors have informed your views?

As previously noted, the ability to identify readmissions that occur in different hospitals to the index admission requires a unique patient identifier. Until now, IHPA has used the Medicare PIN, a de-identified unique identifier derived from the Medicare number, for these purposes.

There are several issues with use of the Medicare PIN as the unique patient identifier for the purposes of measuring avoidable hospital readmissions. Reporting of the Medicare number appears sufficiently robust in all states to measure national avoidable hospital readmissions from 2015-16. However, jurisdictions do not currently have access to the Medicare PIN, meaning that they are unable to replicate the analysis undertaken by IHPA to measure avoidable hospital readmissions. The lack of transparency for hospitals and clinicians about avoidable hospital readmissions creates a significant barrier to action.

An alternative to the Medicare PIN is the Individual Healthcare Identifier (the Identifier) which is discussed in Chapter 5. While the Medicare PIN is sufficient for the purposes of modelling and analysis, it would be preferable to use a more robust approach, namely, the Identifier, for implementing pricing and funding approaches to avoidable hospital readmissions.

IHPA is undertaking consultation with jurisdictions, national data committees, the Australian Digital Health Agency and other national bodies to determine the feasibility of including the Identifier in national data sets. IHPA is working towards this being implemented from 1 July 2019.

#### Consultation questions

- What are the advantages and disadvantages of use of the Medicare PIN and/or the Individual Healthcare Identifier for the purposes of pricing and funding of hospital readmissions?
- What strategies can be used to overcome existing disadvantages for each of these approaches?

#### Readmissions within or across financial years

The final measurement issue relates to the impact of identifying readmissions either within or across financial years. The impact of extending the measurement of avoidable hospital readmissions across two years has been assessed for the 2014-15 and 2015-16 years using the Medicare PIN. Only a relatively small number of additional readmissions were identified across financial years using the condition-specific timeframes. When readmissions are identified across the two financial years, an extra 1,975 are identified, which is an increase of 1.7%.

Extending the measurement of readmissions across financial years would introduce new complexity and reduce the transparency of the funding received by public hospitals. As funding adjustments for avoidable readmissions relate back to the index admission, it would result in some retrospective funding adjustments across financial years. IHPA does not believe that such an approach meets either the 'transparency' or 'ease of implementation' criteria (discussed in more detail later). Accordingly, IHPA is proposing to limit the measurement of readmissions to those occurring in the same financial year.

#### Consultation question

- Do you support the proposal to limit the measurement of readmissions to those occurring within the same financial year?

#### 11.4.5 Pricing and funding approaches for avoidable hospital readmissions

This section examines some of the high-level design choices that IHPA considered as part of developing options to incorporate avoidable hospital readmissions in the Pricing Framework. This includes assessing the relative advantages of pricing and funding approaches, considering whether pricing and funding options should be focussed at patient-level or hospital-level and determining the optimal approach to risk-adjustment.

#### Understanding the difference between pricing and funding approaches

In the Pricing Framework Consultation Paper 2017-18, IHPA distinguished between pricing and funding approaches to safety and quality as follows:

- **Pricing approaches result in changes to the NEP** (including changes which affect price weights or price adjustments). Accordingly, pricing approaches to safety and quality impact on the funding of all public hospital services funded on an activity-basis, rather than impacting only on episodes where there is a safety and quality 'event' (such as a sentinel event, a HAC or an avoidable readmission). Pricing approaches result in a lower 'quality-adjusted' price that applies to all episodes.



- **Funding approaches change the implementation of the NEP.** This can include changes to the assignment and calculation of the NWAU or other approaches. Accordingly, funding approaches to safety and quality influence the funding for some types of public hospital services, but they do not change the level of the NEP. Funding approaches can be applied across both ABF and block-funded hospitals.

