

## National Casemix and Classification Centre

### Comments on the document “Activity based funding for Australian Public Hospitals: Towards a Pricing Framework”

The National Casemix and Classification Centre (NCCC), University of Wollongong, is the national expert centre in classification and clinical coding. We are currently developing the next version of the Australian Refined Diagnosis Related Group (AR-DRG) Classification System. This consists of:

- The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM)
- The Australian Classification of Health Interventions (ACHI)
- The Australian Coding Standards (ACS) and
- The Australian Refined Diagnosis Related Group (AR-DRG) classification

This system underpins a significant proportion of the Activity Based Funding (ABF) model that the IPHA is required to develop. Among other responsibilities, our role is to provide independent technical advice on classification and clinical coding both for payment and for broader purposes. Our comments below are consistent with this responsibility.

#### 1. General comments

Patient classification systems have a number of purposes. Only one of these is for use in funding models. Patient classification systems are also required for epidemiology, research, planning, statistical reporting and quality improvement purposes. The design of patient classification systems should not be compromised by attempts to drive the primary focus towards funding. This is an important principle and we discuss it further in Section 5 (Payment for Performance/Quality) below.

If the goal of funding patient care on an activity basis is to achieve a more equitable and transparent system, the casemix classification system that is adopted must be predictive of cost. If the casemix classification system is not predictive of cost, the resulting funding model will inevitably be neither fair nor transparent. It is thus essential that the casemix classifications adopted for ABF purposes are based on evidence of performance in explaining differences in patient costs. Where no evidence exists, there is little alternative but to employ block funding. This issue is of particular relevance to mental health services which is discussed further in Section 2, below.

There is a need for a very clear distinction between the services provided in **acute hospitals** and **acute patients**. Acute public hospitals provide a range of services including acute inpatient, emergency, subacute, mental health, outpatient and community based services. Indeed, acute inpatient bed days now represent only about 80% of all hospital bed days, and this figure is expected to decline in response to government investments in subacute care in recent years.

The DRG system is designed for the classification of **acute inpatients**. It is not designed for all patients who happen to be treated in an acute care hospital. Equally, hospitals provide a range of ambulatory and community based services that are also not appropriately classified by DRG.

The funding of different streams of hospital activity needs to be considered on a case-by-case basis, including the selection of an appropriate fit-for-purpose classification. One size does not fit all.

Issues relating to the boundaries between different streams of care are critical and need to be resolved. For example, there is a range of services that can be provided on either an admitted or a non-admitted basis, and there is currently significant inconsistency both between and within States and Territories in relation to admission practices. Both the care type, and the decision about whether or not a patient is admitted, then determine which casemix classification is applied.

If the ABF funding model is to be equitable and transparent, admission criteria need to be developed and applied in a nationally consistent manner. This is not currently the case. Examples of services that may be provided on a same day admitted or on an outpatient basis include chemotherapy, radiotherapy, endoscopies, other medical procedures and a range of home based services.

If the IPHA funding framework continues to allow such services to be classified in different ways, it will create incentives for hospitals to design their models of care to maximise funding rather than patient outcomes. Such perverse incentives can be neutralised by either the application of standard rules on the boundary between inpatient and outpatient care, or by applying common cost weights across classifications that neutralise the incentives to deliver care in a particular setting. This latter approach implies some level of normative costing.

## 2. Mental health services

The draft pricing framework includes a statement that “The only part of the mental health service delivery system where there is an acceptable national classification is for inpatients separations in general and specialist acute hospitals”. The framework goes on to state that this classification is the AR-DRG classification. This statement is not factually correct and it needs to be amended in the final version of the framework.

The NCCC is currently developing AR-DRG Version 7 for national application from 1 July 2013. As part of this development process, we have undertaken an extensive analysis of the mental health AR-DRGs. Key findings can be summarised as follows:

1. The Mental Health (MH) Major Diagnostic Category (MDC 19) is the worst performer of the whole AR-DRG classification in terms of ability to explain differences in resource consumption between patients. The statistic that is used to test the performance of a casemix classification is the Reduction in Deviation (RID) statistic. The higher the RID the better. The length of stay (LOS) RID for the MH DRGs is around 16%. In contrast, the LOS RID for the best performing MDC (MDC 11 - Diseases and Disorders of the Kidney and Urinary Tract) is 76%, and for the AR-DRG system as a whole around 61%. With a RID of only 16%, the Mental Health DRGs do not perform well enough for them to be used as the basis of a payment model for the specialist mental health sector. While drug and alcohol treatment services are not specifically mentioned in the paper, it should be noted that, with a LOS RID of only 22%, MDC 20 (Alcohol/drug use and alcohol/drug induced organic mental disorders) also performs poorly.
2. About one third of mental health admissions are for patients who do not receive specialised MH inpatient services. These patients typically have very short stays and, for this reason, they represent only about 10% of total mental health bed days. Given that these patients are admitted to units such as general medical wards, there is little alternative but to use AR-DRGs to fund this patient group. This is because neither their care nor their costs can be separated from the care provided to other (non-mental health) patients treated on the same ward.

The NCCC recommends that a development program be undertaken to develop a mental health classification for use in the specialist mental health sector.

