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Independent Hospital Pricing Authority Level 6, 1 Oxford Street Sydney NSW 2000

10<sup>th</sup> November 2016

Dear Sir / Madam,

<u>Submission on the Consultation Paper on the Pricing Framework for Australian Public Hospital Services 2017-18</u>

Thank you for the opportunity to make a submission on this Consultation Paper. What follows is my opinion as a practising clinician in a major public hospital and as a Council Member of the Australian Society of Plastics Surgeons. This response will be limited to the points in section 11 (Pricing and funding for Quality and Safety) of the paper and will focus specifically on section 11.6 (Hospital Acquired Complications)

The concept of financially rewarding safe practice and penalising hospitals for adverse events is appealing on the face of it, but more complex when thoroughly examined.

It is appropriate for Commonwealth and State Governments to seek to provide funding based on health outcomes to a greater or lesser extent. However, an absence of Hospital Acquired Complications after surgery does not equate to a good outcome and a good outcome can occur, even in the context of a complication.

Example A (composite case): Mr Jones is a 24 year old carpenter. In his spare time at the weekend he is making a cubby house for his 2 year old daughter. He accidentally amputates the middle and ring fingers of his left hand with a band saw. He attends a public hospital within an hour of the accident. A specialist plastic surgeon sees him and decides he is suitable for surgery to try to reattach the fingers. The goal of the surgery is to restore Mr Jones to having a hand that looks normal and functions well. This sort of surgery is complex and involves microsurgery to reattach the blood vessels and nerves. Because of the very nature of the injury and the surgery there is a significant risk that something may not run perfectly. Mr Jones has a higher risk of things going wrong because he is a smoker and tiny blood vessels tend to spasm

more easily in smokers. Mr Jones undergoes the surgery (taking 10 hours), everything goes well and he is sent to the ward. Six hours later the blood flow to one of the fingers stops and he has to return to the operating theatre. After a further repair of the blood vessels Mr Jones's finger is fine. He is discharged from hospital 6 days later. One year later, at the age of 25, Mr Jones is completely back to his normal work level as a carpenter and caring for his family. He has a long working life ahead of him. The goal of restoring Mr Jones to having a normal-looking, functional hand has been achieved.

In this case, the outcome was good and the goal of the surgery was achieved, but there was a Hospital Acquired Complication (HAC), which in the proposed model, would result in the hospital being penalised. In the USA, where this sort of financial penalty for complications is in place, the rate of re-attachment of fingers has dropped significantly over the last 20 years (Fufa et al., 2013). This is not because finger re-plantations are not the best for the patient, but rather because of adverse financial factors.

## How can cost effectiveness of surgery be measured?

Value in healthcare is the paramount to the proper running of any healthcare system and can be defined as outcomes relative to cost. The numerator of the value equation must be health outcome, not absence of complications or volume of activity. Properly defining and measuring health outcomes is therefore an essential pre-requisite.

In surgery, the outcome can sensibly be defined as a measurable endpoint relating to the goal of surgical treatment. When the goal of surgery is to achieve cure of a cancer, return of the cancer and cancer-free survival are suitable outcomes. In other surgery, goals of treatment often relate to improvement in quality of life and this is best measured by patients rather than surgeons, hence the need for patient-reported outcomes measures in this field. Health-related quality of life can be assessed by using the patient's perspective using validated patient-reported outcomes measures. "Most healthcare aims to reduce symptoms, minimise disability, and improve quality of life—these are aspects that only patients can assess" (Black, 2013). Whilst a high complication rate may be a sign of poor care, it is a surrogate for outcome, not an outcome in itself. True outcomes must relate to the aim of treatment.

For individual patients, there is often poor correlation between the final outcome of a procedure and the incidence of interim complications, so in fact complication rate is a poor surrogate. As well as this, complication rates also relate to factors such as the socioeconomic and health status of population served by the hospital, rather than just the performance of the hospital staff and systems.

In addition, the current IHPA proposal does not take account of "filtering" of patients to different hospitals. For example, in my own local health network, there are two small hospitals, with limited high dependency and critical care facilities and one large hospital, with all possible facilities. Unsuprisingly, only the fit, low-risk patients are selected to have their elective surgery at the smaller hospitals and so comparing the hospitals' complication rates is not valid, because of the very different patient risk profile.

## If Hospital Acquired Complications are not used as a determinant for funding, is there another model that could be used?

Clinical effectiveness is a term which refers to how effective a procedure is in terms of achieving the goal of that procedure. IHPA could, very reasonably, build a developing policy on financially rewarding hospitals that measure their outcomes and penalise hospitals that do not measure their outcomes. Over time, if most hospitals are measuring outcomes, procedures with better clinical effectiveness could be rewarded more. However, it is important that such a concept would have to be introduced in nuanced and properly supported manner.

