



Australia's hospitals 2008–09

at a glance

Health services series no. 37

June 2010

Australian Institute of Health and Welfare
Canberra



The Australian Institute of Health and Welfare is Australia's national health and welfare statistics and information agency. The Institute's mission is better information and statistics for better health and wellbeing.

© Australian Institute of Health and Welfare 2010

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced without prior written permission from the Australian Institute of Health and Welfare. Requests and enquiries concerning reproduction and rights should be directed to the Head of the Communications, Media and Marketing Unit, Australian Institute of Health and Welfare, GPO Box 570, Canberra ACT 2601.

This publication is part of the Australian Institute of Health and Welfare's Health services series. A complete list of the Institute's publications is available from the Institute's website <www.aihw.gov.au>.

ISSN 1036-613X

ISBN 978-1-74249-033-5

Suggested citation

Australian Institute of Health and Welfare 2010. Australia's hospitals 2008–09 at a glance. Health services series no. 37. Cat. no. HSE 89. Canberra: AIHW.

Australian Institute of Health and Welfare

Board Chair

Hon. Peter Collins, AM, QC

Director

Penny Allbon

Any enquiries about or comments on this publication should be directed to:

George Bodilsen, Hospitals Unit

Australian Institute of Health and Welfare

GPO Box 570

Canberra ACT 2601

Phone: (02) 6244 1157

Email: george.bodilsen@aihw.gov.au

Published by the Australian Institute of Health and Welfare

Printed by Bytes 'n Colours

**Please note that there is the potential for minor revisions of data in this report.
Please check the online version at <www.aihw.gov.au> for any amendments.**

Contents

Introduction	4
How many hospitals are there?	4
How many beds are there?	5
How diverse are public hospitals?	6
How many people are employed in Australia's hospitals?	7
How much do hospitals spend?	8
How are our hospital services funded?	9
What services do Australian hospitals provide?	10
Emergency department services	10
Outpatient care	12
Admitted patient care: overview	12
Admitted patient care: same-day acute care	22
Admitted patient care: overnight acute care	23
Admitted patient care: elective surgery	24
Admitted patient care: sub-acute and non-acute care	26
Additional information	28
References	28

Introduction

Hospitals are an important part of Australia's health landscape. They provide services to many Australians each year.

A summary measure of the significance of Australia's hospitals is the amount that is spent on them—an estimated \$38.5 billion in 2007–08, about 3.4% of Australia's gross domestic product, or about \$1,811 per person (AIHW 2009). And hospital spending has been increasing faster than inflation—adjusted for inflation, it increased by 4.8% each year, on average, between 2002–03 and 2007–08.

Access to our hospital services and the quality of the services, as well as funding and management arrangements for them, are under constant public scrutiny. This summary report presents an overview of statistics on our hospitals that can serve as a background to public discussion and debate.

While most data in this report are for 2008–09, some data for private hospitals were only available for 2006–07.

How many hospitals are there?

In Australia, both public and private hospitals provide hospital services.

The state and territory governments own and manage most public hospitals. Public acute hospitals mainly provide 'acute care' for short periods, although some provide longer term care, such as for rehabilitation. Public psychiatric hospitals specialise in the care of people with mental health problems, sometimes for long periods of time.

Private hospitals are mainly owned and managed by private organisations, either for-profit companies or not-for-profit non-government organisations. They include day hospitals that provide services on a day-only basis, and hospitals that provide overnight care.

In 2008–09, there were 1,317 hospitals in Australia:

- 737 public acute hospitals
- 19 public psychiatric hospitals
- 285 private day-only hospitals
- 276 other private hospitals.

The number of public acute hospitals was relatively stable between 2004–05 and 2008–09.

The number of private hospitals increased from 532 in 2004–05 to 561 in 2008–09.



Additional information

More detailed statistics, and more information on how to interpret the data here is in the companion report, *Australian hospital statistics 2008–09*. Further detail is also available in data cubes at <www.aihw.gov.au>.

How many beds are there?

As hospital sizes vary considerably, the number of beds is a better indicator of the availability of hospital services than is the number of hospitals. However, the range and types of patients that different hospitals treat (or their 'casemix') can affect comparability of hospital bed numbers. Hospitals with different casemixes will have differing proportions of beds available for specialised and more general purposes.

Beds counted are those available to be used—with appropriate staffing. The counts are not of physical beds, not all of which may be in use. Chairs used for some same-day treatments, such as chemotherapy, are also included.

In 2008–09, there were:

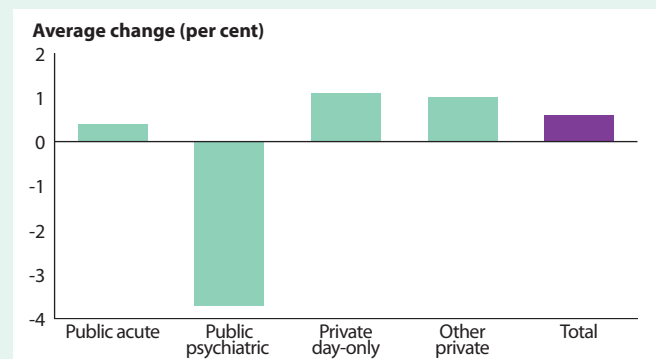
- 54,338 beds in public acute hospitals
- 2,140 beds in public psychiatric hospitals
- 2,168 beds in private day-only hospitals
- 25,298 beds in other private hospitals.

The number of hospital beds increased by 2.7% between 2004–05 (81,717 beds) and 2008–09 (83,944 beds), an annual average increase of 0.7%.

There was a relatively large increase in beds in other private hospitals, and relatively small increases in public acute hospitals and private day-only hospitals (Figure 1).

