



APHA Information Paper Series

Productivity Commission report on Public and Private Hospitals APHA Analysis

This document provides an analysis of the data presented
in the Productivity Commission report 'Public and Private Hospitals'
Australian Private Hospitals Association ABN 82 008 623 809

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Productivity Commission – Public and Private Hospitals

1 Executive summary

- The Commission has found that on average treatment in Private Hospitals costs \$130 less than in Public Hospitals.
- The Commission's data shows that when looking at the costs that private hospitals can control they cost 32% or \$1,089 less than public hospitals.
- According to the report private hospitals have a more complex casemix than public hospitals.
- Where comparable safety and quality data exists in the report private hospitals are shown to be safer than public hospitals.
- Private hospitals offer more timely access to elective surgery, and analysis by the Commission shows that private hospitals carry out more elective surgery with patients from disadvantaged socioeconomic backgrounds than public hospitals.

2 Introduction

In May 2009, the Federal Government asked the Productivity Commission to carry out a research study into public and private hospitals. The final report produced by the Commission offers an overview of the two sectors, showing their differences, similarities, areas where they compete against each other, and areas where they complement each other. The most publicised part of the report has been the Commission's attempts to compare the two sectors on the basis of cost, but some attention has focussed on the safety and quality section.

There is inconsistency between the commentary and quantitative data in the report. In an apparent attempt to provide 'balanced' commentary the Commission has unfortunately failed to draw sufficient attention to many of the key points revealed by the data.

APHA has therefore analysed the data the Commission's report presents. This document provides a brief overview of the cost and safety and quality findings in that data.

3 Data collections

Despite all the data that private hospitals submit at their own expense to the various state and territory data collections, the Productivity Commission found that there was no straight forward way to compare

hospital and medical costs and health and safety indicators. The Commission has found that existing data collections are limited by inconsistent collection methods and missing information. For this reason, the Commission has stated that the cost data it presents is experimental. It has tried to identify shortcomings in the data and account for these in its calculations.

The difficulties the Commission faced in accessing and analysing the data strengthens APHA's call for a rationalisation of data collection. It is absurd that with all the health data that is currently being collected that simple inter-state comparisons cannot be made because each of the states collects data in different ways. This is a waste of taxpayer money and prevents analysis that could drive health outcome improvements. **A straightforward cost-saving measure that will improve health outcomes would be for one national agency to be responsible for all health data collection in Australia.** There should be a single national data collection to which all public and private hospitals provide consistent information.

4 The Commission's cost data findings

The data that the Commission used to produce its cost comparisons were drawn from the National Hospital Costs Data Collection (NHCCDC) for hospital expenditure, and from the Hospital Casemix Protocol for medical and diagnosis costs. **The Commission found that public hospitals are underreporting the cost of treatment by excluding administrative and head-office costs from their NHCCDC submissions.** For example, asset depreciation is not reported for Victorian public hospitals, building depreciation is not reported for public hospitals in Queensland. The costs associated with financial, payroll and human resource management services are also not included in public hospital costs in Queensland. Head office costs are excluded in public hospital costs from New South Wales, Victoria, South Australia, Western Australia and the ACT. The extent to which head office and administrative costs are reported in Tasmania has also started to be reduced. As a result of excluding these costs the reported public hospital costs will appear lower than the actual costs incurred, thereby making public hospitals appear more efficient and cost-effective than they actually are.

It is therefore likely that these data collections under report the cost of treatment within public hospitals in some states.

The Commission used this data to estimate the cost per casemix-adjusted separation for public and private hospitals in each state and for Australia as a whole. The cost per casemix-adjusted separation is the average cost of treating a range of different diagnoses, after controlling for differences in the complexity of required treatments (casemix adjustment).

Casemix adjusted separations were calculated by weighting the number of separations for groups of cases which had similar conditions and which used similar hospital services (known as the Diagnosis Related Group or DRG) by its relative complexity. The relative complexity of each DRG was measured by its costs – the average cost of the DRG across all relevant hospitals divided by the average cost for all DRGs.