Looking at other healthcare systems in the world, the USA and UK have both developed institutions for measurement of health outcome using patient reported outcomes measures – the Patient-Centred Outcomes Research Institute (PCORI) in the US and the Patient Reported Outcome Measures Programme (HSCIC PROMS programme) in the UK. In Australia there is an "Australian Health Outcomes Collaboration" within the Australian Health Services Research Institute (University of Woolongong)(Sansoni, 2007) but they do not seem to have been engaged in the preparation of the IHPA consultation paper.

<u>Is it practical to use Health Outcomes Measures on a routine basis to determine clinical effectiveness?</u>

At Flinders Medical Centre in South Australia, the Breast Reconstruction Service has been measuring health outcomes with a validated patient reported outcomes measure called the "BREAST-Q" for the last 6 years. This work has been recently published in an international plastic surgery journal (Dean and Crittenden, 2016) and is attached to this submission as an appendix.

Example B. (composite case) Mrs Kay is a 42 year old nurse with a husband and 3 children. She had a mastectomy, radiotherapy and chemotherapy for breast cancer. After completing her breast cancer treatment Mrs Kay came to see a specialist plastic surgeon to discuss breast reconstruction (rebuilding a breast after one has been removed). The goal of the surgery was to restore her psychological and physical health to as near to normal as possible. The clinic assessed her health-related quality of life before her surgery using a questionnaire. Her scores, out of 100, were 42 for psychological well-being and 68 for physical well-being. She decided to go ahead with surgery and had a reconstruction using a latissimus dorsi muscle flap.. Her scores were checked again 6 months after her surgery and found to be 95 for psychological well-being and 89 for physical well-being. She had no complications and returned to work within 3 months of surgery. The goal of the surgery was achieved and was quantitatively measured using a validated Patient Reported Outcomes Measure.

Although this patient did not have a surgical complication, experience tells us, that even if she had, she still would have derived real benefit from having the surgery (i.e. the surgery was of high value).

Are some patients particularly high risk and should we be operating on them?

Surgeons spend many years learning to evaluate the risks and benefits of surgery for individual patients. In fact the "patient selection" aspect of surgical practice is often as challenging as the technical aspects of surgery. The decision to operate on a high risk patient is never taken lightly and the implication of "fines" for Hospital Acquired

Complications is that the surgeon or hospital has done something wrong. An illustration of difficult risk assessment is as follows:

Example C. (real de-identified case – patient's permission given for disclosure) Mrs X is a 57 year old childcare worker with neck pain, back pain and breathlessness. She also has a serious heart condition (cardiomyopathy). She has recently had to give up work due to health problems and finds household tasks difficult. She was assessed as being suitable for a breast reduction operation by a specialist plastic surgeon in the public outpatient clinic. The goal of the surgery was to reduce her pain and improve her quality of life. She was put on the waiting list for surgery and during her procedure had 1.2kg of breast tissue removed. 1 week after the surgery she reported much improvement with breathing, sleeping and mobility. Before surgery her physical well-being and psychosocial well-being scores out of 100 using a PROM were 45 and 17 respectively. After surgery her scores were 71 and 74.

This is a quote from the patient, received in a letter:

"I was hoping my breast reduction would help my heart failure by being able to breathe more easily and to be more comfortable with a larger monitor in my chest, but I got so much more and I feel like a new person - even my children and husband have noticed the drastic change in my daily activities. It used to be a chore just to get through the days & nights, but life is very different now. I still can't believe that just removing excess breast can change so much in one's life and turn it around, all those little things that people take for granted I was struggling through, but now my quality of life is so much better. Many thanks."

This patient was on anti-coagulants, with a serious heart condition. Although she did not have any significant complications, she was certainly high risk, and in a system where financial penalties for any complications dominate the model of care, she could have been denied the surgery that was so demonstrably beneficial for her.

Are there other systems in place for protecting patient safety and monitoring Hospital Acquired Complications?

There are multiple systems in place for auditing and monitoring Hospital Acquired complications. Individual units and hospitals have internal reporting systems for adverse events, there are statewide and national reporting systems and bodies such as the Royal Australasian College of Surgeons who conduct Perioperative Mortality Reports. Hospital Accreditation also examines Hospital Acquired Complications. All surgeons are trained to and are committed to reducing Hospital Acquired Complications as a major focus of their daily work. Bringing in an IHPA funding model change in this area is unlikely to have an additional effect.

## **Summary**

- 1. Ensuring that high value healthcare is delivered efficiently and effectively in Australia's public hospitals is important.
- 2. Altering the funding for public hospitals so that penalties apply for Hospital Acquired Complications should be rejected. Unintended consequences could be
  - a. Denial or reduction of services to high risk patients
  - b. Pressure from hospital executives to reduce high risk surgical specialties, even if they deliver highly beneficial surgery.
  - c. Distortion of teamwork culture around good patient care
- 3. An alternative model could involve encouraging measurement of health outcomes in a structured and quantitative way. Measurement should relate to the original goal of the surgery. The Australian Health Outcomes Collaboration is likely to be able to assist with developing such a model.

Thankyou for the opportunity to provide a submission on this consultation paper,

Yours sincerely

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