Initially IHPA proposed funding options and a combined pricing and funding option when considering an approach to HACs. However, pricing options received very limited support from stakeholders on the basis of their lack of transparency and perceived inequity. In essence, stakeholders believed that funding options were more transparent and equitable as there was a direct relationship between the presence or absence of a safety and quality event and the imposition of a funding adjustment. Funding options can also incorporate the use of risk adjustment, resulting in highly targeted changes to funding levels for certain types of patients. This does not occur with pricing options which apply to all patients at the whole of system level.

As a result of this consultation feedback, IHPA introduced funding options, rather than pricing options, for HACs.

Given the strong preference expressed in previous consultations for funding approaches, IHPA has decided not to include pricing options for avoidable hospital readmissions in this Consultation Paper. This decision also promotes consistency across sentinel events, HACs and avoidable hospital readmissions, with funding approaches to be used for all three types of events.

#### Consultation question

- Do you agree with the proposal to include funding options, but not pricing options, for avoidable hospital readmissions?

#### Episode-level and hospital-level funding approaches

Funding approaches fall into two broad categories: episode-level and hospital-level. The Heads of Agreement envisaged a hospital-level approach proposing the development of:

*A comprehensive and risk-adjusted strategy and funding model that will adjust the funding to hospitals that exceed a predetermined avoidable readmission rate for agreed conditions and the circumstances in which they occur.*

Episode-level approaches involve calculating funding adjustments for individual episodes with a safety and quality event, whereas hospital-level approaches involve funding adjustments for hospitals with higher than expected rates of safety and quality events.

IHPA has used episode-level approaches to funding for sentinel events and HACs.

The distinction between episode and hospital-level approaches is not as clear-cut with avoidable readmissions as it is with HACs.

Avoidable hospital readmissions involve two (or more) admitted patient episodes. The funding adjustment has to impact on the hospital responsible for the index admission. **Figure 1** indicated that about one-third of readmissions are to a different hospital than the hospital responsible for the index admission. This means that even episode-level funding adjustments can involve more than one hospital.

The implementation of funding adjustments for readmissions also depends upon the health system 'level' at which readmissions are measured. This can include: the same hospital, another hospital in the same Local Hospital Network, another hospital in another Local Hospital Network in the same state, or another hospital in another Local Hospital Network in another state.

These factors mean that, in practice, episode-level funding adjustments for avoidable readmissions involve an assessment of two or more patient episodes that may occur at different hospitals. Similarly, hospital-level funding adjustments require that avoidable readmissions are attributed back to the initial treating hospital responsible for the index admission, before rates are then calculated across hospitals.

In Section 11.4.6, IHPA has included both episode-level and hospital-level approaches to funding of avoidable hospital readmissions.

### **Risk adjustment for avoidable hospital readmissions**

In the Pricing Framework 2017-18, IHPA introduced a set of assessment criteria that were specifically designed to review the merits of options for incorporating safety and quality into hospital pricing and funding. One of these assessment criteria was equitable risk adjustment which was defined as:

