Australian Government

Department of Health and Ageing

DEPARTMENT OF HEALTH AND AGEING

SUBMISSION

TO THE

PRODUCTIVITY COMMISSION

Hospital Performance Study

July 2009

Contents

1. INTRODUCTION

1. This submission by the Australian Government Department of Health and Ageing (DoHA) to the Productivity Commission's review of the performance of public and private hospitals is intended to assist by providing an overview of the differences in governance and operations of the public and private sectors.

2. This submission will (i) highlight the differences and complementarities of the public and private sectors; (ii) draw attention to various data limitations; and (iii) identify a number of developments that could enhance the scope for future public/private comparisons. This submission also provides material about issues raised in the Commission's Issues paper, which was released on 22 June 2009.

3. Australian hospitals, both public and private, differ in many ways, including ownership, funding and finance, governance, staffing, size, role and accessibility. These differences are of crucial importance when it comes to performance reporting. If comparisons are to be valid and useful, they need to be appropriate, with differences being taken into account.

4. Over recent years, Australian, state and territory governments have agreed or implemented micro-economic reform of the hospital sector. These reforms have sought to enhance the quality and efficiency of hospital services.

5. Collaborative work has included national diagnosis and procedure classification systems; national coding standards; national minimum data sets; national hospital cost studies; national performance frameworks; and national reporting. A fundamental feature of the reform is greater use of information and data to drive performance.

6. Further areas of reform are identified in the National Healthcare Agreement (NHA) and National Partnership Agreements in Hospital and Health Workforce Reform, Preventative Health and Indigenous Health agreed by the Council of Australian Governments (COAG) in November 2008. The recently agreed reforms include the introduction of activity based funding for public hospital services and improving access to sub-acute services.

7. On 25 February 2008, the Prime Minister and the Minister for Health and Ageing announced the establishment of the National Health and Hospitals Reform Commission (NHHRC) to develop a long-term health reform plan for a modern Australia. The final report of the NHHRC was released on 27 July 2009, and the Government is now considering its response to the report's recommendations.

8. The Productivity Commission's study will provide a valuable service if it clarifies the types of inter-sectoral comparisons that can and should be made, and what caveats should be considered. Historical reporting of hospital performance has focused on the public sector. It is now evident that there are expectations of a broader focus that would encompass all hospitals and provide consumers with information about all Australian hospitals that is useful, comparable and assists them in making decisions about their health care.

2. PUBLIC/PRIVATE SECTOR DIFFERENCES

2.1 Funding and governance

Public hospitals

9. Public hospitals are funded by the Australian Government and state and territory governments to provide a wide range of services in a number of different settings. The distribution and supply of these services, relative to population density, can be expensive and greater distances from metropolitan and regional centres impact on issues such as health workforce supply and accessibility. State/territory public hospital funding arrangements currently include both a population health focus and local activity based funding methodologies.

10. The current NHA, like the former Australian Health Care Agreements (AHCAs), requires states and territories to provide health and emergency services through the public hospital system. Public hospital services remain based on the following Medicare principles:

(a) eligible persons are to be given the choice to receive, free of charge as public patients, health and emergency services of a kind or kinds that are currently, or were historically provided[1] by hospitals;

(b) access to such services by public patients free of charge is to be on the basis of clinical need and within a clinically appropriate period; and

(c) arrangements are to be in place to ensure equitable access to such services for all eligible persons, regardless of their geographic location.

11. Public hospitals vary greatly in size, in their range of services, their degree of specialisation, and the extent to which they undertake teaching and research. In rural Australia, they often provide other services too, such as community and aged care. In February 2009, 51.9% of public hospitals, compared with 4.5% of private hospitals, were located outside major cities and inner regional areas (table 1).

[1] Both the NHA and the AHCAs recognise that clinical practice and technology changes over time and that this impacts on modes of service and methods of delivery.

Table 1: The geographic distribution of public and private hospitals, Australia, February 2009

		Region					Total
		Major city	Inner regional	Outer regional	Remote	Very remote	
Total public							
	Number	164	205	236	79	83	767
	Per cent	21.4	26.7	30.8	10.3	10.8	100.0
Private free-standing day facilities							
	Number	231	30	7	0	0	268
	Per cent	86.2	11.2	2.6	0.0	0.0	100.0
Other private hospitals							
	Number	201	64	18	0	0	283
	Per cent	71.0	22.6	6.4	0.0	0.0	100.0
Total private							
	Number	432	94	25	0	0	551
	Per cent	78.4	17.1	4.5	0.0	0.0	100.0

Source: Department of Health and Ageing 2009, Public and private hospital provider number lists (http://www.health.gov.au/internet/main/publishing.nsf/Content/hospitals2.htm)

12. Partnerships between the public and private sectors are emerging with some public patients receiving care free of charge in private hospitals under state/territory government contracts.

13. During the early to mid 1990s a number of private hospital operators were contracted to build and operate public hospitals or take over the running of established public hospitals in some jurisdictions. However, a number of the hospitals concerned reverted to public sector management within a few years and around half remain under private sector management.

14. Australian states and territories have undertaken independent reviews that over time have led to the centralisation or de-centralisation of management and governance. For example, in 2005, all jurisdictions other than Victoria and South Australia employed a centralised approach to public sector health services. These two jurisdictions can be contrasted against New South Wales and Western Australia in which both adopted a de-centralised approach through the creation of area health management boards. In addition, there are a small number of public hospitals that come under the auspices of denominational groups, generally Catholic religious orders.

Private hospitals

15. The private hospital sector in Australia is comprised of overnight stay hospitals and day hospital facilities. State and territory health authorities are responsible for licensing new private and day hospitals. Licensing requirements vary from one jurisdiction to another and differ for private hospitals and day hospital facilities. South Australia, Tasmania and the Northern Territory do not have specific licensing criteria for day hospital facilities but inspect new facilities and provide assurances to DoHA that the facilities are suitable for Commonwealth declaration as private hospitals.

16. The Minister for Health and Ageing (or delegate) has power to declare private hospitals (which includes day hospital facilities) for health insurance purposes, Medicare benefits and the Pharmaceutical Benefits Scheme (PBS), where applicable, under Section 121-5, subsection (6) of the *Private Health Insurance Act 2007* (the Act). Details of matters which the Minister must take into account are at Attachment A.

17. There are currently 554 private hospitals and day hospitals in Australia declared under the Act (table 2).

Table 2: Declared hospitals under the *Private Health Insurance Act 2007* as at 7 July 2009

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Private hospitals	85	79	56	21	31	7	3	1	283
Private day hospitals	89	73	50	21	25	3	9	1	271
Total	***174***	***152***	***106***	***42***	***56***	***10***	***12***	***2***	***554***

Note:
There are a number of private facilities that, while licensed by a State or Territory, do not wish to be declared under the Act. There are also several private hospitals that are part of a state or territory public hospital system and solely provide public hospital services.
Source: Department of Health and Ageing.

18. Private hospitals and day hospital facilities can be for-profit or not-for-profit. The majority of private hospitals and day hospital facilities are for-profit (e.g., Ramsay Health Care) while other facilities are historically religious/charitable and not-for-profit hospitals (table 3).

Table 3: Ownership of private hospitals, Australia, as at 7 July 2009

	Private hospitals	Private day hospitals	Total
Religious/charitable	63	5	68
Ramsay Health	57	6	63
Healthscope	41	2	43
Healthecare	11	0	11
Other	111	258	369
Total	***283***	***271***	***554***

Source: Department of Health and Ageing.

19. Revenue for private hospitals and day hospital facilities can come from a number of sources [e.g., Department of Veterans' Affairs (DVA), state/territory health authorities' contracts, self funding by patients and compensable patients], but the majority of funding is received from private health insurers for treating their members. It is therefore in the interest of facilities to negotiate comprehensive contracts with individual insurers.

20. Where there are no contracts in place, declared private hospital facilities are eligible to receive from health insurers Commonwealth determined minimum benefits for shared ward accommodation. These benefits are not meant to reflect true hospital costs, but provide basic payment for treating private health insurance members.

21. There is also a second tier benefit arrangement established under the Act which applies where a facility does not have a contract with a health insurer. The second tier arrangements provide a higher benefit than the minimum benefit (85% of average contracted charge for the type of care provided) for private hospitals and day hospital facilities which meet specific eligibility criteria. Second Tier was designed to protect high quality private hospitals and day hospitals from selective contracting by health insurers.

22. Governance arrangements for private and day hospitals vary. Private health care member organisations that own facilities may have a single board of directors and chief executive officers at individual hospitals. Some organisations may also be answerable to their shareholders (e.g., Ramsay Health Care and Healthscope). Depending on the ownership of individual hospitals, there may be a formal board of management or a committee. The majority of day hospitals are owned by an individual medical practitioner or small groups of medical practitioners.

23. Private hospital funding also differs from public hospital funding as demand for services drives the revenue received. In contrast, public hospital funding is through Commonwealth contributions and state and territory funding arrangements with some revenue also received from Medicare, the DVA, health insurance funds, and directly from patients who elect to be treated privately. As with private hospitals, the Minister for Health and Ageing (or delegate) has power to declare public hospitals for health insurance purposes, the Medicare benefits and the PBS, where applicable (Attachment A).

2.2 Different roles

Public hospitals

24. The traditional role of public hospitals has been to provide acute care (medical and surgical services not appropriate for the primary care setting, including emergency services and complex procedures), tertiary care (care that requires a higher degree of specialised care and expertise)[2], clinical training (including the training of the health workers who eventually provide services in private hospitals), and research. They also tend to be the initial providers of care involving new and expensive technologies as they develop.

25. This role has been changing over the past decade as technological advances have enabled hospitals to provide more services on a non-admitted patient basis, not only through outpatient departments but also in community settings, in patients' homes and over the phone (PC 2005b)[3]. The development of outreach services, hospital networking, tele-medicine and call-centres, have all allowed hospitals to cater to patient needs away from their own campuses. This is thought to have reduced the need for hospitalisations and the demand on emergency departments (Gruen 2004, p. 61).

