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ABF Information Series Number 4. The cost of public hospitals - which state or territory is the most efficient?

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Abstract
Many comments have been made in the recent media about the efficiency of Australian hospitals. None have been made on firm evidence. In reality, an accurate comparison of jurisdictional performance is almost impossible to do using currently available data. This is because every national report on jurisdictional performance reports different results, even if they cover the same time period. This is illustrated in Table 1 using the latest available national data.

Keywords
state, which, hospitals, public, most, cost, efficient, 4, number, series, information, abf, territory

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ABF Information Series No. 4

The cost of public hospitals – which State or Territory is the most efficient?

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Revised 27 March 2010

Many comments have been made in the recent media about the efficiency of Australian hospitals. None have been made on firm evidence.

In reality, an accurate comparison of jurisdictional performance is almost impossible to do using currently available data. This is because every national report on jurisdictional performance reports different results, even if they cover the same time period. This is illustrated in Table 1 using the latest available national data.

<table>
<thead>
<tr>
<th>Cost Report</th>
<th>NSW</th>
<th>Vic</th>
<th>Qld</th>
<th>SA</th>
<th>WA</th>
<th>Tas</th>
<th>ACT</th>
<th>NT</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIHW Excluding depreciation</td>
<td>$4,295</td>
<td>$4,172</td>
<td>$4,172</td>
<td>$3,900</td>
<td>$4,405</td>
<td>$4,605</td>
<td>$4,513</td>
<td>$4,668</td>
<td>$4,232</td>
</tr>
<tr>
<td>AIHW Including depreciation</td>
<td>$4,423</td>
<td>$4,334</td>
<td>$4,353</td>
<td>$4,028</td>
<td>$4,515</td>
<td>$4,731</td>
<td>$4,644</td>
<td>$4,709</td>
<td>$4,376</td>
</tr>
<tr>
<td>DoHA Excluding depreciation</td>
<td>$3,659</td>
<td>$3,544</td>
<td>$3,931</td>
<td>$3,771</td>
<td>$4,594</td>
<td>$4,135</td>
<td>$4,983</td>
<td>$4,231</td>
<td>$3,820</td>
</tr>
<tr>
<td>DoHA Including depreciation</td>
<td>$3,808</td>
<td>NA</td>
<td>$3,990</td>
<td>$3,897</td>
<td>$4,717</td>
<td>$4,279</td>
<td>$5,170</td>
<td>$4,340</td>
<td>$3,907</td>
</tr>
</tbody>
</table>

AIHW (2009) Australian Hospital Statistics. Health services series no. 33. Note that the above table is based on Table 4.1.d in the AIHW report. AIHW revised this table on its website in December 2009. A previous version of this paper was based on the data in the hardcopy report rather than the revision on the website.


NA Not available

There are several reasons for the differences in reported costs. Perhaps the most important of these is differences in the purpose of each cost study. Depending on the purpose, different costs are included and different levels of precision in the analysis are required. The National Hospital Cost Data Collection (DoHA 2009) was never intended to be used to compare hospital efficiency. Its purpose is to produce a set of national cost weights for use with the Diagnosis Related Group (DRG) casemix classification of hospital activity. Its method appropriately reflects this purpose. In contrast, the Australian Hospital Statistics series (AIHW 2009) does aim to compare efficiency, albeit at a higher level. Its methodology, while very different, also appropriately reflects its purpose.

Other reasons for the difference in costs across reports include:

- The number and representativeness of hospitals included in each analysis. DoHA (2009) is a detailed bottom-up episode of care-level costing study of 241 hospitals whereas AIHW (2009) is a top-down analysis at the state and hospital peer group level that includes public hospitals that provide mainly acute care (350 in total)
- The inclusion/exclusion of capital depreciation
Whether or not the estimated costs of medical services for private patients (that are privately billed to Medicare) are included. They are estimated in AIHW (2009) but not included in DoHA (2009)

Whether or not revenue (and not just expenditure) is included

Variations in accounting practices between jurisdictions, hospitals and cost studies, including how overhead and corporate costs are allocated

Whether costs that cannot be determined are either estimated or excluded. If included, the method of estimation.