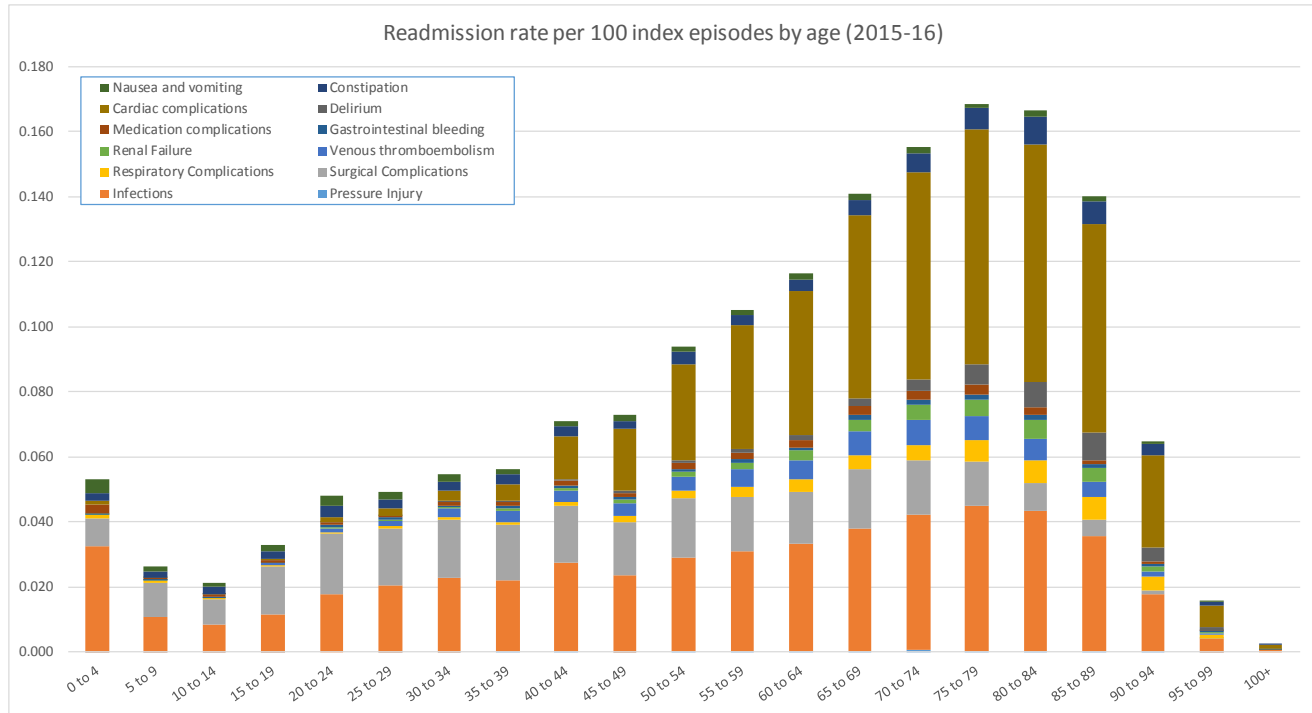
*Pricing and funding approaches should balance the likelihood that some patients will be at higher risk of experiencing an adverse event while recognising that all hospitals have scope to improve safety and quality.*

In the case of avoidable hospital readmissions, the objective would be to ensure that financial adjustments relate only to processes and outcomes of care which are attributable to the hospital versus outcomes that are driven by patient-specific characteristics such as age, the presence of comorbidities, Indigenous status and socioeconomic status.

The Commission's development of the list of avoidable hospital readmission conditions has already included some indirect forms of risk adjustment that increases the likelihood that most readmissions are attributable to actions taken (or not taken) by the hospital responsible for the index admission. In particular, the list excludes many high-risk patients with complex and chronic conditions (such as people with cancer or end-stage kidney disease or people receiving palliative care). The list comprises a clinically reviewed set of tightly defined conditions and readmission intervals that were selected on the basis of their avoidability by improved clinical management. This clinically curated approach to defining avoidable readmissions differs from the use of 'all-causes' readmissions in some other countries including England and Germany. An all-causes approach to defining and funding readmissions requires a more comprehensive risk-adjustment approach to compensate for patient-specific factors.

Using the list of conditions considered to be avoidable hospital readmissions, **Figure 2** indicates that avoidable hospital readmission rates increase by age.

**Figure 2 Age distribution of avoidable hospital readmissions, 2015-16**



IHPA adopted a staged approach to the development of funding adjustments based on risk factors for HACs. This included commissioning expert advice and undertaking multiple rounds of analysis and modelling to assign complexity scores that were linked to a range of patient-specific risk factors.