26. There have also been improvements to discharge planning and information sharing [e.g., between hospitals and general practitioners (GPs)], and these developments have naturally affected the way hospitals relate to population health issues and other health care providers (see also section 3.1 below). In terms of cancer treatments, for example, hospitals now routinely provide services on an admitted and non-admitted basis (including in community settings and in patients' homes). Moreover, they take an active role in terms of the early detection and management, professional development, mentoring, clinical trials and support for patients and their families.

[2] For example, specialised centres of excellence have been established in most jurisdictions to deal with trauma, burns and transplants.

[3] The development of new surgical techniques, new equipment and devices, improved anaesthetics and new pharmaceuticals have affected the length of stay for admitted patient episodes, the location and setting of services.

27. Public hospitals must respond in a clinically appropriate way to unplanned demand for hospital services. In 2007-08, emergency admissions accounted for 41.6% of total public sector admissions, but only 5.7% of total private sector admissions.

28. In terms of non-admitted patient services, public hospitals account for the vast majority of unplanned services provided by emergency departments (EDs), and the vast majority of planned services provided by outpatient departments (table 4).

29. Public hospitals also traditionally act as a 'safety net' in the health system, providing care that other settings may not supply due to cost, support constraints, expertise or technology requirements.

30. Public hospitals are primarily responsible for clinical education and research within the Australian hospital system. Both state and Commonwealth governments provide funding support to public hospitals to improve their capacity to undertake quality work into the causes, diagnosis and prevention of disease. Some principal referral and specialist hospitals operate as 'centres of excellence' conducting clinical trials of treatments and drugs.

31. Public hospitals play a vital role in all health professional training programs by providing clinical placements and supervision. For medical education, on completion of university under-graduate or graduate education programs, graduates enter pre-vocational training year one at a major public teaching hospital to become registered to practise. Most registered doctors then also complete another one to two years pre-vocational training, gaining experience in different clinical departments and in different hospital settings such as in rural hospitals. Most doctors then enter a four to six year vocational training toward becoming independent practitioners accredited by speciality colleges. For most specialties (other than general practice), this vocational training takes place largely in public hospital settings (PC 2005a, p. 70).

32. COAG announced (joint) Commonwealth and state/territory four year funding of $1.091 billion in November 2008 for the provision of clinical placement subsidies for medical, nursing, dental and allied health profession students pursuing pre-professional registration training. A key objective of this funding is to create incentives for the provision of new clinical placements in non-traditional settings outside of public hospitals. A new statutory authority, Health Workforce Australia, is being established to oversee the brokering of these placements, with the guiding principle that funding should follow the student to the location where clinical training is received.

Private hospitals

33. Private hospitals also provide a wide range of services. For example, some large acute private hospitals provide patient services comparable to equivalent public hospitals. There are also specialist hospitals providing specialist services such as psychiatric treatment and rehabilitation. Day hospital facilities provide a range of surgical/medical services, but generally tend to specialise in discreet areas such as ophthalmology, chemotherapy and gastro-intestinal endoscopy. The private sector is largely located in major urban and regional centres.

34. Private hospitals may focus on clinical fields where they have contractual arrangements with relevant specialists. The private sector differs from the public hospital system in that the bulk of its services are provided through planned admissions.

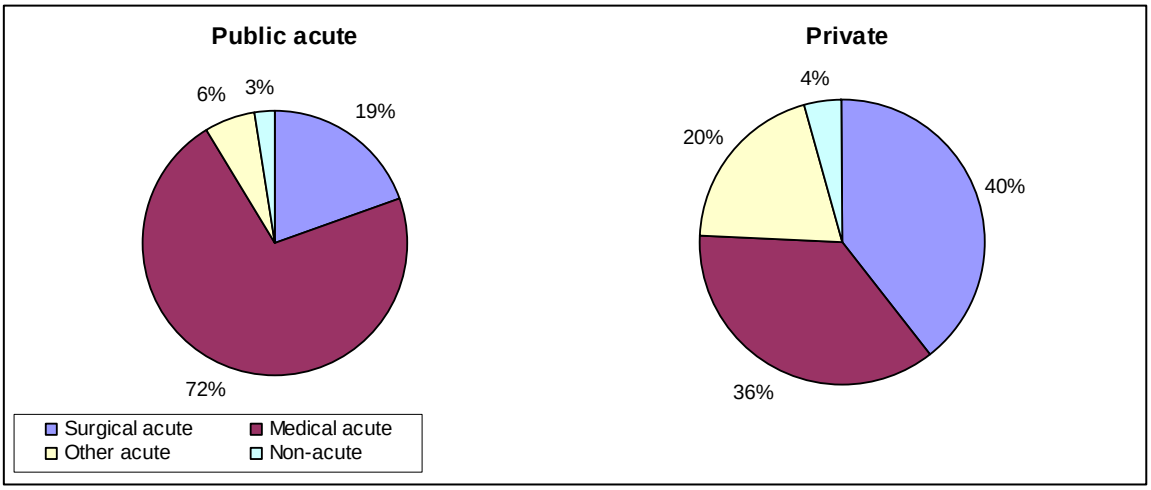
35. About 23 private hospitals have EDs. Most private and day hospitals do not provide the range of traditional outpatient services seen in the public hospital system. Post-admission consultations, if

required, are often undertaken in the treating doctors' rooms. These differences are particularly relevant when it comes to determining a basis for identifying different public/private hospital peer groups (see section 4.4 below).

2.3 Different activities and patient casemix

36. The mix of admitted patient separations and days differs markedly between the two sectors. For example, in 2007-08 procedural episodes [i.e., those assigned to a 'surgical acute' or 'other acute' Diagnosis Related Groups (DRGs)] accounted for 60% of separations and 46% of days in the private sector, but only 25% of separations and 25% of days in the public sector (figs 1 & 2). At the same time, while the private sector accounted for around 57% of all elective admissions, the public sector accounted for around 92% of all emergency admissions (table 4 & fig. 3).

Fig. 1: Percentage distribution of acute and non-acute SEPARATIONS, public acute and private hospitals, Australia, 2007-08

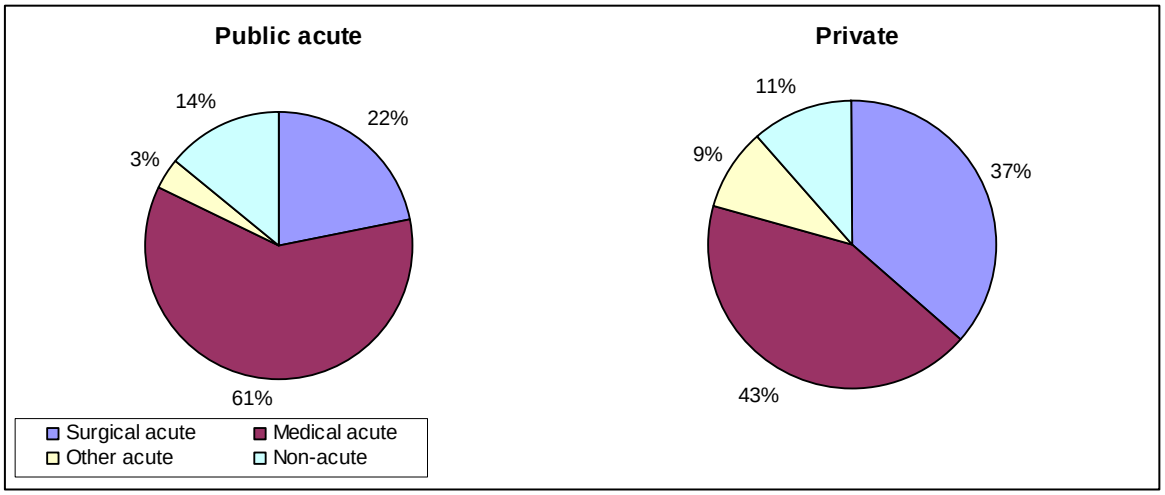


Note:

1. 'Acute' = care types of 'acute', 'newborn with qualified patient days', and 'not reported'. 'Non-acute' = all other care types (i.e., 'rehabilitation', 'palliative', 'psycho-geriatric', 'geriatric evaluation and management', 'maintenance', 'newborn with unqualified patient days' and 'other').

Source: AIHW, *Australian hospital statistics 2007-08*, pp. 19, 286-7.

Fig. 2 Percentage distribution of acute and non-acute PATIENT DAYS, public acute and private hospitals, Australia, 2007-08



Note:

1. 'Acute' = care types of 'acute', 'newborn with qualified patient days', and 'not reported'. 'Non-acute' = all other care types (i.e., 'rehabilitation', 'palliative', 'psycho-geriatric', 'geriatric evaluation and management', 'maintenance', 'newborn with unqualified patient days' and 'other').

Source: AIHW, *Australian hospital statistics 2007-08*, pp. 20, 286-7.

