

Submission to IHPA on the Consultation Paper: The Pricing Framework for  
Australian Public Hospital Services 2017-18

by

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This paper addresses some of IHPA's new policy proposals in its 2017-18 consultation paper released 30 September 2016 relating to policy and funding for safety and quality and new bundling proposals for maternity care. The paper includes, inter alia, insights arising from stakeholder engagement undertaken through the *2016 ABF Reform Toolkit Two Day Workshops*<sup>1</sup>, conducted by Dr Antioch, involving representatives from four Australian States/territories during October 2016. Other jurisdictions will be involved later in November, 2016. The comments below address some of the questions raised by IHPA in the consultation paper for the abovementioned two areas of national policy and represents a consolidation of some of the views expressed during the consultation period.

There is an extensive literature concerning policy and funding for safety and quality and some for bundling options for maternity care. Some literature reviewed relates to pay for performance in Australian hospitals (1-17), benchmarking Australian hospitals (18-64), the need for risk adjustment in the Australian reform agenda (65-71), informative presentations at the 2016 Activity Based Funding (ABF) Congress (72-80), IHPA's policy documents (81-95) and others concerning bundling or capitation for maternity services (96-105), which has informed the current work.

Extensive work has also been undertaken by Dr Antioch in the area of value for money (or cost effectiveness) in health services through implementing and developing Clinical Practice Guidelines (CPGs) with Cost Effectiveness Analysis (CEA) evidence in her work as Chief Executive Officer, Guidelines and Economists Network International (GENI), her roles on the National Health and Medical Research Council (NHMRC) as an international consultant, ten years experience on the senior management of Victorian Local Hospital Networks, and for the 2016 ABF Reform Toolkit Workshop (Antioch, Drummond, Niessen et al 2016 (106); Antioch, Jennings Botti et al, 2002 (107)).

This area that addresses cost effectiveness, is not discussed in the current paper. However, it is highly relevant to the reform agenda of IHPA, Australian Commission on Safety and Quality in Health Care (ACSQHC), Australian Health Ministers Advisory Council, COAG, NHMRC and the Department of Health on achieving cost effective health care in the nexus between quality and funding in Australia (Antioch, Drummond, Niessen et al 2016) (106). This was a key theme emphasized at the 2016 ABF Congress in Australia. The information below addresses the various questions posed by IHPA in its consultation paper.

**A. Policy and Funding for Safety and Quality**

**1. *Is there support for pricing and funding models for safety and quality to be applied broadly across all types of public hospitals, all services, all patients and all care settings?***

- IHPA acknowledges that the three measures (Sentinel events, Hospital Acquired Conditions (HACs) and unplanned readmissions) broadly relate to the inpatient stage of care. The existing classification system, data definitions and coding generally limit application of pricing/funding models for admitted care. However, IHPA has a commitment to cover inpatient, non-admitted, community based care, acute, sub-acute, including mental health. IHPA also acknowledges that some of the HACs can occur in the ED.
- There is support for the safety and quality models for pricing and funding to apply broadly across all types of public hospitals, all services, all patients and all care settings. This may require more work by IHPA and the Australian Commission on Safety and Quality in Health Care (ACSQHC) to cover these settings. However, there are several issues outlined below that should be considered including the need for adequate risk adjustment.

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<sup>1</sup> [http://liquidlearninggroup.com/documents/ABF1016A/ABF1016A\\_W.pdf](http://liquidlearninggroup.com/documents/ABF1016A/ABF1016A_W.pdf)

2. ***What factors should be considered in risk adjustment for safety and quality in pricing and funding models for hospital care?***