The relatively large decrease for public psychiatric hospitals reflected the continuation of the long-term trend to deinstitutionalise services for people with mental illness, and the trend to integrate specialist psychiatric services with public acute care hospital services.

Figure 1 Average annual change in the number of beds, by type of hospital, 2004–05 to 2008–09



Hospital performance: accreditation

Hospital accreditation is regarded as a performance indicator relevant to the effectiveness of hospital services. Hospitals can be accredited through organisations such as the Australian Council of Healthcare Standards, Business Excellence Australia and the Quality Improvement Council, or through certification with the International Organization for Standardization's 9000 quality family.

A total of 654 public hospitals with 54,953 beds (97% of public hospital beds) were known to be accredited at 30 June 2009 (Figure 2). These hospitals provided 99% of public hospital separations (completed episodes of admitted patient care) and 98% of patient days (days spent in hospital as an admitted patient).

Private hospital data are only available for 2006–07. A total of 371 private hospitals and 23,917 private hospital beds (67% of hospitals, covering 90% of beds) were accredited that year.

The proportions of accredited hospitals and beds in accredited hospitals have not changed much over recent years, reflecting continuing requirements of funding organisations for hospitals to be accredited. Since 2004–05, 90% or more of hospital beds have been in accredited hospitals.

Figure 2 Proportions of hospital beds that were in accredited public and private hospitals, 2004–05 to 2008–09





How diverse are public hospitals?

The 756 public hospitals are very diverse in size and the types of services provided for admitted and non-admitted patients (Table 1). The diversity of admitted patient services provided by each type can be gauged by the average number of diagnosis related groups reported (AR-DRGs). In 2008–09, there were:

- 74 *Principal referral hospitals*, located mainly in major cities, with at least one in each state and territory. They provided a wide range of services, including emergency department, outpatient and admitted patient services (including 5 or more separations for 398 AR-DRGs on average). These hospitals accounted for a total of 3.1 million separations or 64% of the total for public hospitals (Figure 3). The total days spent by patients in these hospitals was 10.7 million days or 60% of the total for public hospitals (Figure 4).
- 11 *Specialist women's and children's hospitals*, located in Sydney, Melbourne, Brisbane, Perth and Adelaide. They recorded an average of 20,634 separations, specialising in maternity and other specialist services for women, and/or specialist paediatric services.
- 41 *Large hospitals*, 23 in major cities and 18 in regional and remote areas. They provided emergency department, outpatient and admitted patient services, generally with a range of activities less than for the Principal referral hospitals (5 or more separations for 259 AR-DRGs), with an average of 15,419 separations per hospital.

- 92 *Medium hospitals*, 22 in major cities and 70 in regional areas. They delivered an average of 5,770 separations per hospital (with a narrower range of services than the Large hospitals). Most had accident and emergency services (rather than formal emergency departments) and some had outpatient clinics.
- 151 *Small acute hospitals*, 110 in regional areas and 40 in remote areas. They delivered mainly acute care for admitted patients, with an average of 1,205 separations per hospital in the year, with a relatively narrow range of services. They generally did not have emergency departments although most provided accident and emergency services.
- 19 *Psychiatric hospitals*, specialising in the treatment and care of people with mental health problems. They were located in Sydney, Melbourne, Brisbane, Perth, Adelaide and Hobart, with 3 in regional Queensland centres.
- 8 specialist *Rehabilitation hospitals*, located in Sydney, Perth and Adelaide.
- 8 specialist *Mothercraft hospitals*, located in Sydney, Melbourne, Brisbane and Canberra.
- 86 *Small non-acute hospitals*, mainly in rural and remote areas. The services they provided tended to be mainly non-acute, so the average length of stay was longer than in the hospitals that provided mainly acute care.
- 79 *Multi-purpose services*, mainly in regional and remote areas. These hospitals were generally combined with services for residential aged care, and mainly provide non-acute admitted patient care.
- 187 other hospitals, mainly small hospitals or particular specialist hospitals such as hospices.