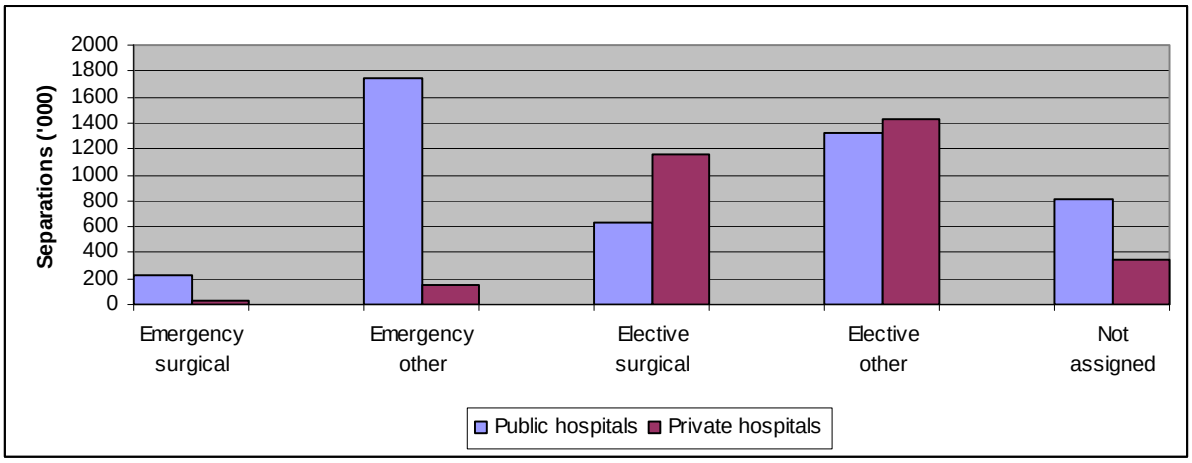
Table 4: Private sector share (%) of hospital beds and activity, Australia, 2006-07 and 2007-08

	2006-07	2007-08
Resources		
Beds [1]	32.4	33.0
Total admitted patient activity [2]		
Separations	38.7	39.7
Same-day separations	45.0	46.6
Patient days	30.0	30.4
Acute care admitted patient activity: elective/emergency separations [3]		
All emergency	9.6	8.3
Emergency surgery	16.1	13.3
Emergency 'other' (i.e., medical & other acute)	8.7	7.6
All elective	55.9	56.9
Elective surgery	63.1	64.5
Elective 'other' (i.e., medical & other acute)	51.2	52.0
Acute care admitted patient activity: separations by DRG-type [4]		
Surgical	56.2	57.3
Medical	24.3	25.0
Other acute	66.7	68.5
Total non-admitted patient activity		
Total occasions of services [5]	3.6	n.a.
Accident & Emergency (A&E) presentations [6]	6.3	n.a.

Sources and notes:

1. AIHW, *Australian hospital statistics 2007-08*, p. 13; *2006-07*, p. 18. Public psychiatric hospitals are included. For 2007-08, the private hospital data are preliminary.
2. AIHW, *Australian hospital statistics 2007-08*, p. 19-20; *2006-07*, pp. 22-3. Includes public psychiatric hospitals. The AIHW's hospital morbidity database has near complete coverage of the public sector, but only around 97% coverage of the private sector. Consequently, it is likely that this table slightly underestimates the private sector share.
3. AIHW, *Australian hospitals statistics 2007-08*, pp. 182-3; *2006-07*, p. 168. Not all episodes are given urgency of admissions status. For example, urgency admission is not assigned for vaginal deliveries or statistical admissions.
4. AIHW *Australian hospital statistics 2007-08*, pp. 286-7; *2006-07*, pp. 272-73. Acute episodes (including newborns with 'qualified' days) can be defined in terms of three DRG types: medical, surgical and other acute. Surgical episodes differ from medical and other acute episodes in that they involve procedures that would usually require the use of an operating room. 'Other acute' episodes fall between the surgical and medical partitions in the DRG classification system, and include non-operating room procedures such as dental extractions and colonoscopies. Medical episodes differ from surgical and other acute episodes in that they do not include procedures in their DRG definition.
5. AIHW, *Australian hospital statistics 2007-08*, p. 24; *2006-07*, pp. 25-6. Includes public psychiatric hospitals and both A&E and outpatient occasions of service.
6. AIHW, *Australian hospital statistics* 2007-08, p. 24; *2006-07*, p. 25. Excludes public psychiatric hospitals.

Fig. 3 Number of surgical acute and other (i.e., medical and 'other') acute separations by urgency of admission and hospital type, Australia, 2007-08



Notes:

1. For this figure, 'other' has been defined as DRGs in the medical and other partitions of the DRG classification.
2. Not all episodes are assigned an urgency category of 'emergency' or 'elective'. The urgency category 'not assigned' is used for (i) admissions for normal delivery (obstetric); (ii) admissions that begin with the birth of the patient or, when it was intended that the birth occur in the hospital, commence shortly after the birth of the patient; (iii) statistical admissions that involve a patient being transferred from one care type, say 'acute care', to a different care type, say 'rehabilitation', during a hospital stay; and (iv) planned re-admissions for the patient to receive limited care or treatment for a current condition, for example dialysis or chemotherapy.

Source: AIHW, *Australian hospital statistics 2007-08*, pp. 182-3.

2.4 The blurring of boundaries

37. Boundaries between public hospital and private hospitals and the services provided within each sector are becoming increasingly blurred. Examples include:

- public hospitals provide services to private patients, while private hospitals provide services to public patients;
- admitted patient care can occur in hospital wards with beds; in rooms with specially-designed chairs (e.g., for chemotherapy and renal dialysis); in EDs (e.g., when 'access block' or something else requires a patient to be kept on a trolley for a number of hours); or in patients' homes (through hospital-in-the-home arrangements);
- the planned or scheduled care provided by public hospital outpatient departments can occur on hospital campuses, in community settings, or in patients' homes;
- emergency care is provided by public hospitals and also by some private hospitals;
- the education and training of health care professionals is now occurring in some private facilities.

38. Recent reforms to private health insurance have reduced the need for insured patients to be admitted in order to receive benefits from their fund. Under the *Private Health Insurance Act 2007* (the Act), health insurers can expand their products to cover a broader range of health services provided outside the hospital setting. The aim is to prevent illness and hospitalisation, where possible,

and reduce private health insurance costs, while providing consumers with greater choice in clinically appropriate treatment settings. Examples are programs that prevent and manage chronic disease and treatments that can be safely provided in patients' homes, which could include chemotherapy and dialysis.[4]

[4] Prior to the introduction of the Act, patients had to be admitted into hospital in order to claim benefits through their *private hospital cover*. Under the Act, private health insurers are able to offer cover for certain hospital treatment services provided outside of the hospital setting.

Hospital Treatment Cover is defined under section 121-5 of the Act as treatment that is intended to manage a disease, injury or condition that is provided by, managed by, or arranged with the direct involvement of a hospital.

Private health insurers can pay benefits for hospital treatment deemed necessary by the hospital and delivered in a range of settings, for example hospital, home, aged care facility or community facility. The key factor is that the hospital is the provider responsible for the delivery or arrangement of the treatment, rather than the requirement for the treatment to be provided on hospital grounds. This legislative provision is intended to enable more flexible and innovative delivery of hospital treatment services.

There are no minimum benefits payable for hospital treatment provided or arranged for a patient outside the hospital setting. Before benefits are payable for hospital treatment provided outside the hospital, arrangements need to be agreed between the hospital and relevant insurer. There is no legislative requirement for hospital service providers and insurers to enter into these arrangements. However, the policy intent of the legislation is to provide scope for innovative service delivery arrangements to be established, without restrictive parameters or limitations being set by the legislation.

3. HOSPITAL EFFICIENCY

3.1 The need to consider allocative efficiency

39. The Commission is to compare the efficiency and effectiveness of the public and private hospital sectors, and has indicated that it intends to focus on productive efficiency.

40. The Commission's issues paper notes that allocative efficiency is 'determined by factors such as how governments allocate resources across the health sector and the balance between public and private financing of health care', and then contends that 'these issues are largely beyond the study's terms of reference' (p. 7).

41. DOHA would suggest that, when it comes to hospitals, allocative efficiency could be taken to also include:

- the distribution of services between the admitted and non-admitted patient environments;
- the substitution of admitted patient care - e.g., pre-admission clinics, ambulatory surgery, the transfer of previously admitted services such as chemotherapy to outpatient departments, and hospital-in-the-home arrangements;
- the use of outreach services and call-centres to reduce the need for admitted patient care; and
- the development of hospital networks, including 'hub-and-spoke' arrangements and tele-medicine, to facilitate patient transfers and the optimal use of available resources.

42. Productive and allocative efficiency are often inter-dependent, with allocative efficiencies allowing productive efficiencies to produce their maximum benefit. This can account for some of the perceived differences in efficiency between public and private hospitals.

43. Private hospitals and day hospital facilities provide mainly *planned* admitted patient care. This means that these hospitals and facilities allocate appropriate resources to suit the mix of their patients.

44. Private day hospital facilities by their very nature must have processes in place to ensure that patients can be treated effectively and safely on a same-day basis.

45. Some private hospitals have hospital-in-the-home arrangements thus reducing unnecessary stays in the facility. It is a condition for the Commonwealth declaration of private facilities that private hospitals and day hospital facilities provide appropriate services to treat patients in a situation of emergency, or have arrangements in place for transfer of patients to a hospital where emergency services are available.

46. Health insurers, as the major funders of the private hospital sector, may also require facilities to have in place arrangements that ensure services are delivered as effectively and efficiently as possible for their members.

3.2 Measuring and comparing productive efficiency

47. Productive efficiency, if measured in terms other than cost efficiency, could be studied through looking at the average length of stay (ALOS) for selected Adjacent Diagnosis Related Groups (ADRGs)[5] broken down by patient clinical complexity levels (PCCLs).[6] The table at Attachment E indicates the sort of analysis that may be useful.

48. However, total ALOS can be misleading if it is not adjusted for patient clinical complexity. Using I03 *Hip revision or replacement* as an example:

- total ALOS was 9.6 days in the public sector compared with 8.4 days in the private sector, yet public sector ALOS was lower for every PCCL; and

- the shorter total ALOS recorded by the private sector may be attributed to 71.5% of cases treated in private hospitals having no or only minor complications and co-morbidities (CCs) compared with 45.9% in public hospitals (Attachment E).

[5] ADRGs consist of one or more DRGs generally defined by the same diagnosis or procedure code list. DRGs within ADRGs have different levels of resource consumption and are partitioned on the basis of several factors, including complicating diagnoses/procedures, age, and or patient clinical complexity level.

[6] The Australian Refined Diagnosis Related Groups (AR-DRG) classification is able to take account of *multiple* illnesses experienced by *individual* admitted patients:

Complications and co-morbidities (CCs) are additional diagnoses that are likely to result in significantly greater resource consumption.

Complication and co-morbidity levels (CCLs) are severity weights given to ALL additional diagnoses. They were developed through a combination of medical judgement and statistical analysis and range in value from 0 to 4 for surgical and neonate episodes, and from 0 to 3 for medical episodes. A CCL value of 0 means the code is not a CC; or the code forms part of the definition for the Adjacent DRG; or the code is a CC, but is closely related to the principal diagnosis; or exactly the same code appears elsewhere on the record. Only CCs attract CCL values greater than zero. A CCL value of 1 = minor CC; 2 = moderate CC; 3 = severe CC; and 4 = catastrophic CC.