- It is imperative that the national agenda be explicit about the incentive problems that risk adjustment is intended to fix in the health financing context and to carefully consider whether the new policy proposals can ensure that these incentive problems are mitigated. The incentive problems include (a) ***Dumping***: avoidance of high cost individuals, (b) ***Skimping/creaming***: distortions of *services* offered, (c) ***Cost reducing effort***: too much or too little cost reducing effort, (d) ***Signal distortion***: distortions in *signals* used to calculate payments (Van de Ven and Ellis 2000). These issues are relevant to both policy proposals discussed in this paper.
- Risk (or severity) adjustment factors may include, *inter alia*, patient characteristics such as age, sex, principal diagnosis, complications and co-morbidities and especially complexity markers for certain diagnosis and procedures that may relate to state-wide referral service (SWRS) such as transplantation, major trauma, cystic fibrosis etc. Further information about the need to risk adjust for SWRS is discussed in Antioch Ellis and Gillett (2007) which cites several earlier studies by Antioch and Walsh about the Victorian evidence (Antioch and Walsh, 2000, 2002, 2004).
- New classification systems for mental health, non admitted patients emergency department may include variables that assist in identifying risk adjustment factors but there may be value in further exploring additional variables given the nature of the HACs.
- Whilst IHPA does not intend to risk adjust sentinel events there is a need to carefully consider the suicide event in hospital as this may not be necessarily due to a breakdown in the hospital process itself but rather may reflect the severity of patient's mental illness.
- Antioch (2016a) advised the Australian Senate Inquiry on the Outcomes of the 42nd meeting of the Council of Australian Governments held on 1 April 2016 that Version 8 AR-DRGs includes new Episode Clinical Complexity (EEC) model from July 2016 which now allows Complex Diagnosis (CD) - including principal diagnoses - that can be used for new splitting criteria for Adjacent DRGs into AR DRGs. She noted that it would be helpful if IHPA could determine if this new approach adequately accounts for the effects of the SWRS. The senate submission is published by the Australian Parliament (Antioch, 2016a) and is provided as Attachment 1 to this submission<sup>2</sup>.
- Several risk adjustment factors could be relevant to areas captured by the HACs. Many broadly relate to respiratory, cardiology, gastrointestinal, urinary, orthopaedic, mental health and intracranial injury. Some SWRS that are relevant could be heart, lung, liver and kidney transplantation, major trauma and cystic fibrosis. Mental health for the suicide sentinel event could also be a priority.
- A simple example to explain the argument about the need to risk adjust for the impact of SWRS was presented to the Australian Senate in 2016 and is outlined here:
  - Cardiomyopathy is a 'severity marker' for heart transplant patients and may occur in a patient awaiting a heart transplant and admitted under other DRGs for cardiac procedures or medical treatment in hospital episodes prior to transplantation. Such 'heart transplantation patients' would be more costly than other patients in these (non transplant) DRGs receiving care in other hospitals (Antioch, 2016a).

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<sup>2</sup> [http://www.aph.gov.au/sitecore/content/Home/Parliamentary\\_Business/Committees/Senate/Finance\\_and\\_Public\\_Administration/COAG/Submissions](http://www.aph.gov.au/sitecore/content/Home/Parliamentary_Business/Committees/Senate/Finance_and_Public_Administration/COAG/Submissions) (see Submission 7)

- The recommendations by Antioch (2016a) to the Australian Senate are cited here for completeness and relevance. They were also considered by the Senate Select Committee on Health: Inquiry into Health Policy, Administration and Expenditure: Public Hospital Funding (Antioch 2016b).

#### Recommendations

1. IHPA to provide transparent evidence of adequate risk adjustment of ABF classification and funding. IHPA to address whether the funding formulae adequately takes account of impacts of severity markers arising from State-wide referral services.
  2. Risk adjusted measurement tools/classification systems should be mandatory to ensure accurate measurement of costs and *outcomes*, including comparisons between hospitals. This requirement should be included in the work to be undertaken by the Parties in conjunction with the Australian Commission on Safety and Quality in Health Care (ACSQHC) and the IHPA *The Agreements at Schedule 2, Clause 9 to 11, especially Clause 10 (a) and (b) do not make any such requirement explicit and only refer to funding and pricing. Legislation should ensure adequate measurement tools to ensure equity, natural justice/ procedural fairness.*
  - 3 Recommendation 2 is also applicable to the intention at Schedule 2, Clauses 12 and 13 concerning funding adjustments for readmissions to hospitals. If measurement tools/classification systems are inadequate then there will be a lack of equity and natural justice.
  4. The agreements and related legislation should ensure transparent evidence of adequate risk adjustment of the funding arrangements and comparative data of adverse events across hospitals.
  5. COAG to note that large hospital deficits can be significantly attributable to inadequate risk adjustment of hospital formulas and not necessarily attributable to inefficient clinical practice. Further, inadequate funding can result in adverse outcomes due to lack of resources.
  6. A risk adjustment factor in the funding formulae for hospitals that have multiple State-wide referral services could be developed if transparent evidence in recommendation 1 is not available. Methods published in the *European Journal of Health Economics* by Antioch, Ellis and Gillett et al (2007) to be considered as input into the development of a risk adjuster where there are Multiple State-wide Referral Services (MSRS) in the one Local Hospital Network.
  7. To enable increased funding to hospitals:
    - (a) The GST should be extended to financial services to raise \$3b to \$4b per annum and
    - (b) \$70 million to fund the Commonwealth's primary care reforms to be obtained from the Medical Research Future Fund which has A\$3 billion in assets interest'. (Antioch, 2016 page 4)
3. ***Do you support the proposal to not fund episodes that include a sentinel event? If not, what are the alternatives and how could they be applied consistently?***
- There is broad support not to fund sentinel events given hospitals do need to resolve any processes that cause harm, but there is a caveat as outlined below.
  - Further work may be required with the suicide sentinel event. There may be arguments to consider funding episodes where a suicide occurs for the hospital stay for the period from admission to the day of the suicide. In order to define the suicide as a sentinel event, there would need to be clear evidence that hospital processes could have mitigated the tendency towards suicide and with consideration of the way in which the patient suicided.