Figure 3 Separations for admitted patients, by public hospital type, 2008–09

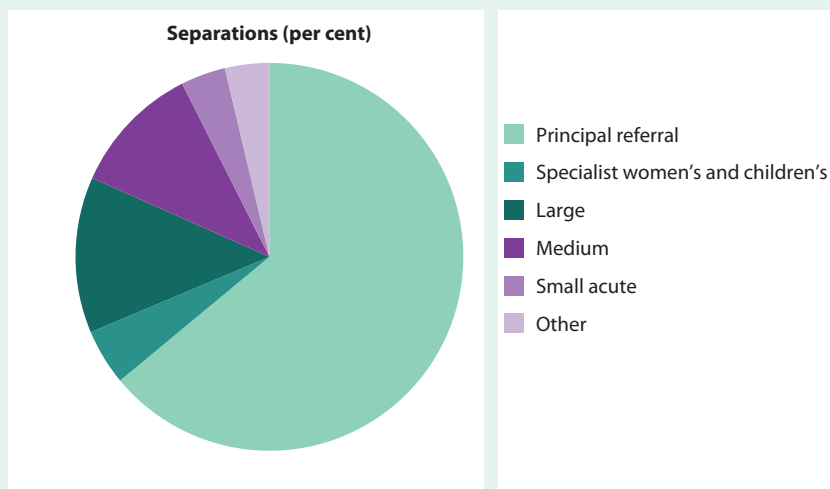


Figure 4 Patient days for admitted patients, by public hospital type, 2008–09

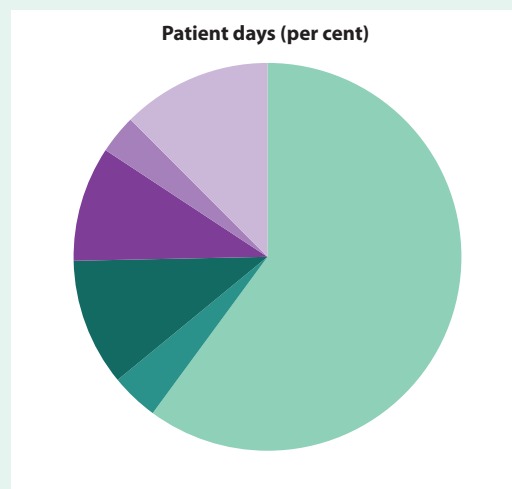


Table 1 The diversity of public hospitals, 2008–09

Hospital type	Number of hospitals								Separations (average)	Average beds	Average length of stay (days)	Non-acute care (patient days %)	AR-DRGs (with 5+ separations)
	Location				Services provided								
	Major cities	Regional	Remote	Total	Emergency departments	Accident and emergency services	Outpatient clinics	Elective surgery					
Principal referral	50	23	1	74	74	74	69	74	42,058	411.8	3.4	8.1	398
Specialist women's and children's	11	0	0	11	9	11	11	11	20,634	200.8	3.1	0.5	227
Large	23	17	1	41	38	41	36	34	15,419	143.5	3.0	13.1	259
Medium	22	70	0	92	34	90	11	55	5,770	64.1	3.2	21.3	146
Small acute	0	110	40	151	18	148	2	33	1,205	21.6	3.2	10.6	49
Psychiatric	10	9	0	19	0	3	0	0	554	110.7	54.7	51.6	10
Rehabilitation	6	2	0	8	0	7	1	1	1,104	70.5	20.8	91.2	27
Mothercraft	8	0	0	8	0	8	0	0	1,683	26.5	3.6	0.0	10
Small non-acute	13	62	11	86	4	83	1	2	883	28.4	8.5	67.9	21
Multi-purpose services	0	47	32	79	0	79	0	3	345	12.0	4.3	29.0	15
Other	32	78	77	187	6	173	0	1	233	13.1	15.0	85.8	22
Total	175	418	162	756	183	717	131	214	6,434	74.7	3.7	17.1	126

How many people are employed in Australia's hospitals?

Australian public hospitals employed about 247,000 full-time equivalent staff in 2008–09, and private hospitals employed over 47,000 in 2006–07. Hospital staff include medical officers (such as surgeons, anaesthetists and other specialists, and trainees), nurses, diagnostic and allied health professionals (such as physiotherapists and occupational therapists), administrative and clerical staff, and domestic and other personal care staff.

These statistics do not include visiting medical officers in public hospitals (who are paid on contract, rather than as staff) and most medical officers who provide services in private hospitals (where the patients and Medicare mainly cover payment, rather than the hospitals).

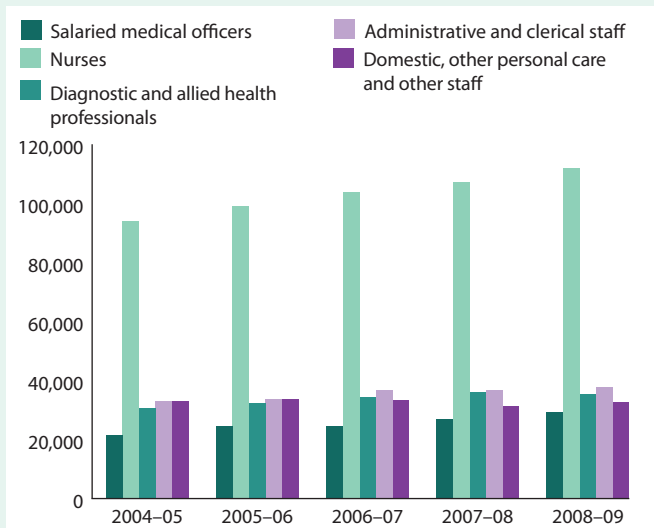
Public hospitals

The largest staffing category in public hospitals is nurses, who made up 45% of the full-time equivalent staff numbers in 2008–09. Medical officers comprised 12% of full-time equivalent staff, and diagnostic and allied health professionals comprised 14%.



The number of salaried medical officers increased by an average of 8.1% annually between 2004–05 and 2008–09, to 29,200. The number of nurses increased by an annual average of 4.5%, to 112,000 in 2008–09 (Figure 5).

Figure 5 Average full-time equivalent staff, public hospitals, 2004–05 to 2008–09



Private hospitals

The staffing mix in private hospitals is somewhat different from that in public hospitals, because most medical services are not provided by hospital staff and the range of services provided is different. The largest staffing category in private hospitals is nurses, who made up 60% of the full-time equivalent staff numbers in 2006–07 (ABS 2008). Medical officers and diagnostic and allied health professionals comprised 7% of full-time equivalent staff.

How much do hospitals spend?

Hospital expenditure includes recurrent expenditure and capital expenditure. Recurrent expenditure is money that is spent on goods and services that are consumed during the year, for example, salaries. Capital expenditure includes money spent on buildings and large pieces of equipment.

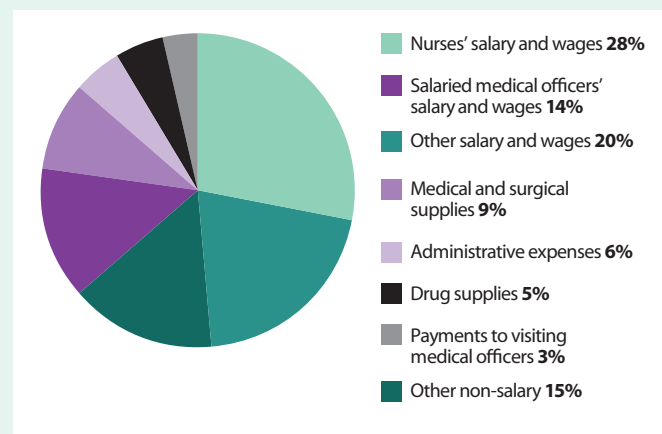
Public hospitals

In 2008–09, recurrent expenditure by public hospitals was \$31,323 million (excluding depreciation). After adjusting for inflation, this represented an increase of 5.0% compared with 2007–08.