The results of the calculations can be seen below in Table 1

Cost component	NSW		Vic		Qld		SA	
	Public	Private	Public	Private	Public	Private	Public	Private
General hospital	2511	1944	2106	2004	2683	1948	2800	1803
Pharmacy	164	42	235	87	174	45	146	53
Emergency	205	16	251	50	211	40	135	61
Medical and diagnostic	733	1497	900	1226	794	1404	621	1214
Prostheses	137	620	108	527	121	491	140	495
Capital	439	210	359	240	560	223	381	158
Total	4189	4330	3960	4133	4543	4151	4223	3783
Total excluding costs not controlled by private hospitals¹	3319	2213	2952	2380	3628	2256	3462	2074

Cost component	WA		Tas, NT & ACT		Australia	
	Public	Private	Public	Private	Public	Private
General hospital	3094	1845	3243	2236	2552	1953
Pharmacy	202	144	186	55	187	68
Emergency	147	11	238	21	208	34
Medical and diagnostic	1048	1275	725	1391	798	1346
Prostheses	155	555	141	540	131	542
Capital	359	281	447	345	426	230
Total	5006	4111	4980	4586	4302	4172
Total excluding costs not controlled by private hospitals¹	3803	2281	4114	2655	3373	2284

Table 1 Cost per casemix-adjusted separation by jurisdiction and sector, 2007-08

The cost data shows that private hospitals control their costs far better than public hospitals.

The cost data shows that on average treatment in private hospitals costs \$130 less than treatment in public hospitals per casemix-adjusted separation.

5 Private hospital costs

The Productivity Commission allocated hospital costs into six different areas. These are: general hospital, pharmacy, emergency, medical and diagnostic, prostheses and capital costs. The combined total of each of these areas is the basis of the reported cost data in the report. However due to government control on prostheses pricing, and the fact that that medical and diagnostic costs relate to fees charged by doctors, not hospitals, private hospitals only have control over the costs in four of these six cost areas.

¹ This total shows the cost of treatment per casemix-adjusted separation only for the cost components that private hospitals are responsible for. It therefore excludes prostheses and medical costs. Private hospitals do not control prostheses and medical costs. Prostheses costs are set by the Prostheses and Devices Committee. Medical costs are a matter for the patient and treating doctor to determine.

Prostheses costs

The Commission found that the lower prostheses costs in public hospitals were a result of bulk purchasing agreements by hospitals. Private hospitals have no control over the cost of prostheses used in their hospitals and are unable to enter into such bulk purchasing agreements. The prices are fixed by a government committee and the prostheses used in an operation are chosen by the treating doctor. In addition to being unable to take advantage of bulk purchasing agreements, the Commission notes that the higher cost of prostheses in the private sector is a result of a wider range of prostheses being available to patients.

Medical and diagnostic costs

Medical and diagnostic costs are incurred differently in the public and private hospitals systems. The Commission notes that in public hospitals these costs generally relate to the wages and salaries of doctors and specialists. Public hospitals are responsible for negotiating and managing these salaries. However in private hospitals, medical and diagnostic costs consist of fees charged directly to patients by doctors and those fees are outside the control of the hospital in which treatment is performed.

6 The real difference in hospital costs

APHA has determined that when looking at those costs for which private hospitals are responsible the data shows that private hospitals cost \$1,089 or 32% less than public hospitals per casemix-adjusted separation.

This is a much fairer comparison as it excludes medical and prostheses costs which are beyond the control of private hospitals. Public hospitals have lower costs as they are able to negotiate directly with manufactures of devices and do not provide patients with a choice of prostheses. Prostheses costs in private hospitals are determined by the Prostheses and Devices Committee (PDC). Private hospitals do not profit from the provision of prostheses to patients and must supply them at the cost the PDC determines. One of reasons medical costs are lower in public hospitals is because they are indirectly subsidised by the work doctors carry out in the private hospitals².

Individual DRG costs

In addition to examining the cost per casemix-adjusted study, the Commission has also analysed the cost per separation for individual DRGs. This is another area in the report where the commentary offered does not match the data produced. The Commission concludes that most DRGs had broadly similar costs in public and private hospitals. The Commission's analysis was based on allowing public hospitals a very generous 10% leeway when comparing the costs. This has meant that the Commission has

² Productivity Commission (2009) Public and Private Hospitals. Page 105 citing Australian Health Service Alliance and Australian Medical Association.

allowed the cost of the individual DRGs in a public hospital to be categorised as ‘the same’ as in private hospitals so long as they are within 90 to 110 per cent of the private hospital cost.