**4 Do you support the proposal to include a sentinel events flag to improve the timeliness and consistency of data that is used for funding purposes?**

- Yes this is strongly supported.

**5. HAC - Option 1 : Remove the HAC so that it does not contribute to DRG assignment. What are the advantages and disadvantages of Option 1 which reduces funding for some acute admitted episodes with a HAC?**

- In 85% of cases with a HAC there is no impact of the HAC on the grouping of the AR-DRG and the hospital does not receive any additional funding for such HAC. The disadvantage of Option 1 is that it will not make much difference to the funding the hospital receives. The hospital is already incurring financial losses due to such HACs and the hospital is being implicitly penalised already.
- Option 1 will only reduce funding for 15% which would be assigned to a lower complexity AR-DRG. These findings are based on IHPA's analyses of the data for 2014-15 as discussed in IHPA's 2017-18 consultation paper
- Under the existing arrangements, the cost of the HACs occurring, in 85% of episodes where a HAC occurs, is still included in the NEP calculations for the next period of funding. This would continue under option1.

**6. HAC - What are the advantages and disadvantages of Option 2 that adjusts funding to hospitals on the basis of differences in their HAC rates? Options include**

- **6.1 No risk-adjustment – each hospital is compared against all other hospitals on the basis of their ‘raw’ HAC rates;**
- **6.2 Stratification of hospitals within states – hospitals are compared on raw HAC rates but are ranked within states;**
- **6.3 Stratification of hospitals within peer groups – hospitals are compared on raw HAC rates but are ranked within peer groups;**
- **6.4 Risk adjustment – each hospital is compared nationally against all other hospitals on the basis of HAC rates that are risk-adjusted for age and patient complexity.**
- Of the options listed above only option 6.4 is supported but such support is conditional on further clarification of that option. It could be improved by including elements of 6.3 (ie stratification of hospitals within peer groups) prior to any national comparisons against other hospitals on the basis of risk adjustment. Further, transparent evidence is required of the adequacy of the risk adjustment and whether sufficient attention is provided to the impact of SWRS.
- **The option which has not been suggested by IHPA is to make no changes at all for HAC scenarios.** One could argue that hospitals are already being penalised in 85% of HAC cases as the hospitals have to deal with the increased costs associated with treating those patients as they do not impact on the DRG assignment and the hospitals do not receive extra funding to cover the higher costs. However, one disadvantage identified was the flow on effects of the higher costs which would be captured in the calculations of the NEP.

**7 HAC - What are the advantages and disadvantages of Option 3 that combines funding incentives and penalties?**

- A quality-adjusted NEP with funding incentives for hospitals with the lowest HAC rates.