If a separate classification approach is adopted for the specialist mental health sector, the NCCC could then develop a set of mental health DRGs that are suitable for the classification and funding of mental health episodes that occur outside specialist MH units.

It is further recommended that mental health be recognised as a distinct 'Care Type'. Care designated as 'mental health' would thus be classified using a specialist mental health classification while care designated as 'acute' would be classified and funded by AR-DRG.

### 3. Subacute services

The issues with respect to subacute care are similar to those for mental health. However, there is one important difference. Subacute care services are already formally separated from acute care with the patient being classified to a subacute 'Care Type'.

The specialist subacute care type is defined by the patient receiving a program of specialised subacute care regardless of whether that service was delivered in a designated unit or elsewhere. Four subacute care types are currently formally recognised - Palliative Care, Rehabilitation, Geriatric Evaluation and Management (GEM) and Psychogeriatric care.

Previous research undertaken by our sister research centre, the Centre for Health Service Development, and others, has demonstrated that the costs of subacute care are driven by the patient's functional status (ability to manage every day activities of daily living) rather than the underlying medical diagnosis. For this reason, subacute care is not appropriately classified by DRG.

In recognition of this, all subacute services are excluded from analysis in DRG development, and the NCCC does not recommend the use of DRGs for the funding of any subacute care services. Specialist subacute care units and services are able to collect the clinical data required to assign subacute episodes to a specialist subacute classification, however this is not always the case for specialist subacute care provided in general settings such as medical wards. While this issue is outside the remit of the NCCC, we recommend that it be explicitly addressed in the final version of the framework.

### 4. Specialised Services for Children

As part of the development of Version 7 of the AR-DRG system, the NCCC is currently reviewing and improving the performance of the classification in relation to services to children.

We have identified, and are adding, a range of additional co-morbidities that specifically affect children and impact on their cost. This level of analysis has not previously been undertaken and, while we are yet to complete it, the funding gap for services to children has already been reduced for AR-DRGs Version 7.

These co-morbidities include developmental delay, conduct/behavioural disorders, issues of physical development and bronchiolitis. Further improvements to the DRG classification are expected as we intend to split certain DRGs into age groups where age splits are supported by the evidence.

It should be noted that these classification changes will be effective for all acute inpatient services to children and will not be restricted to children treated in specialist children's hospitals. Any residual funding gap for services to children, and the funding of cost increases that relate to the provision of specialised care to patients in Children's Hospitals, may need to be met through the payment model.

## 5. Payment for Performance/Quality

The NCCC does not agree that the DRG classification should be modified so as to reduce complexity levels, and therefore ABF payments, to services providing care with adverse outcomes. Key reasons for this are:

- The Condition Onset Flag (COF) that identifies whether a patient condition was present on admission is currently under review. Analysis of this flag in the national data collection suggests that it is unreliable. The NCCC is currently working with the Australian Institute of Health and Welfare (AIHW) and the Australian Commission on Safety and Quality in Health Care (ACSQHC) to provide a clear definition and standards for this flag.
- The removal of certain complications from the DRG grouping logic to reduce the severity levels will lessen the usefulness of classification for its other purposes (see Section 1). The ability to analyse adverse care outcomes and to understand associated increased costs will be compromised, as will the use of DRGs in health services and clinical research more generally.
- Such systems create incentives for clinicians to not document (and coders to not code) adverse care outcomes. If clinicians and coders respond to these incentives, it will result in a critical loss of morbidity information.
- There is currently no facility for risk adjustment for patients with complex medical histories that are at greater risk of having complications. Incentives will be created for hospitals to manage that risk through patient selection, or early discharge practices.

The NCCC supports the concept of using funding models to drive and reward quality improvement. Our view is that this is best done through the payment model rather than through a classification approach.

The ACSQHC has already undertaken significant work on the identification of conditions (using ICD10-AM) that are complications of hospital care. The ACSQHC funded researchers at the Australian Centre for Economic Research on Health at the University of Queensland to develop the Classification of Hospital Acquired Diagnoses (CHADx). Rather than the American approach proposed in the consultation paper, we recommend that CHADx be reviewed to determine its suitability to inform adjustments that may be managed within a payment model.

## 6. Ongoing research and classification development

While we understand the time requirements that the IHPA is operating under, a longer-term view is also required in relation to the development and maintenance of classifications. Such a longer term view is essential if the activity based funding model is to be progressively improved over time. This means that:

- The classifications that are selected for ABF in 2012/13 need to be assessed for their appropriateness and performance before classification decisions are made for future ABF programs.
- Decisions about classifications for use in 2013/14 and beyond, need to be informed by research and evidence. This requires an investment in research and development as soon as possible.
- There is a need for a budget and a process for progressive refinement of patient classification systems over time. This needs to involve local system development and improvements. It also needs to involve strategic Australian contributions to, and evaluation of, international classifications.

Our very strong view is that ongoing research and development should be managed through strategic partnerships rather than through short term contracts and consultancies. There are very few people currently in Australia who have expertise in morbidity and casemix classification. Long-term investment in capacity building is urgently required.

++++++

The NCCC is happy to provide any further information that may be required. Please contact either Jenny McNamee (NCCC Director) or Prof Kathy Eagar (NCCC Executive Director) in the first instance.