Patient clinical complexity level (PCCL) is a measure of the cumulative effect of a patient's CCs, and is calculated for each episode. The calculation is complex and has been designed to prevent similar conditions from being counted more than once. A PCCL value of 0 = no CC; 1 = minor CC; 2 = moderate; 3 = severe CC; and 4 = catastrophic CC. To attract a PCCL of 4, an episode must have at least two CCs regardless of whether it is assigned to a surgical, medical acute or other acute DRG.

4. RESPONSES TO QUESTIONS RAISED IN THE ISSUES PAPER

4.1 Cost indicators

Are there cost measures other than the two proposed by the Commission that you would like to be reported? If so, what are those measures and what are their strengths and weaknesses? (p.10)

49. The Commission is to report comparative hospital and medical costs for clinically similar procedures performed by public and private hospitals. The issues paper indicates that it proposes to use the following measures:

- average cost per separation, when comparing costs associated with clinically similar procedures

- average cost per casemix-adjusted separation, when aggregating across different types of treatment/diagnosis for a broader comparison of costs.

50. The issues paper identifies a number of difficulties when it comes to using available data to compare public and private sector hospital costs and DOHA agrees with this position.

4.2 Clinically similar procedures

Is the proposed approach to selecting clinically similar procedures appropriate for comparing costs between public and private hospitals? What, if any, other factors should be considered when compiling a list of procedures for such a comparison? Are the 20 AR-DRGs selected by the AIHW to compare average length of stay appropriate for the comparison of costs? What alternative procedures should be included, and what are the reasons for this? (p.11)

51. The AR-DRG classification system is comprised of a manageable number of diagnosis-based classes that are differentiated on the basis of clinical content and resource consumption. DRGs provide a 'currency' that can be used for funding, budgeting and charging. They also provide a means for monitoring activity and reporting performance.

52. DRGs are used for the grouping and costing of admitted patient episodes that may or may not include one or more procedures. It is customary to distinguish between three DRG-types: surgical, medical acute, and other acute:

- surgical episodes differ from medical and other acute episodes in that they involve procedures that would usually require the use of an operating room;

- medical acute episodes differ from surgical and other acute episodes in that they do not include procedures in their DRG definition;

- 'other acute' episodes fall between the surgical and medical partitions in the DRG classification system, and include non-operating room procedures such as dental extractions and colonoscopies.

53. DRGs relate to episodes rather than procedures, but provide the best means of examining resource homogenous admitted patient activity.

54. The Commission proposes to use DRGs as a basis for comparing clinically similar procedures, and seeks views on a list provided by the Australian Institute of Health and Welfare (AIHW).

55. DOHA notes that the list of 20 DRGs in the issues paper does not include any 'other acute' DRGs (which are easy to identify in that the middle digits of their codes consist of numbers ranging from 40 to 59). Second, only 11 of 23 Major Diagnostic Categories (MDCs) are represented. That is, the list contains no DRGs from any of the following MDCs:

- diseases and disorders of the nervous system;
- diseases and disorders of the eye;
- diseases and disorders of the ear, nose, mouth and throat;
- diseases and disorders of the skin, subcutaneous tissue and breast;
- endocrine, nutritional and metabolic diseases and disorders;
- newborns and other neonates;
- diseases and disorders of the blood and blood forming organs and immunological disorders;
- infectious and parasitic diseases;
- alcohol/drug use and alcohol/drug induced organic mental disorders;
- injuries, poisoning and toxic effects of drugs;
- burns; and
- factors influencing health status and other contacts with health services.

56. While the list in the issues paper is restricted to DRGs without CCs, it may be more useful to take a broader perspective and consider the effect of CCs on length of stay and patient throughput.

57. DRGs are appropriate when comparisons are made on the basis of cost, but ADRGs may be more appropriate when comparisons are made on the basis of length of stay. ADRGs can be disaggregated by PCCLs, as indicated by the public/private sector lists at Attachment E.

58. However, examining a range of DRGs with significant numbers of patient separations annually may be a useful means of comparison.

4.3 Data sources

What, if any views, do you have about the Commission's proposed use of NHCDC and HCP data to compare hospital and medical costs for clinically similar procedures performed by public and private hospitals? Where you identify problems, what suggestions do you have to address them? (p.14)

National Hospital Cost Data Collection (NHCDC)

59. The draft Round 12 (2007-08) NHCDC results include 89% of acute public hospital separations, 72% of acute private hospital separations, and 46% of acute same day private hospital separations. Round 12 results are due for release in late August 2009. This collection includes what is considered a representative sample of the hospital sector and it is important to note that the NHCDC is a voluntary collection and this may pose a challenge to any analysis of its results.

60. In essence it makes it difficult to compare cost data over time, between and within jurisdictions and between the public and private sectors. This is due to the differences in scope and costing methodologies within jurisdictions as well as between the public and private collections. In addition, there are differences in the type of patient casemix treated in public and private hospitals.

61. The current NHCDC allows jurisdictions and participating private hospitals to provide their data without auditing or reconciliation controls. This has resulted in obvious differences such as the

handling of depreciation, but there are potentially many others that are not identifiable. For example, DoHA is aware that some costs are not included in the collection, which in effect reduces an average cost.

62. Another aspect to be considered is the impact of the different costing methods between hospitals and sectors, and the resulting effect of this on the splits between the various cost buckets. Approximately 75% of public sector cost data is patient costed data which attributes costs directly to patients as they occur. The cost modelled approach used by most private hospitals requires the extraction of a hospital's general ledger expenses and patient activity data. This follows with a modelling process to allocate the costs to patients which rely on service weights (or relativities) to disperse their costs between the different types of patients.

63. There are also understandable differences between the two sectors. Private hospitals do not pay for medical, pharmacy, imaging or pathology, as these services are paid for via the Medicare Benefits Schedule (MBS) and PBS. For example, in the private sector, the medical costs are billed to the patient and therefore not included in the private sector costs, while other components, such as supplies, will be included. The public system is implied to be a full cost attribution of costs, which does not consider offset from revenue.

Hospital Casemix Protocol (HCP) data collection

64. While the NHCDC is concerned with costs of services, HCP data provides de-identified patient demographic, clinical and financial information for all privately insured patient services. HCP is collected under the *Private Health Insurance Act 2007* by health insurers, who then provide data to the Commonwealth.

65. The HCP reports a range of financial information including charges, benefits paid by insurers and any rebate paid by the Commonwealth (e.g., MBS in the case of the medical services). This information is provided to the insurer through the patient claiming process and may not represent the true cost of that care. Further, the advent of bundled charges in the industry may also affect the use of this data in any analysis of data (or costs). The bundling of charges relates to agreements between hospitals and insurers that specific charges will be bundled for payments.

66. The issues paper comments on the quality of the HCP. Over the last two years, the Commonwealth has been working directly with insurers to improve the quality, completeness and timeliness of this collection. This has been achieved through improvements to error rate tolerances and the provision of direct feedback to insurers on their performance (in collection terms) against their industry. This work continues.

4.4 Proposed disaggregation

What views do you have regarding the Commission's proposed disaggregations by jurisdiction, region and peer group? What, if any, alternative disaggregations do you recommend and what are their strengths and weaknesses? (p.16)

67. The issues paper raises the possibility of delineating public and private hospitals on the basis of the number of separations. That is, it proposes the following peer groups:

Acute hospitals:		
Very large	-	*20,001 + separations per year*
Large	-	*10,001 to 20,000 separations per year*
Medium	-	*5,001 to 10,000 separations per year*
Small	-	*2,001 to 5,000 separations per year*
Very small	-	*Up to 2,000 separations per year*
Other hospitals:		
Psychiatric	-	*Psychiatric*
Other	-	*Other ungrouped hospitals, including prison*

68. These groups are not based on casemix-adjusted activity and therefore do not recognise the range of services being provided or the types of patients being treated in the hospital. It is known that some hospitals specialise and provide a very limited range of services covered by a small number of DRGs, while others provide a wide range of services relating to hundreds of DRGs. The 'weighting' of separations is also a strong indicator of the resources required to care for patients.

69. However for the purposes of this review, it is important to note that existing variation in hospital structures means there will be differences between private day hospitals, public and private acute hospitals, and public and private psychiatric hospitals that may be of interest to the Commission's study. Private day hospital facilities could be identified as a separate peer group, given that they generally restrict their services to planned care during daytime hours. Also, public and private psychiatric hospitals are known to be very different in terms of patient profiles (e.g., the mix of patients and length of stay).

70. The table at Attachment D is intended to highlight some of the difficulties when considering what appear to be similar hospitals. It provides some data for two large public hospitals.[7] These profiles reveal how, over a recent 12 month period, the two hospitals provided a similar number of admitted patient services and a similar number of non-admitted patient services. However, they also highlight major differences between the two hospitals:

- 86% of total inpatient episodes provided by B were admitted from elective surgery waiting lists, compared with 8% for A;
- whereas the leading 5 ADRGs accounted for 66% of admitted patient episodes in B, they only represented 21% in A;
- there were 185 beds in A, compared with 55 in B;
- the two hospitals employed practically the same number of salaried medical officers, yet A had more than twice as many nurses as B;

[7] Defined on the basis of the PC's proposed definition of 10,001 to 20,000 separations per year.

- B provided more than twice as many emergency department services than A (Attachment D).

71. The existing national standard for public hospital peer groups specifically takes a range of factors into account to allow for this variation. The current classification, while limited to the acute setting, is in use in other settings including emergency departments. Work undertaken to date in relation to implementing national activity based funding has led to the Department, in collaboration with the AIHW, coordinating a 'Peer Group Review Project' aimed at reviewing and defining existing AIHW peer groups for public and private hospitals; and assessing the feasibility of developing new peer groups for other types of services. It is intended that this project will be completed in 2010.