- Step 1: A 'quality-adjusted NEP' is calculated that is based on removing all episodes with HACs so that these episodes do not feed into the determination of the NEP. This means that the amount paid by the Commonwealth for all public hospital services (irrespective of whether the service includes a HAC or not) is adjusted downwards.
  - Step 2: This funding reduction is used (either fully or partially) to provide positive funding adjustments (incentives) directly to hospitals that have the best performance on HAC rates. A variation on this approach would see the funding returned to individual states that could then choose to invest the funding on safety and quality programs
    - In considering steps 1 and 2 above, one view is that for step 2 the only acceptable option is for the funding to be returned to the state or territory to invest in the funding on safety and quality programs.
    - To ensure that the hospitals with the greatest need for more funding for safety and quality are recipients of the funds then National Partnership Agreements could be developed to clarify and hold jurisdictions accountable
    - It would be inappropriate to reward the best performing hospitals from an equity perspective; rather far more appropriate to assist those hospitals with the greatest need.
    - ***These reform imperatives assume adequate risk adjustment of data. In the absence of adequate risk adjustment (including for the impacts of SWRS) the entire reform package is not supported.***
8. Option 4: *Is there another option that IHPA can consider given the evidence they have reviewed and published?* How can they communicate that option and the arguments effectively to COAG?
- As outlined above regarding question 6 - ***The option which has not been suggested by IHPA is to make no changes at all for HAC scenarios.***
  - One could argue that hospitals are already being penalised in 85% of HAC cases as the hospitals have to deal with the increased costs associated with treating those patients as they do not impact on the DRG assignment and the hospitals do not receive extra funding to cover the higher costs.
  - However, one disadvantage identified was the flow on effects of the higher costs occur in the calculations of the NEP.
  - This option could be communicated via AHMAC and COAG deliberations.
9. ***Readmissions***
- ***What approach is supported for setting timeframes within which avoidable hospital readmissions are measured?***
    - IHPA notes the imperative to determine timeframes within which condition-specific readmissions could plausibly occur as a result of complications in the initial admissions. There is some agreement for this flexibility in determining the time frames.

- IHPA has provided examples of condition-specific readmission windows identified by US clinicians were:
  - *one day* for acute complications of poor inpatient glycemic control;
  - *seven days* for air emboli arising from a medical or surgical procedure; incompatible blood transfusion; catheter-associated urinary tract infections; and vascular catheter-associated infections;
  - *30 days* for deep vein thrombosis or pulmonary emboli following hip or knee joint replacement surgery; and
  - *183 days* for foreign object retained after surgery; mediastinitis following coronary artery bypass graft surgery, fractures and other physical injuries sustained during inpatient care; infections arising from specific orthopaedic joint procedures or bariatric procedures; and Stages III & IV pressure ulcers (IHPA 2016).
- This issue of specifying time lines for condition specific readmissions can be further developed by the ACSQHC in consultation with the NHMRC with regard to clinical practice guidelines. The use of the above mentioned time frames would be important to communicate to the AHMAC and COAG given the heads of agreement specify relatively restricted time frames.
- *Is there Australian evidence (including guidelines or recommendations) that could be used to implement condition specific readmission timeframes?*
  - As indicated above, IHPA could liaise with both the ACSQHC and the NHMRC about any Australian evidence. Some health insurers have been investigating these issues and that work could be considered.

## **B. New Bundling proposals: Maternity Care**

1. *Do you support IHPA's intention to introduce a bundled price for maternity care in future years?*
  - It would be helpful to examine the data further to provide insights about the views below.
  - It is unclear why IHPA seeks to bundle maternity care and what the expected benefits in terms of improved models of care would be achieved through such bundling. Bundling is often applied for chronic diseases where greater co-ordination and collaboration improve patient outcomes and costs. Why would bundling significantly improve the patient experience in the case of maternity care? The proposal excludes cases where there are multiple funders involved in care such as the public and private sector mix of care.
  - There is some limited support for the concept with caveats as indicated below and clarification by IHPA of the rationale for bundling maternity care.