About 63% of this expenditure was for salary payments (\$19,695 million) (Figure 6).

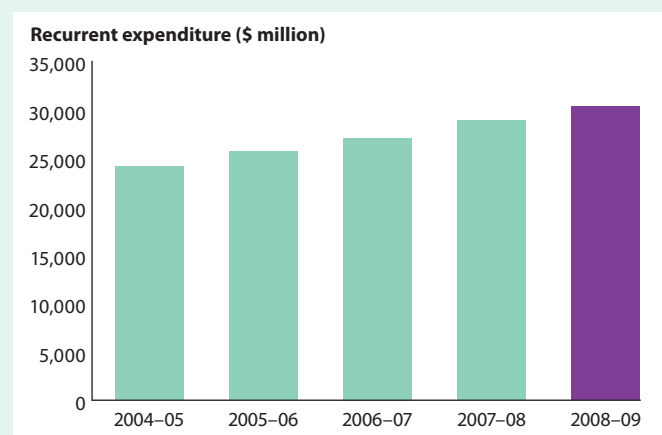
About 70% of recurrent expenditure was on admitted patient services, rather than emergency department, outpatient and other services for non-admitted patients, and other hospital activities.

Figure 6 Recurrent expenditure, public hospitals, 2008–09



Between 2004–05 and 2008–09, recurrent expenditure by public hospitals increased by an average of 5.9% per year (after adjusting for inflation) (Figure 7).

Figure 7 Recurrent expenditure, adjusted for inflation, public hospitals, 2004–05 to 2008–09



Private hospitals

In 2008–09, recurrent expenditure by private hospitals was \$8,137 million (including depreciation) (ABS 2010).

About 51% of this expenditure was for salary payments (\$4,124 million).

Between 2004–05 and 2008–09, recurrent expenditure by private hospitals increased by an average of 2.4% per year (after adjusting for inflation).

How are our hospital services funded?

Public and private hospitals are funded from a range of different sources, reflecting the types of patients they treat and the types of services they provide. Governments mainly fund emergency department and outpatient services, whereas admitted patient services are commonly funded by private (non-government) sources as well as government sources.

The sources of funds reported here are the original sources rather than the immediate sources. Hence, the

Australian Government is regarded as the source of funds for the contributions that it made for public hospitals via the Australian Health Care Agreements, even though the funds were provided through state and territory governments. The Australian Government is also regarded as the source of funds for the contributions it made to private hospitals via private health insurance premium rebates, even though the funds were provided through health insurance funds or their members.

In general terms, the state and territory governments and the Australian Government mainly fund public hospitals (Figure 8) (AIHW 2009). The proportion of funding that was from the Australian Government declined between 2000–01 and 2006–07, then increased in 2007–08 (Figure 10). Private health insurance and out-of-pocket payments by patients mainly fund private hospitals (Figure 9).

Figure 8 Funding sources for public hospitals, 2007–08

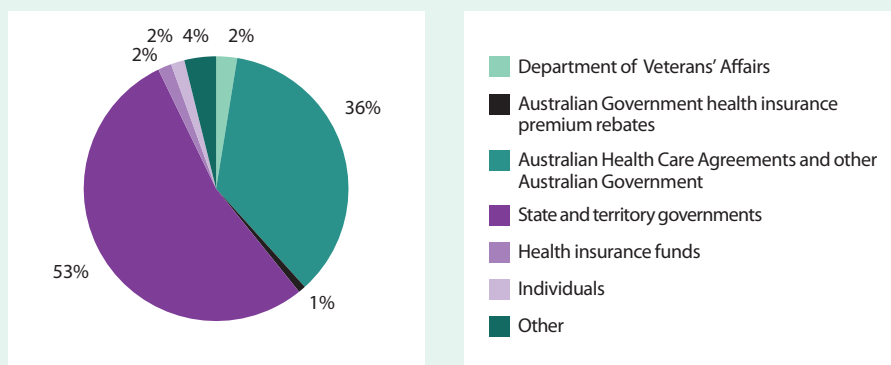


Figure 9 Funding sources for private hospitals, 2007–08

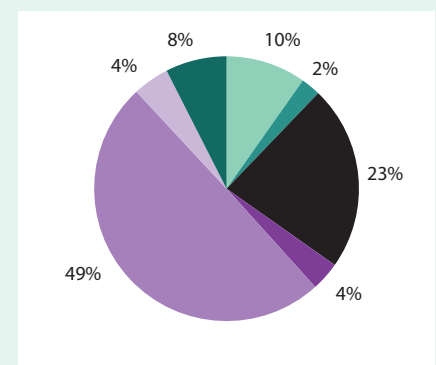
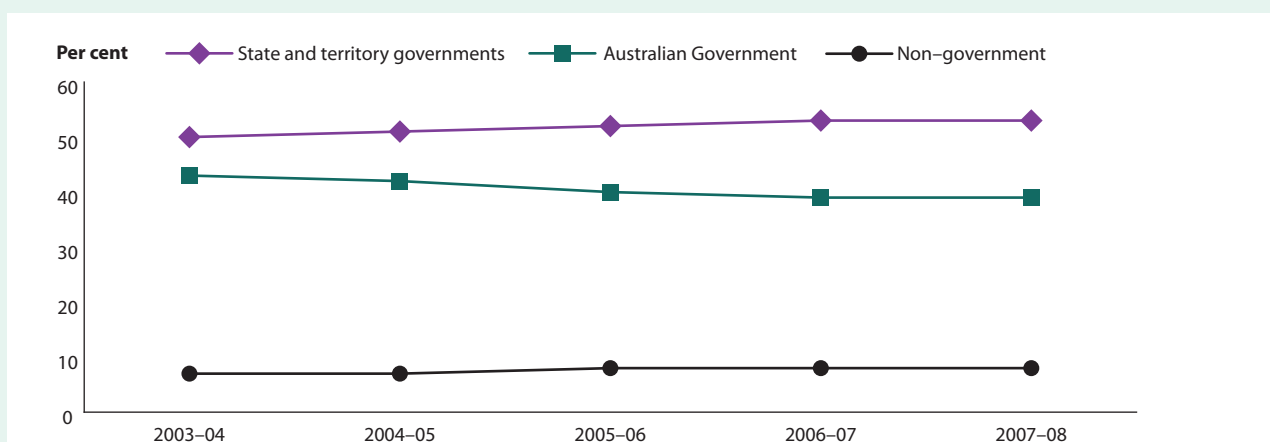


