Submission to the Productivity Commission Discussion Draft Report
Public and Private Hospitals

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Elizabeth Savage attended the June and October Roundtables on the Inquiry into Public and Private Hospitals representing the Centre for Health Economics Research and Evaluation at the University of Technology Sydney. Elizabeth Savage and Glenn Jones are Chief Investigators on an ARC-funded research project on "Patient waiting times at public hospitals and the demand for private care".

We provide comments on the Draft Report under the following headings:

1. Access to health data
2. The consistency and limitations of public and private hospital cost data
3. The treatment of fixed costs in the comparison between public and private hospitals
4. Regional comparisons
5. Emergency
6. The choice of other comparators

1. Access to health data

Australia has complex system of funding for its health system. Health expenditures are split between patient copayments and Commonwealth or State government subsidies. State governments deliver free, universal inpatient treatment in public hospitals, partly funded by block payments from the Commonwealth. The Commonwealth subsidises pharmaceuticals listed on the Pharmaceutical Benefits Scheme, diagnostic tests and all medical services provided to private inpatients. Private health insurance can be used to lower copayments for medical services to private inpatients. The Commonwealth government mandates community rating of premiums and pays premium subsidies.

Most information about the operation of the Australian health system is contained in large quantities of routinely collected administrative data which are largely unavailable to researchers. This severely compromises our understanding of the operation of the Australian health system and impedes the development of more effective use of health spending.

Researchers are often refused access to health-related administrative data with unjustifiable claims to privacy or confidentiality. While patient privacy is an important issue, appropriate governance procedures for de-identified data can provide the necessary privacy protections.

We strongly support the Commission's recommendation that there should be greater consultation with potential users on how data are collected and made available. This is necessary both to improve the quality of data collections and encourage research which can inform improved design of health policy and delivery of health care. The creation of linked health record data at the individual patient level must also be a high priority. Without linked data we cannot identify the most effective and appropriate forms of co-ordinated health care.

2. The consistency and limitations of public and private hospital cost data

The Discussion Draft report draws attention to significant data shortcomings that "has limited its ability to construct fully comparable estimates". The Commission repeatedly warns that because of its limited ability to construct comparable estimates, their results are "experimental". Nevertheless, it is the findings of the Commission, and not the stated caveats, that are likely to be the focus of the public debate. This is evident from media discussion of the draft findings. *In our view the lack of consistent data means that the comparison of costs between public and private hospitals is so compromised that it cannot provide meaningful results.* To elaborate:

The **NHCDC** is used to generate AR-DRG cost weights; however the method used differs *systematically* between the public and private sectors. The private sector is characterised as using "cost modelling at the DRG level"; this method is not described in the report and there is no discussion of how consistently the approach is applied within the sector. The majority of the public sector (75%) is characterised as using "patient costing"; again there is no discussion in the draft report of the method or of its consistent application across the public sector. The method by which costs are attributed to patients "directly as they occur" is opaque. There is also anecdotal evidence of a lack of consistency between state jurisdictions and within them. Different reporting requirements in the different jurisdictions also produce different incentives for where cost items are included and this generates further potential biases.

The NHCDC is a voluntary collection of hospital expenditures (costs) and does not cover all hospitals. The hospitals that report may be a systematically selected sample and unrepresentative even of their sector. In the public sector there appears to be a bias to large hospitals. In the private sector the bias is less clear. In both sectors there is no data on medical and diagnostic costs for private patients because these are directly billed to patients. In the private sector there are a number of other data omissions. Private hospital data is only provided for private patients who make a claim to private health insurers. All other private patients (self-funded, DVA, workers compensation etc) are excluded. Of DRGs, 12% were also excluded if there was a small number of separations in either sector or if a small number of hospitals were involved.

The **HCP** data is a census of private health insurance claims and, as such, includes data on charges (not costs) directly to patients. Of private hospital separations, those for which there was no insurance claim (20%) are excluded from this data. The HCP data is used to generate medical and diagnostic data for privately insured private patients in private hospitals which is missing in the NHCDC data. There is again a potential problem of sample selection: for example, if those patients with no insurance claim systematically differ from those who are self-funded, this introduces a further bias in the results. The HCP data is also deficient in regard to private patient separations in public hospitals, 80% of which are not assigned to a DRG and are classified as 'ungroupable'. This compares to 3% of private hospital separations.

Finally, there is likely to be a range of complexity within a DRG and anecdotal evidence suggests that complexity tends to be greater in public hospital settings, particularly for some DRGs. The extent of this potential bias should be investigated.

The main risk for comparisons of costs between public and private sector hospitals is that systematic differences in the way the cost data is generated will be incorrectly attributed to efficiency differences. This is true for the aggregate analysis and is not overcome by the use of more complex techniques such as stochastic frontier analysis applied to the same deficient data.

We recommend that:

- that the final report include detailed descriptions of methods of cost modelling and patient costing and include a discussion of how consistently these methods are applied in practice;
- that costing results for the subsample of public hospitals which use cost modelling (reported as 25% at the October Roundtable) be compared with (i) the costing results for the public hospitals using patient costing and (ii) the costing results for the private hospitals also using cost modelling;
- to provide additional information to assess the reliability of comparisons of the composition of costs between sectors, the final report should detail the percentage of total cost which the analysis allocates, both by sector and by cost component;
- detailed description of how missing data was addressed (eg medical and diagnostic cost data for direct-billed private patients);
- to examine whether complexity within DRGs differs between the public and private hospitals, patient characteristics (such as age and co-morbidities) be compared between public and private patients for a group of selected DRGS. (This is also relevant for the interpretation of differences in length of stay for the same surgical procedure between public and private hospitals.)

3. The treatment of fixed costs in the comparison between public and private hospitals

The accounting practice of allocating fixed costs, or overheads, to outputs of production is ad hoc and misleading. The same is true for allocating fixed costs to DRGs. We recommend that fixed costs of hospitals (both of infrastructure and administration) not be assigned to particular DRGs.

4. Regional comparisons

There are no private hospitals in remote regions and remote public hospitals have higher costs than those in other regions. Therefore the inclusion of public hospitals in remote regions biases the comparisons between public and private hospital costs. We agree with the recommendation made by John Deeble at the October Roundtable that all public hospitals in remote regions be excluded from the analysis.

5. Pharmacy and emergency departments

The rationale for combining the costs for pharmacy and emergency departments is unclear. We recommend that the methods and data sources used to generate costs for pharmacy and emergency departments should be described in detail in the chapter on hospital and medical costs in the final report. To explore the impact of an emergency department on cost, we recommend that comparisons should be made between public and private hospitals, with and without, emergency departments. (This is also relevant for the comparison staffing levels between sectors.)

6. The choice of other comparators

There is no rationale for including waiting times for elective surgery in a comparison of public and private hospital performance and efficiency. Unlike private hospitals, public hospitals operate under fixed budgets and, in this setting, waiting lists are used to ration demand in the absence of prices. Comparisons of public hospital waiting times across and within state jurisdictions and controlling for patient complexity are of interest for the operation of public hospitals but fall outside the scope of this study. We recommend that the waiting times not be used as a partial indicator in the final report.