**2. *What stages of maternity care and patient groups should be included in the bundled price?***

- From the three bundling options under consideration by IHPA, only pre and post natal care should be included in the bundled price.
- There may still be a requirement for appropriate risk adjustment of the bundle for pre and post natal care. Risk adjustment could also be required if IHPA decided to include the inpatient component in the bundle given the impact of any complications that arise during the pregnancy and also the risk factors of the mother which may vary.
- Some risk adjustment variables to include in the bundled funding model are outlined below and further discussed in response to question 4 below.
- The risk factors associated with the mother that could be relevant for risk adjustment include mother's age, alcohol drinker status, smoker status, drug taker and indigenous status. Other factors likely to impact on the costs include geographical location (metro/rural). There may be jurisdictional variations in some practice patterns. IHPA could examine these risk factors through multiple regression analysis of the national data sets. Where patient risk factor data is not captured in the national data sets, IHPA could consider the literature that may address the impact of such risk factors on costs and utilization of maternity patients.
- There is agreement that very high risk patients could be excluded from the bundle including gestational diabetes. This is the intention of IHPA. Further clarification of exclusions intended by IHPA would be helpful. For example, how would IHPA account for emerging complications during the pregnancy and how would that impact on the funding model? This could include mothers that develop pre-eclampsia, breech position of the fetus, congenital birth defects, pre-mature labour including pre-mature rupture of membranes, impact of pre-term birth defects at all stages of the pregnancy.
- There may be impacts on the number of visits required pre and post natal where complications arise which would then impact on the funding model. More visits may be required and/or additional treatment such as drugs, hospitalisation etc.
- IHPA could examine the most up to date Clinical Practice Guidelines internationally and in Australia to provide further insights about how to handle emerging complications before, during and after the birth and how this might impact on the bundled price and funding model under consideration.

**3. *Should IHPA include postnatal care provided to the newborn in the bundled price?***

- The cost of postnatal care provided to the newborn could be excluded from the bundled price.

**4. *What other issues should IHPA consider in developing the bundled price?***

- As indicated in response to question 2 - complications may arise during the pregnancy at any stage (pre natal, during the birth, post natal). Such complications can impact on the total costs per patients and may contribute to high variation across patient groups in health services utilization and costs.
- IHPA could further analyse the data to ascertain the likely incidence and prevalence of such complications and determine the potential impact on any funding model that is developed for bundling. Jurisdictional differences may emerge eg NT may be a particular risk for complications given risk factors of the indigenous population.

- This complexity issue is relevant for each of the three bundling options under consideration by IHPA, For example pre-eclampsia can lead to emergency C- Sections and potentially change the cost structures for patients who develop such complications during pregnancy. It is also associated with longer LOS in hospitals for some patients.

**C. Recommendations**

- That IHPA note the above responses to the questions posed in the consultation document.



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Dear Committee Secretary

Thank you for the opportunity to provide a submission to the Senate Inquiry on the Outcomes of the 42nd meeting of the Council of Australian Governments held on 1 April 2016. My submission addresses some key issues relating to hospital funding as specified in the Heads of Agreement between the Commonwealth and the States and Territories on Public Hospital Funding

## 1. Background

COAG considered hospital funding and health reform and reaffirmed that providing universal health care for all Australians is a shared priority at the 1 April 2016 meeting. COAG agreed a Heads of Agreement for public hospitals funding from 1 July 2017 to 30 June 2020 prior to considering longer-term arrangements. The Commonwealth will provide \$2.9 billion in additional funding for public hospital services. Growth in Commonwealth funding is capped at 6.5% per annum.

The Agreement preserves important parts of the existing system, including the national efficient price and Activity Based Funding (ABF). It also focuses on reducing unnecessary hospitalisations, improving patient safety and service quality. All jurisdictions agreed to take action to improve the quality of care in hospitals and reduce the number of avoidable admissions as part of the Agreement, by:

- reducing demand for hospital services through better coordinated care for people with complex and chronic disease. The current system does not always provide the care the chronically ill require and they are therefore hospitalised more than is necessary;
- improving hospital pricing mechanisms to reflect the safety and quality of hospital services by reducing funding for unnecessary or unsafe care. Reducing hospital-acquired complications will improve patient safety; and
- reducing the number of avoidable hospital readmissions. Too many patients are readmitted to hospitals as a consequence of complications arising from the management of their original condition (COAG, 2016a)<sup>1</sup>.