Figure 10 Funding sources for public hospitals, 2003–04 to 2007–08





What services do Australian hospitals provide?

Australian hospitals provide a range of services for both non-admitted and admitted patients. Services for non-admitted patients include emergency department services and outpatient clinics. For admitted patients, they include emergency and elective (planned) care, maternity services, medical and surgical services, either provided on a same-day basis or involving a stay in hospital overnight or longer.

Variation in data on hospital services

Although there are national standards for data on hospital services, there are some variations in how hospital services are defined and counted between public and private hospitals, among the states and territories, and over time.

For example, there is variation in admission practices for some services, such as chemotherapy and endoscopy. As a result, people receiving the same type of service may be counted as same-day admitted patients in some hospitals and as non-admitted patients in other hospitals.

In addition, hospitals provide some services in some jurisdictions, and non-hospital health services provide them in other jurisdictions. The national data on hospital care does not include care provided by non-hospital providers such as community health centres.

Emergency department services

Emergency departments provide care for patients who may have an urgent need for either medical or surgical care. Emergency departments may also provide services for patients returning for further care (such as the removal of bandages or stitches), or for patients waiting to be admitted to a ward. About one in four presentations to emergency departments ends with the patient being admitted.

Public hospitals provide most emergency department services. Private hospitals provided about 450,000 emergency department services in 2006–07 (ABS 2008), about 6% of the total for that year.

Public hospitals

There were about 7.2 million accident and emergency visits to public hospitals in 2008–09. Between 2004–05 and 2008–09, they increased by an average of 4.6% per year (Figure 11).

These presentations include both those to formal emergency departments in larger hospitals and those to smaller hospitals (commonly in more remote areas) with other arrangements for providing accident and emergency services.

Figure 11 Public hospital accident and emergency visits, 2004–05 to 2008–09



Hospital performance: emergency department waiting times

Each patient who presents to an emergency department is assessed according to how urgently they should receive care (using a triage category system). The most urgent cases are assigned to the *Resuscitation* triage category (should be treated immediately), and the least urgent are assigned as *Non-urgent* (should be seen within 2 hours).

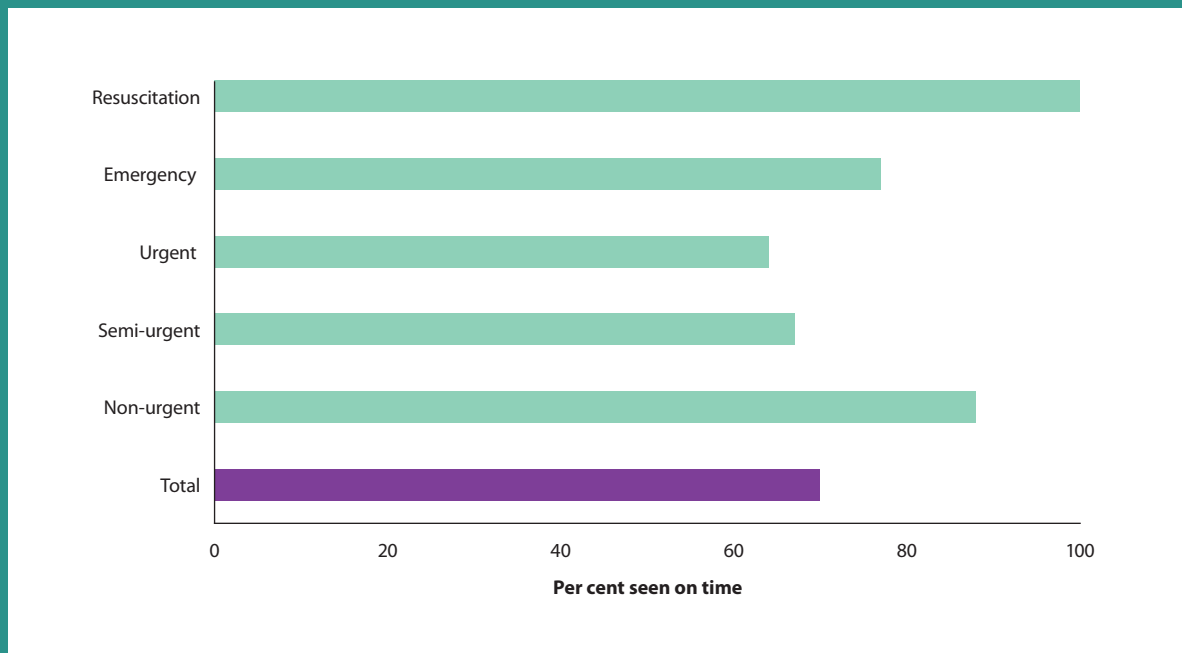
Data on triage category and waiting times were available for 5.6 million emergency department presentations (about 80% of all accident and emergency visits to public hospitals). A total of 4.9 million (85%) were in *Principal referral and specialist women's and children's hospitals* and *Large hospitals*.