4.5 Taxes and the cost of capital

What, if any, suggestions do you have to take account of differences between hospitals in the fringe benefits and payroll tax regimes they face? What alternative approaches could be used and what are the strengths and weaknesses of these approaches? (p.16)
What, if any, comments do you have about the proposed approaches to dealing with the cost of capital? What alternative approaches could be used, and what are the strengths and weaknesses of those approaches? (p. 17)

72. DoHA does not have any comment on the differences in taxation regimes. With regard to the NHCDC, fringe benefits tax is reported under the 'oncost' bucket, while payroll tax has been determined as being out-of-scope.

73. The NHCDC identifies two types of capital costs - 'capital related costs' and 'capital related assets'. These costs can be reported as 'direct' or 'overhead'. While direct cost centre items relate directly to patient care, overhead cost centre items are incidental (i.e., they do not have a direct relationship to a specific episode of patient care).

74. For NHCDC purposes, the Hospital Reference Manual (HRM) says 'capital related costs' are (i) costs of items available for use in the production period to be costed which: are durable (and therefore relate to the site, buildings, plant, or equipment); are able to support production for an appreciable period of time; and are purchased outright (capital assets) or leased or rented and cost over $5,000; and (ii) interest and leasing costs incurred to acquire the previously mentioned items.

75. Whether the capital costs are treated as direct or overhead is dependent on the accounting practices – i.e., some hospitals attribute costs directly to cost centres and some attribute all such costs to an overhead cost centre such as maintenance, which impacts on where the cost ends up in the costing process. Unfortunately the handling of capital costs cannot be determined from the data held by DoHA – i.e., it would be necessary to examine each hospital's general ledger.

76. The HRM, which provides guidelines on how to report cost data, defines 'capital related assets' as assets owned by the hospital. The HRM states that all depreciation related to 'capital related assets' should be posted to the 'depreciation' bucket irrespective of cost centre. However, some jurisdictions do not report these costs.

77. In summary, even though 'capital related costs' and depreciation are reported in the NHCDC, the methodology means that the data are not sufficiently transparent to enable the separate identification of these costs.

Other capital expenditure data

78. In 2006, DoHA produced and circulated recurrent expenditure guidelines and depreciation guidelines to assist jurisdictions calculate depreciation for figures in the template *Report on recurrent expenditure under the Australian Health Care Agreements*. These guidelines refer to accounting standards AASB 116 *Property, Plant and Equipment* and AASB 138 *Intangible Assets* and contain instruction about calculating the value of assets (including useful life, expensing limits, revaluation of assets).

4.6 Rate of hospital-acquired infections

What hospital-acquired infections should the study compare between public and private hospitals? Why have you nominated those infections, and are there likely to be any limitations on the availability of accurate and comparable data? What, if any, views do you have about using data from the ACHS Clinical Indicator Program to analyse rates of hospital-acquired infections? What suggestions do you have to address any concerns you may have?
What, if any, other data sources do you recommend to compare the rate of hospital acquired infections between the public and private hospital systems? What are their strengths and weaknesses? (pp. 18-9)

79. Approximately 6% of all patients who are treated in Australian hospitals acquire an infection during their hospital stay (Spelman 2002, p. 286). The Commission's issues paper, identifies the infections that are known to be the most common.

80. The Australian Commission for Safety and Quality in Health Care (ACSQHC) has estimated that there are about 200,000 healthcare-associated infections in Australia each year, and that these are directly responsible for an additional two million patient days in the public and private sectors (Cruickshank 2008).

81. Sound comparisons between the public and private sectors on the basis of hospital-acquired infections is necessary with a clear need to set benchmarks and identify best practice. One of the performance benchmarks adopted under the NHA is that the rate of staphylococcus aureus (including MRSA) bacteraemia be no more than 2.0 per 10,000 occupied bed days for acute care public hospitals by 2011-12 in each state and territory.

82. At the national level, this reporting is supported through use of the 'condition-onset' flag from July 2008, which identifies the source of hospital infections and allows infections acquired in the treating hospital to be distinguished from infections acquired elsewhere. 'Condition-onset' data are currently only available at the state level (e.g., Victoria).

4.7 Other relevant indicators

What, if any, views do you have on the suitability of the Commission's other proposed indicators for comparing public and private hospitals? Where you identify potential weaknesses, please provide supporting evidence if possible, and suggest alternative approaches.
Are there any of the other indicators that should not be reported? If not, please explain your reasoning.
Are there any data sources that might assist with reporting these indicators? (p.22)

83. The issues paper canvasses the following wide range of indicators:

Quality and patient safety:
- *Hospital-acquired infections*
- *Unplanned readmissions and returns*
- *Selected adverse events*
- *Accreditation*

Efficiency:
- *Average cost for selected individual DRGs*
- *Average cost per casemix-adjusted separation for all DRGs collectively*
- *Relative stay index*

Responsiveness:
- *Informed financial consent*
- *Patient satisfaction*

Access:
- *Waiting times for elective surgery, public hospitals*
- *Emergency department waiting times, public hospitals*
- *Access to ICU/HDU beds*

Workforce characteristics:
- *Age distribution*
- *Occupational mix of the hospital workforce*
- *Productivity*

84. This list includes some new indicators, some established nationally agreed indicators that have previously been reported at the national level and some where indicator development work may be currently underway.

Australian Healthcare Agreements (AHCAs) and National Healthcare Agreement (NHA)

85. National minimum data sets (NMDSs) have been collected annually by DoHA and the AIHW, and performance information has been reported in *Australian hospital statistics* and *The state of our public hospitals report*.

86. Performance indicators were developed and implemented throughout the life of the AHCAs (see Attachment B). Data for 2007-08 were reported in recent 2009 reports (AIHW 2009; DoHA 2009). Data for 2008-09 under the extension of the AHCAs will be reported in 2010.

87. Under the NHA, the Commonwealth and states and territories have committed to on-going performance reporting, and working collaboratively to improve performance reporting to enhance public accountability. The focus is on the achievement of results, efficient service delivery and timely provision of publicly available performance information.

88. The National Health Information Standards and Statistics Committee (NHISSC) is currently developing methodology for all NHA performance indicators.

89. NHISSC is playing a central role in terms of developing current and future data standards. NHISSC reports to the National E-Health and Information Principal Committee (NEHIPC) and through it to the Australian Health Ministers' Advisory Council (AHMAC).

National Health Performance Framework

90. The National Health Performance Framework at Attachment C was developed by the former National Health Performance Committee (NHPC) and endorsed by the Australian Health Ministers' Conference (AHMC) in 2001.

4.8 Multivariate analysis

What, if any, views do you have on the proposed use of multivariate techniques to compare public and private hospitals? What other factors should the study use to adjust for differences between hospital structures that can influence relative hospital efficiency? Where you identify potential weaknesses, please provide supporting evidence if possible, and suggest alternative approaches. (p. 26).

91. The issues paper canvasses two well-known multivariate analysis techniques for the estimation of efficiency: Data Envelopment Analysis (DEA) and Stochastic Frontier Analysis (SFA).

Data Envelopment Analysis (DEA)

92. DEA is a deterministic non parametric test that compares hospitals with each other, giving efficiency or inefficiency ranking based on comparison against the best hospital/s in the group. DEA uses linear programming to construct a piece-wise linear-segmented efficiency frontier.

93. Selection of the relative inputs and outputs in DEA may be complicated. As a general rule, specifying as many inputs and outputs as possible introduces more realism into the analysis and makes the analysis richer by allowing for substitutability among inputs and outputs (Bates 2006, p. 505).

94. A potential problem with the DEA technique is that it is relative. If all the hospitals in the study group are performing badly they could still appear to be quite efficient as they are being tested in relation to each other (Wang 2006, p. 2). DEA does not measure outcomes of the health system, but only outputs (e.g., the number of separations per day, as opposed to number of patients who experience an actual positive improvement to their health due to the health system's actions).

Stochastic Frontier Analysis (SFA)

95. SFA involves estimating a cost function that includes two error terms – one reflecting random shocks to a hospital's costs and the other to measure systematic deviation from best practice. The cost inefficiency score is the non-random residual and can be interpreted as the percentage difference between a given hospital's actual costs and the frontier (best-practice) cost level in that year (Zuckerman 1994, p. 256). Like DEA, SFA is sensitive to the input/output data chosen for analysis.

96. While SFA can be robust (Worthington 2004, pp. 153-8; Jacobs 2001, pp. 103-15), some inconsistencies exist. SFA may be less accurate in determining efficiency in small sample size studies, which may raise questions about whether the number of hospitals in certain peer groups is enough to enable its application at this level.

Caveats

97. The SFA and DEA techniques could be good indicators of efficiency of public hospital services in regards to expenditure. Yet it is important to remember that a focus on efficiency may reduce cost

per patient but may not necessarily improve the quality of the outcome. Furthermore, hospital efficiency should not be viewed in isolation from the role hospitals play in the community.

Support

98. DoHA supports the use of both DEA and SFA to analyse efficiency, and suggests the Commission use both techniques to compare multiple sets of input to output ratios. Clearly, care will need to be taken when drawing conclusions from these techniques, especially in cross sector comparisons given data collection differences and differences in policy and governance structures.

Additional comment

99. A further benefit in the Commission conducting analysis and releasing the results is that baseline data for further multivariate techniques to track changes in efficiency could be examined (PC 2006, p. 170).

100. For example, the Malmquist Productivity Index (MPI) uses a time series of DEA results to produce a mean of two indices, measuring the change in efficiency from one period to the next, and allowing a breakdown of efficiency changes over time. MPI are defined as ratios of distance functions. Distance functions are a natural way of modelling the production frontier, indicating changes in efficiency, and shifts in the frontier indicating changes in technology (Sommersguter-Reichmann 2000, p. 311). This process may allow for the tracking of efficiency changes due to policy choice and environmental influence (Hollingsworth 2003, p. 207).