The Commonwealth will continue its focus on reforms in primary care that are designed to improve patient outcomes and reduce avoidable hospital admissions (COAG, 2016a)<sup>1</sup> The agreement builds on, and complements, the policy and reform directions outlined in the National Healthcare Agreement (NHA) and the National Health Reform Agreement (NHRA). It is also subject to the Intergovernmental Agreement on Federal Financial Relations and should be read in conjunction with that agreement and any subsidiary schedules (COAG, 2016b)<sup>2</sup> The Agreement forms the basis of negotiations leading towards a time-limited addendum of the National Health Reform Agreement, in the form of an additional schedule, to commence on 1 July 2017. The addendum will amend specified elements of the operation of the National Health Reform Agreement for a period of three years, ceasing 30 June 2020 (COAG, 2016b)<sup>2</sup>

## 2. COAG Heads of Agreement

### 2.1 Pricing for Quality and Safety

The Agreements at Schedule 2, Clause 9 to 11, state:

9 "While most health care in Australia is associated with good clinical outcomes, preventable adverse events or complications continue to occur across the health system. By reducing hospital acquired complications, there is potential to not only improve patient safety, but also achieve efficiencies.

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<sup>1</sup>COAG communiqué 1 April 2016 [https://www.coag.gov.au/sites/default/files/COAG\\_Communique.pdf](https://www.coag.gov.au/sites/default/files/COAG_Communique.pdf)

<sup>2</sup>

[https://www.coag.gov.au/sites/default/files/Heads%20of%20Agreement%20between%20the%20Commonwealth%20and%20the%20States%20on%20Public%20Hospital%20Funding%20-%201%20April%202016\\_0.pdf](https://www.coag.gov.au/sites/default/files/Heads%20of%20Agreement%20between%20the%20Commonwealth%20and%20the%20States%20on%20Public%20Hospital%20Funding%20-%201%20April%202016_0.pdf)



10. The Parties, in conjunction with the Australian Commission on Safety and Quality in Health Care (ACSQHC) and the IHPA, will develop a comprehensive and risk-adjusted model to integrate quality and safety into hospital pricing and funding.

- a. The model will determine how funding and pricing can be used to improve patient outcomes and reduce the amount that should be paid for specified adverse events, ineffective interventions, or procedures known to be harmful.
- b. This could include an adjustment to the amount the Commonwealth contributes to public hospitals for a set of agreed hospital acquired conditions. Any downward adjustment to an individual state would not be deducted from the available pool of funding under the overall cap of 6.5 per cent.

11 The Parties agree to develop the model for implementation by 1 July 2017". (COAG, 2016b)<sup>2</sup>

## 2.2` Reducing avoidable readmissions

The Agreements at Schedule 2, Clauses 12 to 13 State:

12 "The Parties agree to work together to reduce avoidable readmissions to hospital within 28 days of discharge, with a particular focus on avoidable readmissions within 5 days of discharge, for conditions arising from complications of the management of the original condition that were the reason for the patient's original hospital stay.

13. The Parties, in conjunction with the ACSQHC and the IHPA, will develop 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 by 1 July 2017". (COAG, 2016b)<sup>2</sup>

## 3. Issues

Greater measurement of the quality of healthcare is supported. The stated 'goal' of 'a risk adjusted strategy and funding model' is also supported. However, it is crucial to ensure adequate risk adjusted funding formulae in the arrangements at the outset (ie *prior* to the abovementioned adjustments). That is, the Independent Hospital Pricing Authority (IHPA) funding formulae should adequately reflect the health need of complex patients to in its national formulas to avoid inappropriate underfunding hospitals. This would assist in improving both equity and health outcomes overall. *From a legal perspective, it could facilitate natural justice/ procedural fairness.*

The IHPA facilitates thorough and high quality work in areas such as stabilizing the national funding models<sup>3</sup>, the financial review of the national hospital cost data collections<sup>4</sup>, National Weighted Activity Unit (NWAU) calculators for sub-acute, Emergency Departments, non-admitted and acute activity<sup>5</sup>, development of the recent AR-DRG Version 8<sup>6</sup>, review of the AR-DRG Case-Complexity Process<sup>7</sup> along with annual reviews of the national efficient price and cost determinations<sup>8 9</sup>.