In 2008–09:

- 70% of patients were seen within the recommended time for their triage category, ranging from 64% for *Urgent* presentations to 100% for *Resuscitation* (Figure 12)
- for 50% of presentations, the patient received care in 23 minutes or less and, for 90% of presentations, the patient received care in 119 minutes or less.

The proportion of patients seen within the recommended time for their triage category has stayed the same over recent years, being 69% or 70% each year between 2004–05 and 2008–09. Resuscitation patients were seen on time for either 99% or 100% of presentations each year, and emergency patients were seen on time for between 76% and 78% of presentations.

Figure 12 Proportion of public hospital emergency department presentations seen on time, 2008–09





Outpatient care

Outpatient care is provided in outpatient clinics, particularly by public hospitals but also by private hospitals. Both types of hospitals also provide other non-admitted patient services (other than emergency department services) and various outreach services, such as district nursing.

Public hospitals

Outpatient clinic care includes consultations with specialists to determine the most appropriate treatment for a patient's condition. This can result, for example, in the patient being placed on a waiting list for elective surgery.

Other care provided to non-admitted patients includes the dispensing of medication and diagnostic procedures, including pathology, X-rays and ultrasounds—often provided in association with admitted patient care or outpatient clinic services. District and community nursing services are also delivered from hospitals for non-admitted patients.

In 2008–09, public hospitals provided about 42 million service episodes for non-admitted patients:

- 16.5 million were delivered in specialist outpatient clinics with the chief contributors being medical/surgical/obstetric, allied health and dental. Most (11.5 million or 69%) were in *Principal referral and specialist women's and children's hospitals* and *Large hospitals*
- mental health and alcohol and drug services delivered 3.0 million services
- pharmacy, pathology, radiology and organ imaging made up a further 17.1 million services
- 5.4 million episodes were community health, outreach or district nursing services

- 341,000 episodes were for group sessions (provided to more than one patient at a time), with mental health, alcohol and drug, and community health accounting for 31% of the sessions.

Between 2004–05 and 2008–09, outpatient care delivered in specialist outpatient clinics increased by an average of 1.7% per year; pharmacy, pathology, radiology and organ imaging services increased by 10.1% per year; mental health and alcohol and drug services decreased by 2.5% per year; and district nursing, outreach and community health services decreased by about 6% per year (Figure 13).

Private hospitals

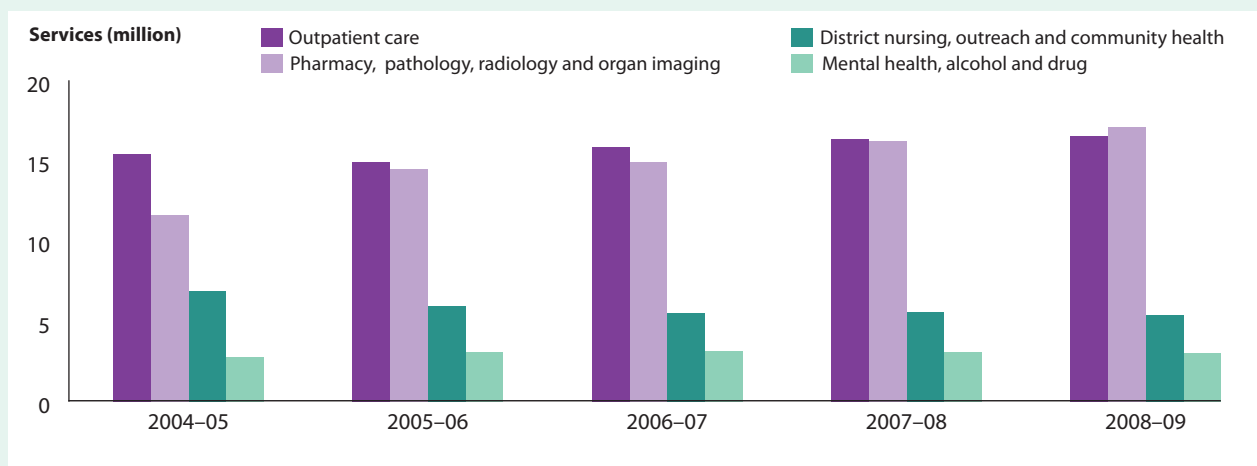
In 2006–07, private hospitals provided about 1.1 million outpatient services (6.7% of the total for public and private hospitals): dialysis, radiology and organ imaging, endoscopy, psychiatric, alcohol and drug, other medical/surgical/diagnostic, dental, pharmacy and allied health services (ABS 2008). They also provided about 180,000 other services for non-admitted patients (0.5% of the total for public and private hospitals): community health, district nursing, and non-medical and social services.

Admitted patient care: overview

Admission to hospital is a formal process, and follows a medical officer making a decision that a patient needs to be admitted for appropriate management or treatment of their condition, or for appropriate care or assessment of needs.

Separations (episodes of admitted patient care) and patient days (a count of the days spent in hospital as an admitted patient) are useful measures of admitted patient services.

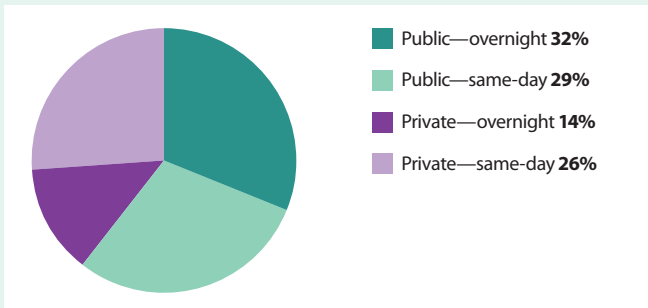
Figure 13 Non-admitted patient services, public hospitals, 2004–05 to 2008–09



In 2008–09:

- there were over 8.1 million separations from Australian hospitals
- 60% of separations were in public hospitals (4.9 million separations), with half of these being same-day separations
- 40% of separations were in private hospitals (3.3 million), with two-thirds of these being same-day separations (Figure 14).