4.9 Informed financial consent

What, if any, views do you have about the suitability of the Ipsos surveys as a data source for analysing informed financial consent? What suggestions do you have to address any concerns you may have?
What, if any, other data sources relating to informed financial consent are you aware of? What is your view on their usefulness for this study? (pp. 26-7)

101. The IFC (informed financial consent) Consumer Surveys conducted by Ipsos Australia are independent surveys that provide statistically significant data about IFC. In 2007, 4164 usable surveys were returned (42% response rate, compared with 46% or 4596 usable surveys in 2006 and 41% or 4120 usable surveys in 2004).

102. There are other data sources relating to IFC, including complaint statistics from the Private Health Insurance Ombudsman (PHIO) and an IFC poll conducted by the Australian Society of Anaesthetists (ASA), but these sources have important limitations.

103. The level of complaint to the PHIO is lower than suggested by the IFC Consumer Surveys conducted by Ipsos Australia as, not all affected consumers may be aware of the PHIO's office, and those that are may be concerned about impairing their relationship with their doctor by making a formal complaint. Moreover, the surveys suggest that patients' concern levels rise appreciably once the gap exceeds $400. It follows that many patients may not complain about a gap below $400.

104. The ASA has also conducted their own IFC poll of 600 responding anaesthetists in 2008.

4.10 Rates of informed financial consent

What, if any, suggestions or comments do you have regarding the proposed disaggregation of informed financial consent data by type of provider and region?
What alternative disaggregations could be used and what are the strengths and weaknesses of these disaggregations?(p.27)

105. The issues paper notes that there would be methodological limitations associated with disaggregating the unpublished IFC Consumer Survey data by Statistical Local Area (SLA). This would also be inappropriate due to privacy considerations. Disaggregating the data by broader ASGC-RA regions, as suggested, would be more appropriate in this context.

4.11 Out-of-pocket expenses for patients not given sufficient information

What, if any, views do you have regarding the suitability of the out-of-pocket expenses data collected in the informed financial consent surveys for the Department of Health and Ageing?
What, if any, other data sources on out-of-pocket expenses for patients who do not give informed financial consent are you aware of? What is your view on their usefulness for this study?

106. The IFC Consumer Surveys conducted by Ipsos Australia are independent surveys that provide statistically significant data about out-of-pocket expenses.

107. The recent *Review of the Prostheses Listing Arrangements* (October 2007) noted that although the HCP data collected by the Department from insurers should provide accurate information on out-of-pocket expenses for prostheses, yet the quality of the data could be improved. DoHA notes it is working with insurers to improve this collection (see paragraph 66).

4.12 Best practice examples of informed financial consent

What, if any, best-practice examples are you aware of where informed financial consent is provided for every procedure?
Are there best-practice examples of informed financial consent in those services and specialities which have the lowest rates of informed financial consent?(p. 29)

108. The 2007 IFC Consumer Survey conducted by Ipsos Australia indicated that problems with surprise gaps (i.e. gaps and no IFC) are largely associated with medical specialists who have limited patient contact – anaesthetists, pathologists, radiologists and surgeons' assistants.

109. The department provided funding to the Australian Medical Association (AMA) in June 2007 to undertake activities to increase the incidence of IFC obtained by medical specialists with limited patient contact. The activities included developing a best practice billing model for pathologists.

110. The Department also provided funding to the AMA in 2005-06 to assist with an education campaign for doctors to improve the level of IFC.

4.13 Indexation of Medicare Levy Surcharge

In addition to those indexation factors mentioned in this paper (AWOTE, AWTE, CPI and WPI), are there alternatives that you would like the Commission to consider? If so, what are they and why do you favour including them in the Commission's analysis?
What is the most appropriate indexation factor for the MLS thresholds, and why do you favour the measure you have nominated? (p. 33)

111. DoHA supports the continuation of the use of average weekly ordinary time earnings (AWOTE) as the indexation factor for the Medicare levy surcharge because of its relevance and consistency. It is relevant in that it measures the increase in 'normal' earnings for employees (e.g., it includes cash salary but excludes overtime for standard hours of work). At the same time, AWOTE is the indexation measure used for a number of other income thresholds (e.g., the concessional superannuation contributions cap and the low-rate threshold for superannuation lump sum payments).

4.14 Improving the feasibility of future comparisons

What conceptual and data problems do you anticipate will prevent the study from completing all of the tasks requested in the terms of reference? How will foreshadowed policy developments, including those under the National Healthcare Agreement, address the problems?
What developments should the study consider in order to improve the feasibility of future comparisons? What problem does your proposed change address, and what are the strengths and weaknesses of your proposal?(p. 35)

112. This paper has described the differences that exist between the public and private hospital sectors from a national perspective. It is evident that the differences in funding, governance, roles and patient casemix have led to differences in the way information for both sectors has been developed, collected and reported.

113. Increasingly the blurring of boundaries between the two sectors in terms of services delivered is leading to the need to fully consider the performance of both sectors in a way that is meaningful, relevant and directly comparable.

Current policy development

114. As mentioned in the issues paper, implementation of the NHA together with associated nationally consistent 'progress measures' and activity based funding for public hospitals, will to some extent address the conceptual and data problems acknowledged in the issues paper.

115. For example, it is anticipated that Commonwealth/State work around the implementation of activity based funding will lead to greater national consistency in the enumeration, classification and costs for all public hospital services, thus enabling more reliable comparisons, including of efficiency. The private sector will also need to be involved in these developments and steps to do this are underway.

116. Improvements to national hospital costing data will, where applicable, be driven by the 2008 KPMG Review. This review, the first of its kind for several years, examined the costing collection development and management for both sectors and proposed a range of changes to improve national hospital costing data. The review will be considered fully as part of activity based funding implementation where changes to costing methodology are concerned. However, some changes such as ensuring annual private hospital sector collections, the use of a private sector costing coordinator to facilitate collection, and increasing training in costing techniques have already been implemented (in the 2007-08 collection).

Consultation and collaboration is required

117. Data development and collection at a national level requires both the strong involvement of the private sector, and collaboration with all jurisdictions to ensure that developments are consistent and take into account the differences and special considerations of both sectors.

118. Work to do this is already underway. For example, the Commonwealth is chair of two working groups with a focus on private health data. One represents private health insurers and is used to facilitate discussion around changes to the HCP. This group agreed in early 2008 to facilitate improvements to the HCP through a range of measures to improve the quality of this data over time through reduced error rates in supply and regular quarterly reports on data quality and timeliness of supply to insurer chief executives.

119. The Commonwealth chaired private hospital working group includes representatives of the sector and meets quarterly to discuss a range of issues including changes to data specifications. This group is now also to become a consultative body where required on broader reporting matters as they relate to policy.

120. National costing data is also oversighted by a Technical Reference Group that represents all jurisdictions and the private sector and who meet regularly during the course of development of the costing collection each year including the final ratification of results to be published.

121. Other national data collections are oversighted by NHISSC. Private sector representation on this group is essential to ensure the sector is aware of national data changes and their concerns can be incorporated into this area. The Commonwealth has already sought and gained agreement to this arrangement.

122. Further, in regards to development that may involve data or reporting, the Commonwealth directly consults with the private sector and jurisdictions and will continue to do so.

Broader but streamlined information

123. While consultation is a necessary part of any change, there remains a strong need for improvements to data development processes and consistency of national hospital information in a number of areas:

- Expansion and alignment: Public and private hospital information could be better aligned and designed to capture all instances of hospital activity.
    - Currently, all recognised hospitals (public and private) contribute to national admitted patient care data collected by states and territories.
    - Private hospitals that provide other types of patient care, such as emergency or outpatient services, may not contribute to NMDSs unless required under an arrangement with a state or territory.
    - Public hospitals provide information about their establishment through national arrangements, while the Australian Bureau of Statistics (ABS) collects similar private hospital information under their legislation.
    - While public hospital admitted patient data is supplied nationally at the hospital level, private hospital data is supplied inconsistently. Some jurisdictions have reached agreement with private hospitals to supply data nationally at the hospital level while others provide aggregated or de-identified hospital level information.

- Streamlining: Expansion of collected material needs first to consider the streamlining of the reporting burden.
    - Application of the ‘collect once, use often’ principle would see collections with similar bases formatted alike to ensure that the same data does not need to be re-formatted to

be supplied for a different reason. The Commonwealth recognises this and has begun discussions with the private sector about all data that needs to be supplied.

- To date, anecdotal evidence suggests that some private facilities may contribute to as many as nine different collections with different formats and requirements, and those that have facilities in different jurisdictions may have up to eight different reporting regimes to comply with for very similar information. Work to improve this situation will continue.

- All hospital services to be included: Any expansion should also consider capturing information for all hospital services.
  - For example, the scope of some national collections encompasses only larger public hospital information (ED and Outpatient). At the time of introduction of these collections, this was necessary as smaller facilities may have lacked the necessary infrastructure to collect and report information. However, this leads to discrepancies between performance reporting that may involve different collections.
    - For example in 2007-08, public hospitals establishment data reports that there were 7.1 million ED presentations while ED specific data that includes triaged data for these same services, recorded around 5.4 million presentations. This means that performance reporting must in some instances be caveated by the fact that these differences exist.

- Improved efficiency through mandated versions of patient classification and costing information: Improved consistency in national hospital information and less effort devoted to back and forward mapping of AR-DRGs for data grouping purposes is possible.
  - At present, the use of the ICD-10-AM patient classification is mandated for public hospitals through the national health information arrangements and private hospitals also use the latest version (currently version 6).
  - There is not a similar mandate for the use of a particular version of the resource homogenous grouping AR-DRG tool: public hospitals currently use AR-DRG v5.1 (with some moving to version 6 from July 2009) and private hospitals currently use AR-DRG v4.2 primarily due to contracting arrangements that many have in place with private health insurers.
  - The use of different versions of the one classification system often means that any data analysis must be preceded by a considerable and inefficient amount of data mapping when comparing data. A recently finalised review of national AR-DRG management considers this issue. The Commonwealth is considering the recommendations of this review.

5. CONCLUSION

124. The Commonwealth Department of Health and Ageing has provided this submission to assist the Productivity Commission in its review of the performance of public and private hospitals.