For ease of comparison, Table 2 excludes both depreciation and private patient medical costs as these are handled differently in the two analyses. Even when these two items are excluded, there are still significant differences between the reported costs. There is also inconsistency in relation to the relative cost performance of jurisdictions, particularly Western Australia. In the DoHA study, the average cost per weighted separation in Western Australia is 20% above the national average. In the AIHW report, the reported cost for Western Australia is only 4% above the national average. There is also a significant difference between the reports in the relative cost performance of the Northern Territory.

### Table 2  Cost per case weighted separation excluding depreciation and private patient medical costs 2007/08

<table>
<thead>
<tr>
<th>Cost report</th>
<th>NSW</th>
<th>Vic</th>
<th>Qld</th>
<th>SA</th>
<th>WA</th>
<th>Tas</th>
<th>NT</th>
<th>ACT</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIHW 2009</td>
<td>$4,064</td>
<td>$4,047</td>
<td>$4,099</td>
<td>$3,760</td>
<td>$4,252</td>
<td>$4,424</td>
<td>$4,341</td>
<td>$4,618</td>
<td>$4,077</td>
</tr>
<tr>
<td>Difference</td>
<td>$405</td>
<td>$503</td>
<td>$168</td>
<td>-$11</td>
<td>-$342</td>
<td>$289</td>
<td>-$642</td>
<td>$387</td>
<td>$257</td>
</tr>
<tr>
<td>DoHA % of national average</td>
<td>95.8%</td>
<td>92.8%</td>
<td>102.9%</td>
<td>98.7%</td>
<td>120.3%</td>
<td>108.2%</td>
<td>130.4%</td>
<td>110.8%</td>
<td>100.0%</td>
</tr>
<tr>
<td>AIHW % of national average</td>
<td>99.7%</td>
<td>99.3%</td>
<td>100.5%</td>
<td>92.2%</td>
<td>104.3%</td>
<td>108.5%</td>
<td>106.5%</td>
<td>113.3%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

In considering the differences in these figures, it is important to note that the Rudd hospital reform plan (‘A National Health and Hospitals Network for Australia’s Future’) uses a different set of figures again. While the source of the data series in Figure 12 of the Rudd plan is DoHA 2009 (the same source as in the table above), it does not include the latest year (2007/08). Instead, the figure finishes in 2006/07, even though the source data include 2007/08.

Figure 12 in the Rudd reform plan includes the cost of depreciation for all states and territories except Victoria. Victoria reported in the National Hospital Cost Data Collection that depreciation costs are excluded from the Victorian annual cost weight study (which determines the casemix funding for Victorian hospitals) because capital and infrastructure funding to Victorian hospitals is made by specified grants.

The depreciation costs reported by jurisdiction for 2007/08 in DoHA 2009 are shown in Table 3. They range from $0 for Victoria to $187 per case weighted separation in the Northern Territory.

### Table 3  Depreciation per case weighted separation reported in DoHA 2009

<table>
<thead>
<tr>
<th>State / Territory</th>
<th>NSW</th>
<th>Vic</th>
<th>Qld</th>
<th>SA</th>
<th>WA</th>
<th>Tas</th>
<th>NT</th>
<th>ACT</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation</td>
<td>$149</td>
<td>$0</td>
<td>$59</td>
<td>$126</td>
<td>$123</td>
<td>$144</td>
<td>$187</td>
<td>$109</td>
<td>$87</td>
</tr>
</tbody>
</table>

This results in a misleading comparison whereby the cost of Victorian hospitals excluding depreciation (i.e. cash accounting) is being compared with the cost of hospitals in all other states and territories that include depreciation (i.e. accrual accounting).

The critical point is that there has never been a costing study that has included all of the 762 public hospitals in Australia and there is no comprehensive evidence that, having adjusted for the different mix of hospitals and patients in each state and territory, any jurisdiction is more efficient than another.