Figure 14 Same-day and overnight separations, public and private hospitals, 2008–09



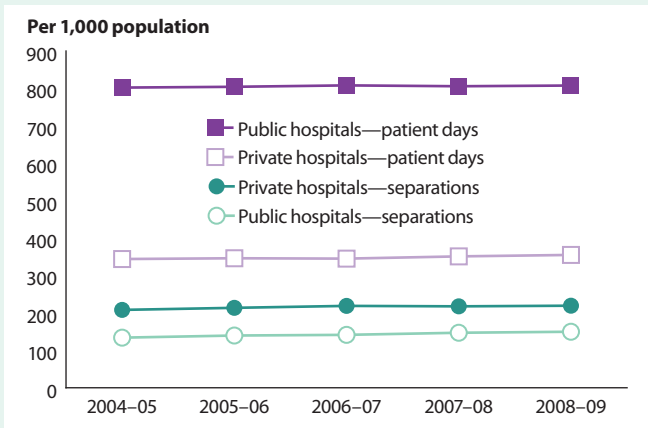
How has this activity changed over time?

Between 2004–05 and 2008–09, separations increased by 16.1% (14.4% in public acute hospitals and 18.8% in private hospitals).

The number of patient days in public acute hospitals increased by 7.4%. For private hospitals, patient days increased by 10.1%.

The numbers of patient days per 1,000 population were relatively stable for both public and private hospitals between 2004–05 and 2008–09 (Figure 15).

Figure 15 Separations and patient days per 1,000 population, public acute and private hospitals, 2004–05 to 2008–09



Who used these services?

In 2008–09, there were over 4.3 million separations for women and girls compared with 3.9 million separations for men and boys (52.7% and 47.3% of separations respectively) (Figure 16).

Separations increased for both males and females between 2004–05 and 2008–09. These increases were very marked for both males and females aged 55 and over (Figure 17).

Most notably, separations increased by 51% for males and by 34% for females aged 85 years and over.

Figure 16 Separations, by age group and sex, 2008–09

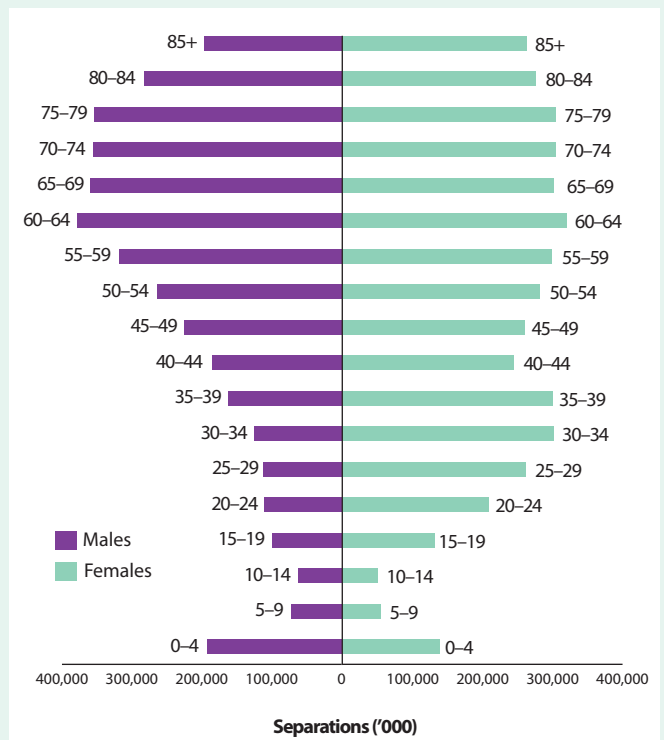
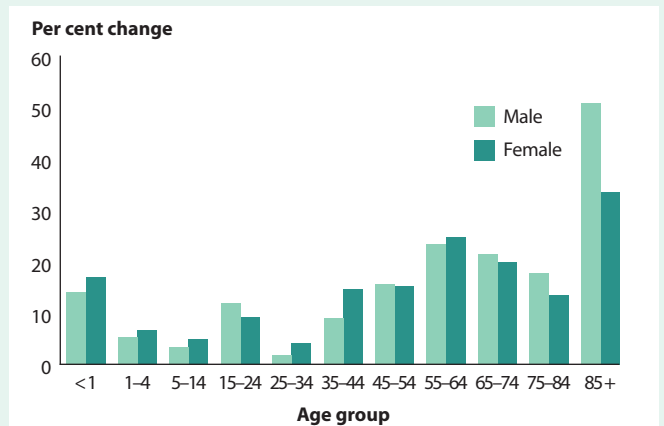


Figure 17 Change in the number of separations, by age group and sex, Australia, 2004–05 to 2008–09





Indigenous Australians

Aboriginal and Torres Strait Islander people, are hospitalised more often than other Australians (after accounting for age). Information on the number of hospitalisations of Indigenous people is limited by the accuracy with which Indigenous patients are identified in hospital records and the rates may be an underestimate.

In 2008–09:

- Indigenous Australians had a separation rate about two and a half times the separation rate for other Australians (870 per 1,000 population persons compared with 363 per 1,000).
- Indigenous Australians had more separations per 1,000 population than other Australians across all age groups (Figure 18).
- However, if hospitalisations for dialysis for renal disease are not counted, Indigenous Australians were hospitalised about 70% more often (503 per 1,000 population compared with 291 per 1,000). This illustrates the impact of renal failure and dialysis on the health of Indigenous Australians.