In developing the HAC risk adjustment model the following list of potential risk factors were investigated:

All HACs	HAC-specific factors
Patient age	Liver disease (HAC04)
Gender	Heart failure (HAC07)
MDC	Myocardial infarction (HAC07)
DRG type (Medical, Surgical, other)	Stroke with immobility (HAC07)
Intensive care unit status	Cardiovascular disease (HAC08)
Presence of another HAC	Malignancy (HAC08)
Patient Indigenous status	Mechanical ventilation (HAC09)
Patient remoteness	Parkinson disease (HAC13)
Patient Socio-Economic Indexes for Areas	Dementia (HAC13)
Transfer status	Dystocia (HAC16)
Chronic disease count	
Highly specialised procedures	
Admission status	
Length of stay	
Charlson score	

It is proposed that a similar approach be undertaken with avoidable hospital readmissions using these potential risk factors as the starting point in developing a risk adjustment model. The detailed development of a risk adjustment approach can best occur following agreement to a preferred funding option for avoidable hospital readmissions.

#### Consultation question

- What patient-specific factors should be examined in a risk-adjustment approach to avoidable hospital readmissions?

#### 11.4.6 Analysis of funding options for avoidable hospital readmissions

In developing funding options for stakeholder consultation, IHPA has considered factors including: the incidence of avoidable hospital readmissions; the funding approaches used in other countries; the desirability of presenting options similar to those that have already been considered for HACs; and the guidance in the previous Heads of Agreement and the Ministerial Direction for including options that are based on comparing rates of avoidable hospital readmissions. Based on these factors, IHPA is putting forward three funding options for the purposes of consultation – two of which involve episode-level funding adjustments and one which involves hospital-level funding adjustments.

IHPA has previously developed and consulted on a set of assessment criteria for reviewing options for incorporating safety and quality into the Pricing Framework. These assessment criteria were refined following consultation feedback during the development of the Pricing Framework 2017-18 and now form the basis of IHPA's assessment and recommendations on preferred funding options for safety and quality. Each of the options presented below is reviewed against these assessment criteria.

##### Option 1: Do not fund the readmission episode

An episode-level approach to adjusting funding assumes that each of the events defined as avoidable hospital readmissions should have been avoided. By implication, the whole costs of such readmissions should not be funded, that is, set it to zero NWAU.

However, as with all funding options for avoidable hospital readmissions, the complexity arises as this financial penalty needs to fall on the hospital responsible for the index admission, which may be different from the hospital providing care for the readmission episode. This means that:

- The readmission would not be funded if it occurred in the same hospital as the index admission; and
- The readmission would be funded if it occurred in a different hospital to the index admission. However, an amount equivalent to the funding for this readmission would be deducted from the index admission hospital.

**IHPA assessment: Option 1 (do not fund the readmission episode)**

Criteria	Assessment
<b>Preventability</b>	Yes - all conditions have been assessed by the Commission as avoidable
<b>Equitable risk adjustment</b>	Partial - risk adjustment factors can readily be included in this option following further analysis
<b>Proportionality</b>	Partial - the entire cost of the episode that should have been avoided is not funded
<b>Transparency</b>	Partial - there needs to be clear information about funding adjustments when readmissions occur across different hospitals
<b>Ease of implementation</b>	Yes

**Consultation questions**

- What are the advantages and disadvantages of Option 1?
- Do you agree with IHPA’s assessment of this option?

**Option 2: Combine the index and readmission episodes and recalculate the funding of the combined episode**

The second episode-level funding option is similar to the approach used in Germany which involves merging the index admission and readmission for reimbursement purposes.

This approach implicitly assumes that the initial treating hospital (providing the index admission) would have incurred additional costs if they had taken effective action to avoid a readmission. Some of these legitimate costs have essentially been ‘postponed’ to a subsequent admission. This differs from Option 1 where it is assumed that the entire costs of the readmission should be able to be avoided.

The implementation of this option includes retaining the DRG of the index admission but including the additional days length of stay incurred during the avoidable hospital readmission.

For this option, the same principle of assigning the funding adjustment to the responsible hospital needs to be adopted (as was described for Option 1). This means that the funding adjustments would be applied to the initial treating hospital responsible for the index admission.

