



WOMEN'S &  
CHILDREN'S  
HEALTHCARE  
AUSTRALASIA

Mr James Downie  
Chief Executive Officer  
Independent Hospital Pricing Authority  
By email: [submissions.iHPA@iHPA.gov.au](mailto:submissions.iHPA@iHPA.gov.au)

Dear James,

**Re: IHPA Work Program 2020-21**

I hope this finds you and your Board and team well in the face of the current COVID-19 pandemic.

Thank you for the opportunity to provide feedback on the IHPA stakeholder consultation paper for the IHPA Work Program 2020-21. As you know, Children's Healthcare Australasia's (CHA) membership comprises 90 paediatric services, including both specialist children's hospitals and general hospitals providing paediatric services, large and small. While Women's Healthcare Australasia (WHA) represents 120+ maternity services across Australia.

We would ordinarily consult widely with our members about a submission such as this. However the current climate of COVID-19 pandemic planning & response has made this unworkable for our members. Nevertheless, we note that WCHA made a submission in 2019 following member consultation that touched on 3 key issues:

- The need to unbundle the pricing for newborns requiring complex medical procedures in tertiary children's hospitals from the general newborn classification & prices
- Our member's recommendations related to a preferred methodology for assessing the risk of HACs in children
- The need for reconsideration of classification and funding for women requiring inpatient mental health care who have an infant staying in hospital with them.

We are not aware of any progress by IHPA on any of these issues in the past year amidst the many competing priorities for your time and attention. We continue to be very willing to contribute to any discussions you may plan to have on these issues in the year ahead.

**CHA recommends IHPA consider unbundling the ICU component of the DRG price for *MDC15 Newborns and Other Neonates*.**

The high cost of treating patients in Intensive Care Units (ICU) is recognised in the NEP19 through the provision of a price adjustment based on the time a patient spends in ICU. This adjustment is applied to all patients utilising ICU except those assigned a Major Diagnostic Category (MDC) of 'Newborns and Other Neonates' (Neonates), where the AR-DRG price is inclusive of a 'Bundled ICU' component.

This differential model for patients requiring treatment in Paediatric Intensive Care Unit (PICU) creates issues in understanding productivity and efficiency as the level of funding is impacted by the proportion of neonates and associated PICU bed utilisation which is subject to variation.

This issue is most evident for long stay, complex patients receiving ventilatory support where age is a prime factor in determining the level of funding received with neonatal patients significantly impacted despite being managed under the same model of care as their older (non-neonatal) patients.

A CHA member, Queensland Children's Hospital (QCH), has conducted a case study for this issue. QCH estimates how much funding is received for providing care to a patient with elective admission from NICU at transferring hospital via QCH Operating Theatre to PICU and then discharged home after 226 days in PICU. If the patient is 27 days old on admission, this episode will be coded to P06A (with bundling ICU payment) and the hospital receives \$379,670. However, if the same patient is 28 days old on admission, this episode can be coded to A13A (with unbundling ICU adjustment) and QCH can receive additional \$848,688 for providing the same care.

QCH's analysis also indicates complex, long stay patients that require significant time in ICU and are typically transferred from other hospitals to specialist paediatric, quaternary facilities are significantly underfunded while less complex patients that do not require treatment in ICU are overfunded.

It is recommended IHPA consider unbundling the ICU component of the DRG price for Newborns and Other Neonates to provide consistency for all patients treated in a PICU and create a more transparent and equitable model. More details about this analysis by Stuart Bowhay at QCH is provided at Appendix A.

**CHA recommends IHPA consider use Rhee Score<sup>1</sup> to replace Charlson Score as a risk factor to predict the likelihood of a HAC occurring in paediatric populations.**

NEP19 adopts Charlson Score to adjust the risk of having a HAC. The Charlson Score was developed based on 1-year mortality rates in a largely adult population of 607 patients from a New York Hospital in 1984. A CHA member hospital, Sydney Children Hospital Network (SCHN) raises a concern about using the Charlson Score to predict the likelihood of a HAC occurring in paediatric patients.

In 2018, Sydney Children's Hospital Network and Queensland Children's Hospital shared inpatient data to support a comparative analysis of the Charlson Score and a paediatric alternative model, Rhee Score, using the following datasets:

- 196,834 HAC in-scope inpatient episodes from SCHN for patients aged 0 – 19 and discharged between 01/07/2014 and 30/06/2018
- 74,490 HAC in-scope inpatient episodes from Queensland Children's Hospital (formerly Lady Cilento) aged 0 – 19 and discharged between 01/07/2014 and 30/06/2017
- Diagnosis information available to flag HACs and assign comorbidity scores
- Current risk adjustment model factors (e.g. gender, transfer status, ICU hours etc.) also included to allow full model to be run

The analysis has shown the Rhee Score outperforms the current Charlson Score with regards to predicting the likelihood of HACs in paediatric patients. SCHN has also used Machine Learning techniques (cross validation, bootstrap resampling and synthetic oversampling) to provide validations of the robustness of these subset models. Cross validated results were largely in agreement. The details of this analysis and references for the Rhee Score and other models are available at Appendix B.

It is recommended IHPA consider adopting the Rhee Score to predict the risk of HACs occurring in paediatric patients up to the age of 18 years

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<sup>1</sup> Rhee D, Salazar, JH & Zhang, Y et al. 2013, A Novel Multispecialty Surgical Risk Score for Children, John Hopkins University School of Medicine, Baltimore

**WHA recommends IHPA consider costing of newborns being looked after in hospital when their mother is admitted for mental health care**

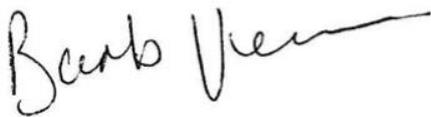
Demand for perinatal mental health care has continued to grow in recent years, with concerns being raised by maternity providers about capacity to fund services with appropriate clinical workforces to care for mothers and their babies, when inpatient mental health care is required for the mother in the postnatal period. There continues to be a significant shortfall in services offering inpatient perinatal mental health care that enable babies to co-reside with their mothers to support attachment and breastfeeding while the mother receives mental health care.

Pricing of these services needs to take into account the need to provide care to a baby that is not itself a patient of the mental health service, but whose care is nevertheless important to the recovery of mental health for the mother, as well as to the prevention of mental ill-health in the infant (e.g. through issues with attachment to the mother). WHA is aware that the Australasian College of Psychiatrists has held meetings with IHPA about their concerns in this area of care in 2019. We would be very pleased of an opportunity for relevant experts and organisations to come together with IHPA staff in the post COVID-19 era to identify workable options for resolving this issue in the 2020-21 year.

**Further information.**

WCHA would be happy to facilitate further discussion with members about these matters if you require clarification or further explanation for any of the comments provided here. Please don't hesitate to contact me if we can assist further. Thank you again for considering our submission.

Kind regards



Dr Barbara Vernon  
Chief Executive Officer  
Children's Healthcare Australasia

27 March 2020