It is under this conservative analysis that **50% of DRGs were estimated to cost less in private than public hospitals**, and 18% of DRGs less in public hospitals than private hospitals. The remainder of the DRGs (32%) were said to cost the same in both sectors. Therefore, even by its own conservative analysis the Commission is incorrect to conclude that for most DRGs, costs were similar in public and private hospitals. Only 32% of DRGs had similar costs (i.e. within 10% of each other). The majority (50%) of DRGs cost less in private hospitals (see Figure 1).

APHA has analysed the Commission’s data and when the 10% buffer that was afforded to public hospitals is removed, **66% of DRGs cost less in private than public hospitals**, and 34% of DRGs cost less in public than private hospitals (see Figure 2).

However when looking at the cost of individual DRGs for the components for which private hospitals control (and so removing prostheses and medical costs), **APHA have calculated from the Productivity Commission data that 90% of DRGs cost less in private hospitals than public hospitals** (see Figure 3).

The cost results from the Productivity Commission and the subsequent analysis by APHA clearly show that private hospital costs are lower than public hospital costs.

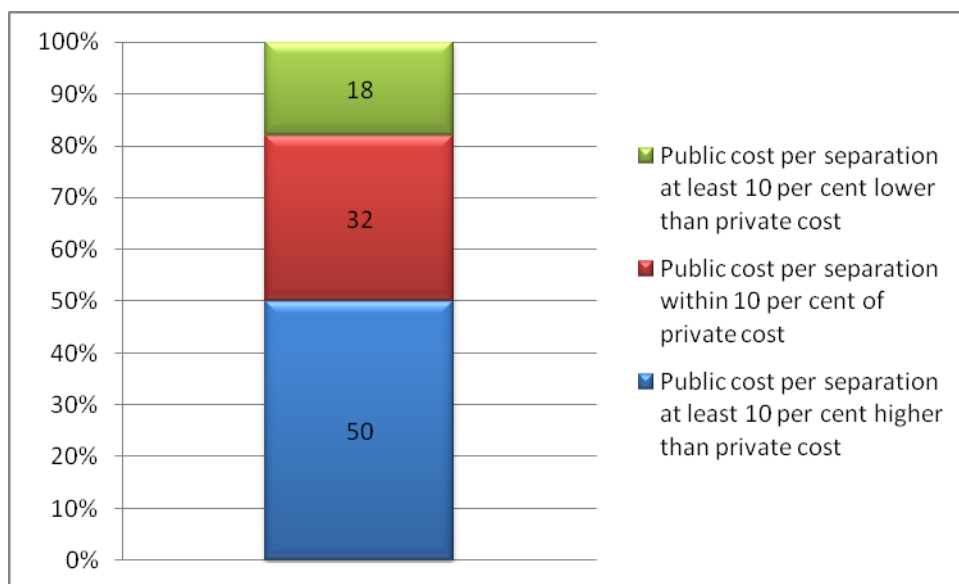


Figure 1 Percentage of DRGs lower/higher than in the private sector

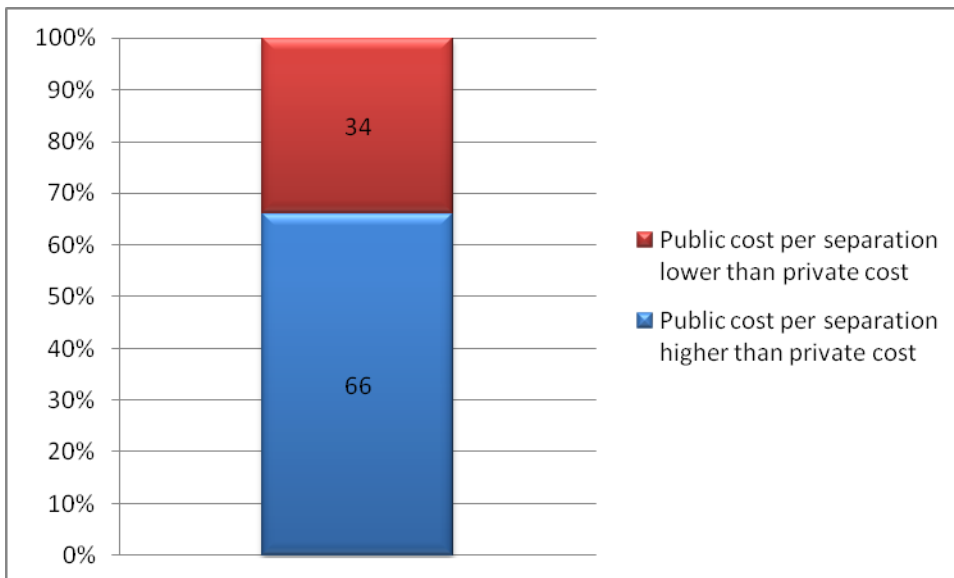


Figure 2 APHA analysis of Productivity Commission estimates - Percentage of DRGs lower/higher than in the private sector