**IHPA assessment: Option 2 (combine the index and readmission episodes)**

Criteria	Assessment
<b>Preventability</b>	Yes - all conditions have been assessed by the Commission as avoidable
<b>Equitable risk adjustment</b>	Partial - risk adjustment factors can readily be included in this option following further analysis
<b>Proportionality</b>	Yes - a reduced share of the cost of the avoidable hospital readmission is not funded
<b>Transparency</b>	Partial - this option introduces more complexity due to the recalculation of funding for index admissions
<b>Ease of implementation</b>	Partial - recalculation of index admission funding adds an additional step

**Consultation questions**

- What are the advantages and disadvantages of Option 2?
- Do you agree with IHPA’s assessment of this option?

**Option 3: Benchmark rates of avoidable hospital readmissions across hospitals with funding adjustments on the basis of threshold rates**

The final option is most closely aligned with the requirements specified in the previous Heads of Agreement and the Ministerial Direction to develop an approach that adjusts funding to hospitals that exceed a predetermined avoidable readmission rate.

The implicit assumption behind Option 3 is that there should only be funding adjustments for a proportion of avoidable hospital readmissions that represent an ‘excess’ level of readmissions. This is broadly similar to the approach used under the US Medicare program (although the funding adjustments used in the US apply to all other admitted patient episodes, not just the avoidable hospital readmission episodes).

There are several design elements that would need to be considered in implementing this option.

The first design element is whether rates of avoidable hospital readmissions should be compared at the level of individual hospitals or at the level of Local Hospital Networks. There are advantages and disadvantages with each approach. (In both cases, rates are being measured using index admissions as the denominator.)

Comparisons of rates of avoidable hospital readmissions across individual hospitals would allow stratification of hospitals using Australian Institute of Health and Welfare’s hospital peer groups. Historically, most benchmarking across Australian public hospitals has occurred at the level of individual hospitals. While the previous National Health Performance Authority issued some reports based on benchmarking across Local Hospital Networks, there is probably less agreement on what constitutes comparable Local Hospital Networks for benchmarking purposes.

On the other hand, comparisons of rates of avoidable hospital readmissions across Local Hospital Networks have the advantage that this would be internally consistent with IHPA’s proposed approach to measuring readmissions that occur within the same Local Hospital Network (rather than being limited to the same hospital). It may simplify the presentation of

reporting rates of avoidable hospital readmissions, as the readmissions would all be ‘internalised’ within the Local Hospital Network.

The second, and more significant, design element is how to set the benchmarks for what constitutes an ‘acceptable’ level of avoidable hospital readmissions. Benchmarks could be set at the top quartile or the top 10% of hospitals with the highest readmission rates. A related issue is whether these benchmarks would be national, state-specific or, indeed, Local Hospital Network /hospital-specific. Measurement of benchmarks at the level of individual hospitals would allow improvement against individual performance but would be less transparent and more complex to administer.

The third design element is the calculation of the actual funding adjustment for the specific readmissions that exceed the agreed benchmark. The most straightforward approach would be to not fund the entire cost of these selected readmission episodes. This approach would be particularly relevant if the benchmark was set high so that only the hospitals (or Local Hospital Networks) with the highest rates of avoidable hospital readmissions were being penalised. However, a more graduated approach could also operate that combined partial funding penalties with lower benchmarks. Under this scenario, more hospitals (or Local Hospital Networks) would experience funding adjustments, but the quantum of the funding adjustment might vary depending on each hospital (or Local Hospital Networks) rate of avoidable hospital readmissions.

**IHPA assessment: Option 3 (Benchmark rates of avoidable hospital readmissions across hospitals with funding adjustments on the basis of threshold rates)**

Criteria	Assessment
<b>Preventability</b>	Yes - all conditions have been assessed by the Commission as avoidable
<b>Equitable risk adjustment</b>	Partial - extent of risk adjustment may depend upon the level at which benchmarks are set and how thresholds are determined
<b>Proportionality</b>	Partial - the funding adjustment only applies to the ‘excess’ readmission episodes, rather than all avoidable hospital readmissions
<b>Transparency</b>	Partial - promotes benchmarking across hospitals on rates of avoidable hospital readmissions; incentives may be less direct for individual clinicians and individual patient episodes
<b>Ease of implementation</b>	Partial - as with all options, a key implementation issue is making the funding adjustment for the index admission hospital which may be different to the readmission hospital