Recent developments by IHPA in analysing casemix complexity are promising<sup>10</sup>. *However, it would assist if IHPA could provide evidence that IHPA's formulae and any 'casemix complexity calculations' adequately risk adjust for the flow on effects of State-wide referral services.* The evidence for the need for such risk adjustment using Victorian hospital data was published internationally by Antioch Ellis and Gillett and Victorian government officials<sup>11</sup>. That evidence and earlier international publications by Antioch and Walsh demonstrated that State-wide referral services impacted on DRG funding in Victoria resulting in underfunding due to more

<sup>3</sup> <https://www.ihoa.gov.au/publications/national-pricing-model-stability-policy>

<sup>4</sup> <https://www.ihoa.gov.au/publications/round-18-independent-financial-review-national-hospital-cost-data-collection>

<sup>5</sup> <https://www.ihoa.gov.au/publications> <https://www.ihoa.gov.au/publications/nwau16-calculator-subacute-activity>  
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<sup>6</sup> <https://www.ihoa.gov.au/publications/development-australian-refined-diagnosis-related-groups-v80>

<sup>7</sup> <https://www.ihoa.gov.au/publications/review-ar-drg-case-complexity-process>

<sup>8</sup> <https://www.ihoa.gov.au/publications/national-efficient-price-determination-2016-17>

<sup>9</sup> <https://www.ihoa.gov.au/publications/national-efficient-cost-determination-2016-17>

<sup>10</sup> <https://www.ihoa.gov.au/publications/review-ar-drg-case-complexity-process>

<sup>11</sup> [http://people.bu.edu/ellisrp/EllisPapers/2007\\_AntiochEllisGillett\\_EJHE\\_RiskAdj.pdf](http://people.bu.edu/ellisrp/EllisPapers/2007_AntiochEllisGillett_EJHE_RiskAdj.pdf)

complex casemix, culminating in significant hospital deficits in the face of efficient health care provision by clinical staff<sup>12</sup>.

Further, in recent years, several Australian States and Territories have reported significant hospital deficits. For example, in November 2015, Victoria reported annual deficits of more than \$700m<sup>13</sup>. In the ACT, Calvary Hospital reported a loss of \$12m in just one year in 2014<sup>14</sup>. During December 2015, Western Australia reported that hospital deficits increased to \$3.16b.<sup>15</sup>

It would be helpful if IHPA could provide insights into whether the State wide referral status effect is adequately captured in the funding models as such status could be a contributing factor to such deficits. For example, does recent work on the Episode Clinical Complexity (ECC)<sup>7</sup>, which measures the cumulative effects of Diagnosis Complexity Level (DCL)<sup>16</sup> for a specific episode, *fully* capture the complexity associated with 'severity markers' linked to state-wide referral services? For example, cardiomyopathy is a 'severity marker' for heart transplant patients and may occur in a patient awaiting a heart transplant and admitted under other DRGs for cardiac procedures or medical treatment in hospital episodes prior to transplantation. Such 'heart transplantation patients' would be more costly than other patients in these (non transplant) DRGs receiving care in other hospitals.

If there is inadequate risk adjustment in the funding arrangements in the national formulas, there will be inappropriate underfunding which would only exacerbate declining health outcomes for high complexity patients. The Agreements at Schedule 2 refer to imperatives to *reduce* the amount that should be paid for specified adverse events, ineffective interventions, or procedures known to be harmful'. This represents a punishment to hospitals for some avoidable adverse events. *Certainly it is appropriate to reduce and/or stop funding ineffective interventions or procedures known to be harmful as they can directly result in health deterioration of patients.*

*However, some adverse events have multiple causes, some actually exacerbated by a lack of funding. It is difficult to accurately measure adverse events fairly across the hospital system.* For example, redness around a wound could be considered an infection by a health worker, whereas others will not. Some hospitals may have higher rates of adverse events such as pressure ulcers because of the age, complexity, and immobility of their patients<sup>17</sup>. Hence risk adjusted measurement tools/classifications should be mandatory to ensure *accurate* measurement and comparisons between hospitals of their health outcomes.

Assuming an adequate and transparent risk adjusted funding formulae, then financial incentives (rather than punishments) for performance could be preferable. *Where COAG is unwilling to consider financial incentives, rather than punishing hospitals, then the need for transparent evidence of adequate risk adjustment of IHPA's national funding formulae is even more imperative.* The agreements and related legislation should therefore ensure transparent evidence of adequate risk adjustment of the formulae.