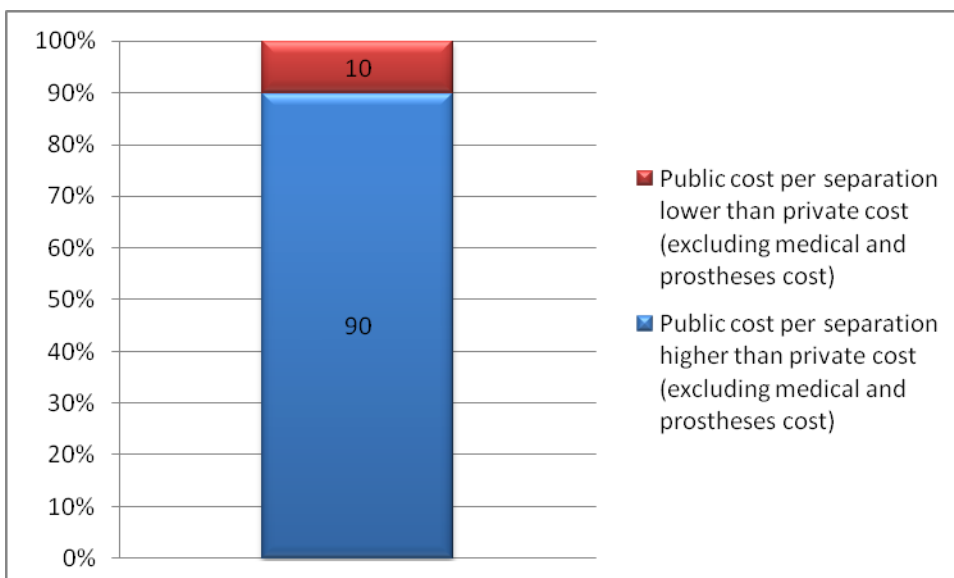


Figure 3 APHA analysis of Productivity Commission estimates - Percentage of DRGs lower/higher than in the private sector

7 Complexity

The lower costs incurred by private hospitals were, according to three state public health departments, the result of private hospitals 'specialising in relatively routine procedures, whereas public hospitals have to provide a broader range of services...'³ However the Commission's own report disproves this theory. The Commission carried out analysis using cost-weights to determine whether public hospitals have a more complex casemix than private hospitals. According to the Commission cost-weights are commonly used as an indicator of the relative complexity of a DRG. The average for all separations is 1.00. If a

³ Productivity Commission (2009) Public and Private Hospitals. Page 115 citing Queensland Health, SA Department of Health, Tasmanian Department of Health and Human Services

hospital has a cost-weight above 1.00 its casemix is more complex than average, and if it is below 1.00 its casemix is less complex than average.

The average cost weight for DRGs in public hospitals was 0.96, and in private hospitals it was 1.09. This led the Commission to conclude that ‘...**the overall casemix of public hospitals is slightly less complex than that of private hospitals.**’⁴

The Commission’s analysis demonstrates that **costs per casemix-adjusted DRG and costs per individual DRGs are lower in private hospitals**, and that private hospitals have a more complex casemix than public hospitals.

8 Safety and quality

The Commission experienced many difficulties when examining the existing data sets that relate to safety and quality within hospitals. In many cases data is either incomplete or collected in different ways in different states. Where the available data allowed analyses and comparisons between sectors private hospitals consistently outperformed public hospitals.

The Australian Council of Healthcare Standards manages the Clinical Indicator Program (CIP). The CIP contains 47 clinical indicators that measure healthcare-associated infections linked to specific procedures. Of the 47 CIP indicators of healthcare-associated infections **four were found to be significantly lower in private hospitals than public hospitals**. No indicators were found to be lower in public hospitals.