125. The Department has already provided de-identified informed financial consent data to assist with this analysis. It continues to liaise with the Commission over data needs and, with the consent of service providers, will provide the Commission with further de-identified aggregated information to assist in its deliberations.

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Attachment A

EXTRACT FROM SECTION 121-5 MEANING OF HOSPITAL TREATMENT - PRIVATE HEALTH INSURANCE ACT 2007

(6) The Minister may, in writing:
(a) declare that a facility is a hospital; or
(b) revoke such a declaration.

(7) In deciding whether to declare that a facility is a hospital or to revoke such a declaration, the Minister must have regard to:
(a) the nature of the facility; and
(b) the range and scope of the services provided; and
(c) whether the necessary approvals by a State or Territory, or by an authority of a State or Territory have been obtained in relation to the facility; and
(d) whether the accreditation requirements of an appropriate accrediting body have been met; and
(e) whether undertakings have been made, or have been complied with, relating to providing to private health insurers information, of the kind specified in the Private Health Insurance (Health Insurance Business) Rules, relating to treatment of persons insured under complying health insurance products that are referable to health benefits funds; and
(ea) if the Minister is deciding whether to revoke such a declaration – any contravention of conditions to which the declaration is subject; and
(f) any other matters specified in the Private Health Insurance (Health Insurance Business) Rules.

Attachment B

2003-08 Australian Health Care Agreements (AHCAs) performance indicators

The performance indicators listed below included 18 that were established at the time of signing the 2003-08 AHCAs, and 18 others that were introduced or planned during the AHCAs (the latter are in italics). These indicators were grouped under six domains of measurement in accordance with schedule C, attachment A of the AHCAs.

1. **Eligible persons are to be given the choice to receive, free of charge as public patients, health and emergency services of a kind or kinds that are currently, or were historical, provided by hospitals.**
   - (a) Public patient weighted separation rate per 1,000 weighted population
   - (b) Same day and overnight separations by funding source
   - (c) Number of separations by care types and mode of separation
   - (d) Emergency department occasions of service
   - (e) Outpatient occasions of service (nine specialist clinics)
   - *(f) Public outpatient occasions of service for each of the 23 specialist outpatient clinics listed in the Outpatient national minimum data set* (from 2005-06).
   - *(g) Public outpatient occasions of service for pathology, pharmacy, radiology and diagnostic imaging* (planned from 2007-08).

2. **Access to such services by public patients free of charge is to be on the basis of clinical need and within a clinically appropriate period.**
   - (a) Waiting times for elective surgery by clinical urgency categories and for 10 selected procedures by days waited at the 50th and 90th percentiles and proportion waiting greater than 12 months.
   - (b) Waiting times for emergency departments by triage category
   - (c) Admissions from waiting list by urgency category and 10 selected procedures.
   - *(d) Emergency department waiting times for service: Median and 90th percentile) by triage category* (from 2004-05)
   - *(e) The percentage of emergency department patients who are admitted whose total time in the emergency department is less than eight hours* (from 2006-07)**.**

3. **Arrangements are to be in place to ensure equitable access to such services for all eligible persons, regardless of their geographic location.**
   - (a) Number of public and private hospital separations by Indigenous and non-Indigenous status per 1,000 populations.
   - (b) Mental health patient days by psychiatric and non-psychiatric hospitals (public and private)
   - (c) Psychiatric care by Indigenous and non-Indigenous status

4. **Indicators of efficiency and effectiveness of public hospital services**
   - (a) Recurrent expenditure, public acute and psychiatric hospitals
   - (b) Revenue, public acute and psychiatric hospitals
   - (c) Cost per casemix-adjusted separation in public hospitals

5. **Indicators of quality and patient outcomes in relation to the delivery of public hospital services**

   (a) Number of accredited medical specialist training positions by specialty (using latest available data)

   (b) Public hospital accreditation status

6. **Indicators of rehabilitation and step-down services**

   (a) Number of rehabilitation episodes by mode of separation, sex, age group and funding source (note minor wording change from Schedule C of 2003-08 AHCAs)

   (b) Number of geriatric evaluation and management episodes by mode of separation, sex, age group and funding source

   (c) Number of occupied bed days [defined as length of stay in the National Health Data Dictionary (NHDD)] for rehabilitation episodes by mode of separation, sex, age group and funding source

   (d) Number of occupied bed days (defined as length of stay in the NHDD) for geriatric evaluation and management episodes by mode of separation, sex, age group and funding source

   (e) Number of rehabilitation episodes per 1000 of population (separation rates)

   (f) Number of geriatric evaluation and management episodes per 1000 population (separation rates)

   [(b) to (f) from 2005-06]

   (g) Number of rehabilitation and geriatric evaluation and management occasions of service (at least to medical clinic outpatient level)

   (h) Number of rehabilitation and GEM occasions of service (outpatient) per 1000 of weighted population (at least to medical clinic outpatient level)

   (i) Number of rehabilitation and geriatric evaluation and management occasions of service (other non-admitted patients)

   (j) Number of rehabilitation and GEM occasions of service (other non-admitted patients) per 1000 of the weighted population

   [(g) to (j) commence for 2006-07]

   (k) Timely assessment of function on admission to rehabilitation and geriatric evaluation and management (GEM)

   (l) Assessment of function prior to patient separation from rehabilitation and GEM

   (m) Documented evidence of an agreed multidisciplinary care plan (outpatient)

   (n) Documented evidence of an agreed multidisciplinary care plan (other non-admitted patients)

   [(k) to (n) commence for 2007-08]

Notes:

1. All performance indicators, with the exception of 5a and 6g-n, are calculated from AHCA NMDSs. 5a is sourced from the Medical Training Review Panel report. Data for 6g-n are provided as state/territory totals.
2. Indicators 1a to 1c, 3, and 6a-f include public and private hospital sectors.
3. For indicator 1g, data are reported as part of the Public Hospital Establishment NMDS, but are not yet collected as part of the Outpatient Care NMDS.

Attachment C

National Health Performance Framework 2001

Health status and outcomes

How healthy are Australians? Is it the same for everyone? Where is the most opportunity for improvement?

Health conditions	Human function	Life expectancy and wellbeing	Deaths
Prevalence of disease, disorder, injury or trauma or other health-related states	Alterations to body, structure or function (impairment), activities (activity limitation) and participation (restrictions in participation).	Broad measures of physical, mental, and social well being of individuals and other derived indicators such as Disability Adjusted Life Expectancy (DALE).	Age and/or condition specific mortality rates

Determinants of Health

Are the factors determining good health changing for the better? Is it the same for everyone? Where and for whom are these factors changing?

Environmental factors	Socioeconomic factors	Community capacity	Health behaviours	Person-related factors
Physical, chemical and biological factors such as air, water, food and soil quality resulting from chemical pollution and waste disposal.	Socioeconomic factors such as education, employment, per capita expenditure on health, and average weekly earnings.	Characteristics of communities and families such as population density, age distribution, health literacy, housing, community support services and transport.	Attitudes, beliefs knowledge and behaviours e.g. patterns of eating, physical activity, excess alcohol consumption and smoking.	Genetic-related susceptibility to disease and other factors such as blood pressure, cholesterol levels and body weight.

Health System Performance

How well is the health system performing in delivering quality health actions to improve the health of all Australians? Is it the same for everyone?

Effective	Appropriate	Efficient
Care, intervention or action achieves desired outcome.	Care/intervention/action provided is relevant to the client's needs and based on established standards.	Achieving desired results with most cost effective use of resources.
Responsive	**Accessible**	**Safe**
Service provides respect for persons and is client orientated. It includes respect for dignity, confidentiality, participation in choices, promptness, quality of amenities, access to social support networks, and choice of provider.	Ability of people to obtain health care at the right place and right time irrespective of income, physical location and cultural background.	The avoidance or reduction to acceptable limits of actual or potential harm from health care management or the environment in which health care is delivered.
Continuous	**Capable**	**Sustainable**
Ability to provide uninterrupted, coordinated care or service across programs, practitioners, organizations and levels over time.	An individual's or service's capacity to provide a health service based on skills and knowledge.	System's or organisation's capacity to provide infrastructure such as workforce, facilities and equipment, and be innovative and respond to emerging needs (research, monitoring)

Attachment D

Table: Profiles of two large Australian public hospitals

	Hospital A		Hospital B	
	Number	**%**	**Number**	**%**
Separations				
Same-day	5,094	35.8	9,003	67.1
Overnight	9,117	64.2	4,439	33.1
Total	14,211	100.0	13,422	100.0
Patient casemix				
Separations assigned to leading 5 ADRGs	2,924	20.6	8,870	66.0
Separations assigned to leading 10 ADRGs	4,290	30.2	10,752	80.0
Elective surgery waiting list				
Total	1,173	100.0	11,537	100.0
Waiting list admissions as % of total admissions		8.3		86.0
Patient type (admitted patient episodes)				
Public (AHCA funded)	10,908	76.8	8,853	65.9
Private (private insurance or self-funded)	2,247	15.8	4,164	31.0
Unknown	1,056	7.4	425	3.2
Total	14,211	100.0	13,442	100.0
Non-admitted occasions of service				
Allied health services	7,397	3.6	69,597	32.5
Community health services	42,847	20.8	-	0.0
Dental	-	0.0	-	0.0
Drug & alcohol	6,904	3.4	-	0.0
Emergency	19,281	9.4	42,228	19.7
Mental health	69,614	33.8	-	0.0
Other district nursing service	4,715	2.3	-	0.0
Other outreach services	-	0.0	-	0.0
Other/Medical/Surgical/Diagnostic	44,401	21.6	84,881	39.6
Pathology	824	0.4	-	0.0
Pharmacy	6,067	2.9	17,378	8.1
Radiology & organ imaging	3,974	1.9	-	0.0
Total	206,024	100.0	214,084	100.0
Emergency department occasions of service				
Resuscitation	132	0.7	2	0.0
Emergency	3,105	16.1	127	0.3
Urgent	7,706	40.0	846	2.0
Semi-urgent	6,688	34.7	7,338	17.4
Non-urgent	1,650	8.6	33,915	80.3
Total	19,281	100.0	42,228	100.0
Beds	185		55	
Staffing (FTE)				
Salaried medical officers	67.7	8.4	66.7	15.6
Nurses	386.6	48.1	158.3	36.9
Diagnostic & health professionals	125.3	15.6	70.7	16.5
Administrative & clerical	124.1	15.4	124.3	29.0
Domestic & other	100.4	12.5	8.9	2.1
Total	804.2	100.0	428.8	100.0

Table: Profiles of two large Australian public hospitals (Cont'd)

Notes:

1. ADRG = Adjacent Diagnosis Related Group; FTE = full-time equivalent.
2. Patient type – The three categories used in this table were defined primarily on the basis of source of funding for the patient's care, and secondarily on the basis of the patient's recorded election status (public or private).