*Other concerns relating to the Heads of Agreements concern the level of hospital funding.* South Australian Premier proposed to COAG that the GST be extended to financial services, which would raise about \$3 to \$4 billion a year.<sup>18 19</sup> Further, \$70 million to fund the Commonwealth's *primary care reforms* is consistent with the guidelines for spending from the *Medical Research Future Fund* which has over A\$3 billion in assets interest.<sup>20 21</sup>

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[http://www.health.gov.au/internet/ihpa/publishing.nsf/Content/F7F044CD6146FF45CA257A7F0003F03B/\\$File/Dr%20Kathryn%20Antioch.pdf](http://www.health.gov.au/internet/ihpa/publishing.nsf/Content/F7F044CD6146FF45CA257A7F0003F03B/$File/Dr%20Kathryn%20Antioch.pdf). (eg see pgs 21 to 47)

13 <http://m.theage.com.au/victoria/victorias-hospitals-cant-pay-bills-after-facing-700-million-annual-deficits-20151112-gkx084.html>

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15 <http://www.perthnow.com.au/news/western-australia/wa-budget-was-deficit-blows-out-to-3-billion/news-story/3c661c7007cd2789641006949e8317ff>

16 The Diagnosis Complexity Level is the casemix complexity weight assigned to each diagnosis within a particular DRG

17 <http://www.smh.com.au/federal-politics/federal-election-2016/hospital-funding-could-help-fund-federal-health-reforms--draft-coag-agreement-20160331-gnvw4.html>

18 <http://www.news.com.au/national/breaking-news/states-urge-fed-govt-partnership-on-health/news-story/6b28ac7ea347876e1bb5e3575da43aaa>

19 <http://www.abc.net.au/am/content/2016/s4432856.htm>

20 <http://theconversation.com/another-day-another-hospital-funding-dispute-how-to-make-sense-of-todays-coag-talks-57058>

21 <http://www.smh.com.au/federal-politics/federal-election-2016/hospital-funding-could-help-fund-federal-health-reforms--draft-coag-agreement-20160331-gnvw4.html>



## Recommendations

1. IHPA to provide transparent evidence of adequate risk adjustment of ABF classification and funding. IHPA to address whether the funding formulae adequately takes account of impacts of severity markers arising from State-wide referral services.
2. Risk adjusted measurement tools/classification systems should be mandatory to ensure accurate measurement of costs and *outcomes*, including comparisons between hospitals. This requirement should be included in the work to be undertaken by the Parties in conjunction with the Australian Commission on Safety and Quality in Health Care (ACSQHC) and the IHPA. *The Agreements at Schedule 2, Clause 9 to 11, especially Clause 10 (a) and (b) do not make any such requirement explicit and only refer to funding and pricing. Legislation should ensure adequate measurement tools to ensure equity, natural justice/ procedural fairness.*
3. Recommendation 2 is also applicable to the intention at Schedule 2, Clauses 12 and 13 concerning funding adjustments for readmissions to hospitals. If measurement tools/classification systems are inadequate then there will be a lack of equity and natural justice.
4. The agreements and related legislation should ensure transparent evidence of adequate risk adjustment of the funding arrangements and comparative data of adverse events across hospitals.
5. COAG to note that large hospital deficits can be significantly attributable to inadequate risk adjustment of hospital formulas and not necessarily attributable to inefficient clinical practice<sup>22</sup>. Further inadequate funding can result in adverse outcomes due to lack of resources.
6. A risk adjustment factor in the funding formulae for hospitals that have multiple State-wide referral services could be developed if transparent evidence in recommendation 1 is not available. Methods published in the *European Journal of Health Economics* by Antioch, Ellis and Gillett et al (2007)<sup>22</sup> to be considered as input into the development of a risk adjuster where there are Multiple State-wide Referral Services (MSRS) in the one Local Hospital Network.
7. To enable increased funding to hospitals:
  - (a) The GST should be extended to financial services to raise \$3b to \$4b per annum and
  - (b) \$70 million to fund the Commonwealth's primary care reforms to be obtained from the Medical Research Future Fund which has A\$3 billion in assets interest.

Your Sincerely,

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<sup>22</sup> [http://people.bu.edu/ellisrp/EllisPapers/2007\\_AntiochEllisGillett\\_EJHE\\_RiskAdj.pdf](http://people.bu.edu/ellisrp/EllisPapers/2007_AntiochEllisGillett_EJHE_RiskAdj.pdf)