Indicator	Units	Infection rate		No. of reporting hospitals	
		Public	Private	Public	Private
Deep incisional SSI in hip prosthesis procedures	Per 100 procedures	0.99	0.63	38	96
Superficial incisional SSI in abdominal hysterectomy	Per 100 procedures	2.02	0.94	16	37
ICU-associated new MRSA healthcare-associated infections in a nonsterile site	Per 10,000 ICU overnight occupied bed days	16.70	7.18	25	23
Non ICU-associated new MRSA inpatient healthcare associated infections in a nonsterile site	Per 10,000 ICU overnight occupied bed days	2.77	1.11	68	59

Table 2 Clinical Indicator Program indicators where private hospitals outperformed public hospitals⁵

The Commission has analysed hospital mortality data to produce ‘risk adjusted mortality rates’ (RAMRs) for public and private hospitals. These mortality rates show a hospital’s actual mortality rate compared to its expected mortality rate. This means that these mortality rates take into account patient risk characteristics. RAMRs less than 1.00 show that the hospital has a lower risk adjusted mortality rate than is expected.

⁴ Productivity Commission (2009) Public and Private Hospitals. Page 116-117

⁵ Productivity Commission (2009) Public and Private Hospitals. Page 134

The results show that private hospitals risk adjusted mortality rates are less than half of those in public hospitals.

Public hospitals	Public contract hospitals ⁶	Private hospitals	All hospitals
0.632	0.540	0.305	0.550

Table 3 Risk adjusted mortality rates⁷

In the analysis of the data on safety and quality the Commission makes reference to private hospitals being more likely to treat patients that are less likely to acquire hospital-acquired infections. This supposition was based on a statement made in a submission to the Commission for which no supporting evidence was provided. There is no actual evidence to substantiate this claim. APHA brought this to the attention of the Commission after the publication of the draft report. The Commission subsequently removed this in the private hospital overview section of the report, but left this unfounded claim in the main findings of the report and within the chapter on hospital acquired infections. Unfortunately the Commission also provides no reference to any evidence that shows that private hospital patients are less susceptible to hospital-acquired infections.

9 Access to services for the socioeconomically disadvantaged

The Commission's commentary states that "elective surgery in public hospitals is more accessible for disadvantaged socioeconomic groups, but tends to be less timely than in the private sector"⁸.

Private hospitals do offer more timely access to elective surgery than public hospitals. However, the conclusion in regards to access for disadvantaged groups does not match the actual data presented in the report (see Table 4 and page 165 of the final report).

The data in the Commission's report show private hospitals carry out more elective surgery for patients from disadvantaged socioeconomic backgrounds. This disproves the commonly held misconception that public hospitals treat a 'sicker' group of patients by virtue of the socio-economic status of those patients.

⁶ Public contract hospitals are public hospitals which are operated by a private company.

⁷ Productivity Commission (2009) Public and Private Hospitals. Page 365

⁸ Productivity Commission (2009) Public and Private Hospitals. Page 30

	Public elective surgical separations	Private elective surgical separations	All elective surgical separations
Most disadvantaged	37.9	37.9	75.7
Second most disadvantaged	34.0	45.0	79.0
Middle quintile	30.6	51.0	81.6
Second most advantaged	24.9	55.7	80.6
Most advantaged	16.9	69.1	86.0
All patients	29.0	52.0	81.0

Table 4 Elective surgical separations per 1000 people⁹

10 Conclusion

The Commission's data shows that private hospitals:

- **Cost less than public hospitals per casemix-adjusted separation**
- **Have lower infection rates than public hospitals**
- **Have lower risk adjusted mortality rates than public hospitals**
- **Have a more complex case-mix than public hospitals**

The Commission's own findings show that private hospitals have a more complex case-mix, treat a greater proportion of older patients, and now carry out a greater number of surgical separations with socioeconomically disadvantaged persons than public hospitals.

Despite this private hospitals are able to offer safer and a higher quality of service than public hospitals. Both infection rates and risk-adjusted mortality rates are lower in private hospitals than public hospitals. High quality treatment though does not mean high cost. Private hospitals have been shown by the Commission to provide lower cost treatment, and to manage their own costs far better than public hospitals.

⁹ Productivity Commission (2009) Public and Private Hospitals. Page 165