Source: Department of Health & Ageing: Admitted Patient NMDS; Electives Surgery Waiting Times Additions & Removals NMDS; Non-admitted Patient Emergency Department Care NMDS; Outpatient Care NMDS; Public Hospital Establishment NMDS.

Attachment E

Table: Average length of stay (ALOS) and percentage distribution of separations for selected Adjacent Diagnosis Related Groups (ADRG) (v.5) and patient clinical complexity level (PCCL) by hospital type, Australia, 2007-08

ADRG / DESCRIPTION	No or Minor CC		Moderate CC		Severe CC		Catastrophic CC		Total	
	%	ALOS	%	ALOS	%	ALOS	%	ALOS	No.	ALOS
PUBLIC HOSPITALS										
E62 Respiratory Infections/Inflammations	41.9	3.4	14.0	5.2	21.8	6.4	22.3	10.1	61,765	5.8
F42 Circulatory Disorders W/O AMI W Invasive Cardiac Investigative Proc	64.2	1.8	23.9	2.7	9.5	5.2	2.4	11.6	27,768	2.6
F71 Non-Major Arrhythmia and Conduction Disorders	62.4	1.9	18.4	3.1	13.8	4.8	5.5	8.8	37,965	2.9
G67 Oesophagitis, Gastroenteritis and Misc Digestive System Disorders Age >9	68.0	1.8	14.5	2.6	12.3	4.2	5.2	8.1	85,831	2.5
H08 Laparoscopic Cholecystectomy	76.7	1.8	11.2	3.1	8.3	4.8	3.8	9.8	22,651	2.5
I03 Hip Revision or Replacement	45.9	6.9	14.1	8.0	19.4	10.2	20.5	16.2	13,986	9.6
I04 Knee Replacement and Reattachment	62.6	6.2	16.5	6.8	12.7	8.6	8.2	13.9	11,829	7.2
J08 Other Skin Graft and/or Debridement Procedures	78.3	1.9	8.2	3.6	9.0	7.3	4.5	18.2	11,296	3.3
N04 Hysterectomy for Non-Malignancy	80.1	3.4	5.2	4.1	11.2	4.6	3.5	7.3	11,880	3.7
O01 Caesarean Delivery	52.8	3.9	22.7	4.7	18.0	5.9	6.5	9.5	55,343	4.8
O60 Vaginal Delivery	71.7	2.4	19.2	3.3	8.3	4.1	0.8	6.5	144,226	2.8
Q61 Red Blood Cell Disorders	69.7	1.3	17.3	1.8	8.7	4.1	4.3	8.2	43,973	1.9
R61 Lymphoma and Non-Acute Leukaemia	63.7	1.5	7.3	4.0	21.0	3.1	8.0	12.6	31,424	2.9
PRIVATE HOSPITALS										
E62 Respiratory Infections/Inflammations	41.5	5.1	14.8	7.4	24.2	8.8	19.5	12.9	11,346	7.9
F42 Circulatory Disorders W/O AMI W Invasive Cardiac Investigative Proc	78.8	1.4	16.4	2.1	4.2	4.5	0.7	10.7	39,182	1.7
F71 Non-Major Arrhythmia and Conduction Disorders	74.2	2.0	14.5	3.5	8.5	6.2	2.8	11.3	12,891	2.8
G67 Oesophagitis, Gastroenteritis and Misc Digestive System Disorders Age >9	67.3	2.8	13.5	4.4	13.9	6.3	5.3	10.7	14,197	3.9
H08 Laparoscopic Cholecystectomy	86.9	1.7	7.4	2.7	4.1	4.5	1.6	10.7	18,620	2.0
103 Hip Revision or Replacement	71.5	7.2	9.8	8.6	11.7	10.4	7.0	17.2	17,371	8.4
104 Knee Replacement and Reattachment	75.4	6.9	10.9	7.8	9.3	9.2	4.4	13.0	22,241	7.4
J08 Other Skin Graft and/or Debridement Procedures	93.9	1.3	3.9	2.0	1.7	5.2	0.5	16.5	29,047	1.4
N04 Hysterectomy for Non-Malignancy	88.0	3.8	2.6	4.1	7.7	5.3	1.7	8.6	14,193	4.0
O01 Caesarean Delivery	66.5	5.1	17.6	5.7	13.1	6.5	2.9	10.4	33,799	5.5
O60 Vaginal Delivery	72.9	4.1	19.7	4.6	7.0	5.1	0.4	7.0	42,998	4.3
Q61 Red Blood Cell Disorders	81.7	1.2	11.5	2.0	5.0	4.7	1.8	9.9	22,437	1.6
R61 Lymphoma and Non-Acute Leukaemia	69.7	1.6	9.2	2.8	16.2	3.3	5.0	14.5	21,493	2.6

See over for notes

Table: Average length of stay (ALOS) and percentage distribution of separations for selected Adjacent Diagnosis Related Groups (ADRG) (v.5) and patient clinical complexity level (PCCL) by hospital type, Australia, 2007-08 (Cont'd)

Notes:

1. Adjacent DRGs consist of one or more DRGs generally defined by the same diagnosis or procedure code list. DRGs within Adjacent DRGs have different levels of resource consumption and are partitioned on the basis of several factors, including complicating diagnoses/procedures, age, and or patient clinical complexity level.
2. The AR-DRG classification is able to take account of *multiple* illnesses experienced by *individual* admitted patients: **Complications and co-morbidities** (CCs) are additional diagnoses that are likely to result in significantly greater resource consumption. **Complication and co-morbidity levels** (CCLs) are severity weights given to ALL additional diagnoses. They were developed through a combination of medical judgement and statistical analysis and range in value from 0 to 4 for surgical and neonate episodes, and from 0 to 3 for medical episodes. A CCL value of 0 means the code is not a CC; or the code forms part of the definition for the Adjacent DRG; or the code is a CC, but is closely related to the principal diagnosis; or exactly the same code appears elsewhere on the record. Only CCs attract CCL values greater than zero. A CCL value of 1 = minor CC; 2 = moderate CC; 3 = severe CC; and 4 = catastrophic CC. **Patient clinical complexity level** (PCCL) is a measure of the cumulative effect of a patient's CCs, and is calculated for each episode. The calculation is complex and has been designed to prevent similar conditions from being counted more than once. A PCCL value of 0 = no CC; 1 = minor CC; 2 = moderate; 3 = severe CC; and 4 = catastrophic CC. To attract a PCCL of 4, an episode must have at least two CCs regardless of whether it is assigned to a surgical, medical acute or other acute DRG.
3. PCCL has been designed at the ADRG level. A diagnosis may be a level 2 CC for one ADRG, and a different level CC for another ADRG. Moreover, as indicated in the previous note, surgical ADRGs have a different basis to PCCLs than medical ADRGs. It is therefore not appropriate to aggregate PCCLs across ADRGs. If research requires comparisons of combinations of DRGs, it would be best to at least avoid aggregating surgical and medical DRGs.
4. Public psychiatric hospitals are excluded. Private free-standing day hospitals are included.
5. Criteria used for the selection of ADRGs in this table: more than 10,000 separations in both sectors; ALOS greater than 1 day; a mix of surgical acute, medical acute and other acute DRGs.

Source: Department of Health & Ageing, National hospital morbidity (casemix) database.

ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACSQHC	Australian Commission for Safety and Quality in Health Care
ADRG	Adjacent diagnosis related group
A&E	Accident and emergency
AHCAs	Australian Healthcare Agreements
AHMAC	Australian Health Ministers' Advisory Council
AHMC	Australian Health Ministers' Conference
AIHW	Australian Institute of Health and Welfare
ALOS	Average length of stay
AMA	Australian Medical Association
AR-DRG	Australian Refined Diagnosis Related Groups
ASA	Australian Society of Anaesthetists
ASGC	Australian Standard Geographic Classification
AWOTE	Average weekly ordinary time earnings
CCs	Complications and co-morbidities
CCLs	Complications and co-morbidity levels
COAG	Council of Australian Governments
DEA	Data Envelopment Analysis
DoHA	Department of Health and Ageing (Australian Government)
DRG	Diagnosis related group
DVA	Department of Veterans' Affairs (Australian Government)
ED	Emergency department
FTE	Full time equivalent
GDP	Gross domestic product
GEM	Geriatric evaluation and management
GPs	General practitioners
HCP	Hospital Casemix Protocol data collection
HRM	Hospital Reference Manual (used for NHCDC purposes)

ABBREVIATIONS (cont'd)

ICD-10-AM	The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification
IFC	Informed financial consent
MBS	Medicare Benefits Schedule
MDC	Major diagnostic category
MLS	Medicare Levy Surcharge
MPI	Malmquist Productivity Index
MRSA	Methicillin-resistant staphylococcus aureus
NEHIPC	National E-Health and Information Principal Committee
NHA	National Healthcare Agreement
NHCDC	National Hospital Cost Data Collection
NHDD	National Health Data Dictionary
NHHRC	National Health and Hospitals Reform Commission
NHISSC	National Health Information Standards and Statistics Committee
NMDS	National minimum data set
PBS	Pharmaceutical Benefits Scheme
PC	Productivity Commission
PCCL	Patient clinical complexity level
PHIO	Private Health Insurance Ombudsman
SFA	Stochastic Frontier Analysis
SLA	Statistical local area
VMO	Visiting medical officer