**Consultation questions**

- What are the advantages and disadvantages of Option 3?
- Should benchmarks for avoidable hospital readmissions be measured and calculated at the level of individual hospitals or at the level of Local Hospital Networks?
- How should the threshold be set for ‘acceptable’ rates of avoidable hospital readmissions? How should the funding adjustments be determined for ‘excess’ rates of avoidable hospital readmissions?
- Do you agree with IHPA’s assessment of this option?

### 11.4.7 Implementation pathway for funding adjustments for avoidable hospital readmissions

IHPA is proposing to introduce an implementation pathway whereby all three potential funding options are shadowed for a period of time. It is proposed to implement this approach over a 24 month period starting from 1 July 2019 subject to stakeholder feedback and COAG Health Council approval.

This approach is intended to ensure clinicians and hospitals have access to readmissions data prior to the implementation of any funding adjustment. It will also provide jurisdictions with an appropriate lead time to progress reporting of the Identifier and for IHPA to develop a risk adjustment model.

During the proposed shadow period, IHPA will provide jurisdictions, clinicians and health services with reports and access to readmissions data through the National Benchmarking Portal, to enable them to monitor their readmission rates.

The proposed implementation pathway will also include an annual report produced by IHPA that outlines the costs of readmissions and the funding impact at the hospital level of each of the three funding options. The annual report will also assess whether the publication of data and potential funding adjustments have impacted on the rates of avoidable hospital readmissions.

IHPA intends to investigate an incremental approach to introducing funding adjustments for avoidable hospital readmissions, whereby funding adjustments on one or two clinical conditions from the list of conditions considered to be avoidable hospital readmissions may be introduced first. This incremental approach is different to that undertaken for implementing HACs as IHPA does not have a funding implementation deadline set for the avoidable hospital readmissions work. Given the complexities of identifying avoidable hospital readmissions compared to HACs, this will provide a more pragmatic approach to implementing a suitable option.

#### Consultation questions

- Do you agree with IHPA's implementation pathway?
- For what period of time should the three proposed funding options be shadowed?
- Do you support an incremental approach to introducing funding adjustments for avoidable hospital readmissions based on one or two clinical conditions from the list of conditions considered to be avoidable hospital readmissions?
- What other options do you recommend for the implementation of a funding model for avoidable readmissions?

## 11.5 Evaluation of safety and quality in health care

Clause 175 of the Addendum requires IHPA to provide advice to the COAG Health Council by December 2018 on evaluating the safety and quality funding reforms against the principles at Clause 176 of the Addendum. The evaluation will support COAG consideration of a longer-term funding agreement from 1 July 2020.

The safety and quality funding reforms implemented by IHPA specifically refer to pricing and funding models for sentinel events, HACs and avoidable hospital readmissions.

IHPA has commenced development of an overarching framework that will require a comprehensive implementation plan and includes the participation of the Commission, states and territories and other national bodies.



The framework proposes a two stage approach:

1. Setting a baseline: The purpose of setting a baseline is to ensure an understanding of the circumstances prior to the implementation of the national reforms in order to provide suitable measurements for the national safety and quality reforms.
2. Evaluating the impact of national funding models: The evaluation of the impact of national funding models will include a mix of quantitative and qualitative approaches.

IHPA is proposing the evaluation takes place over a minimum period of three years in order to establish a baseline on which measures can be put in place, and to provide time for sufficient data collection to effectively assess the impact of HACs and an approved avoidable hospital readmission model.

Stakeholder feedback on potential evaluation questions will inform IHPA's final proposals to the AHMAC and the COAG Health Council in late 2018.

#### **Consultation questions**

- What questions regarding the safety and quality funding reforms should be included in the Evaluation Framework?

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