Remoteness

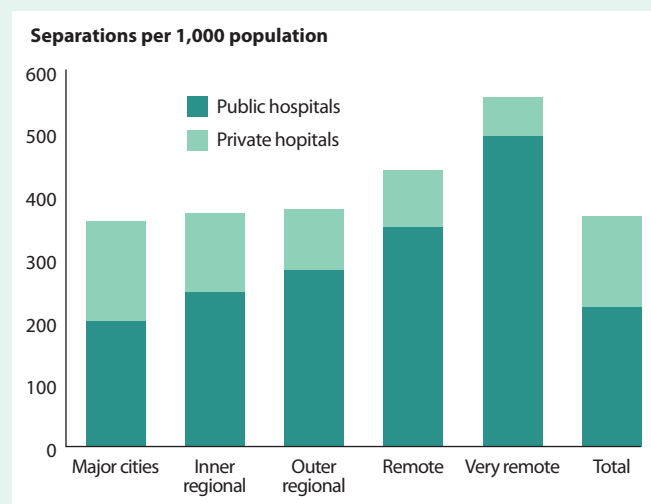
Remoteness area categories divide Australia into areas, depending on distances from population centres.

The number of separations per 1,000 population varied by remoteness area. Overall, separation rates were highest in *Very remote* areas (Figure 19).

For public hospitals, the number of separations per 1,000 population was highest for patients living in *Very remote* areas and lowest for patients living in *Major cities* (496 and 199 separations per 1,000 population, respectively).

For private hospitals, the separation rate was highest for patients living in *Major cities* and lowest for patients living in *Very remote* areas (160 and 62 separations per 1,000 population respectively).

Figure 19 Separations per 1,000 population, by remoteness area of usual residence, public and private hospitals, 2008–09

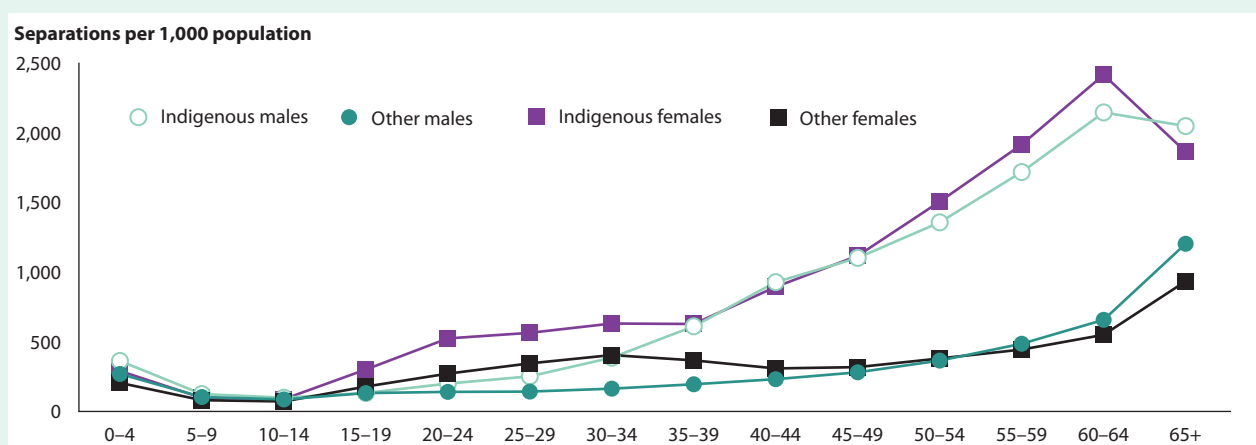


Socioeconomic status

Data describing where patients live can be used to derive an approximation of their socioeconomic status (SES) which, in turn, can be categorised into five equal population groups of socioeconomic disadvantage/advantage. If use of admitted patient services is equal for all SES groups, we would expect an equal number of separations for each group.

The number of separations varied by SES group. Overall, separation rates were highest in the lowest SES group (Figure 20).

Figure 18 Separations per 1,000 population, by Indigenous status and age group, 2008–09



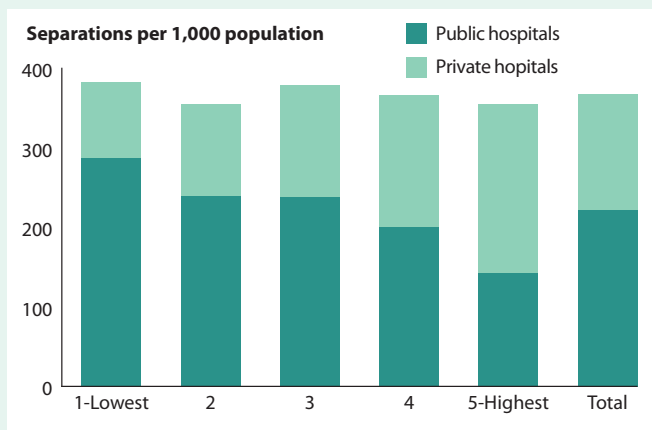
Notes

1. Other males/females includes separations for both non-Indigenous males/females and separations for which Indigenous status was not reported.
2. This figure includes data for New South Wales, Victoria, Queensland, Western Australia, South Australia and public hospitals in the Northern Territory.

For public hospitals, the number of separations was highest for patients living in areas classified as being the lowest SES group and lowest for patients living in areas classified as being the highest SES group (287 and 142 separations per 1,000 population, respectively).

For private hospitals, the number of separations was highest for patients living in areas classified as being the highest SES group and lowest for patients living in areas classified as being the lowest SES group (212 and 96 separations per 1,000 population, respectively).

Figure 20 Separations, by socioeconomic status group, public and private hospitals, 2008–09



Why did people receive this care?

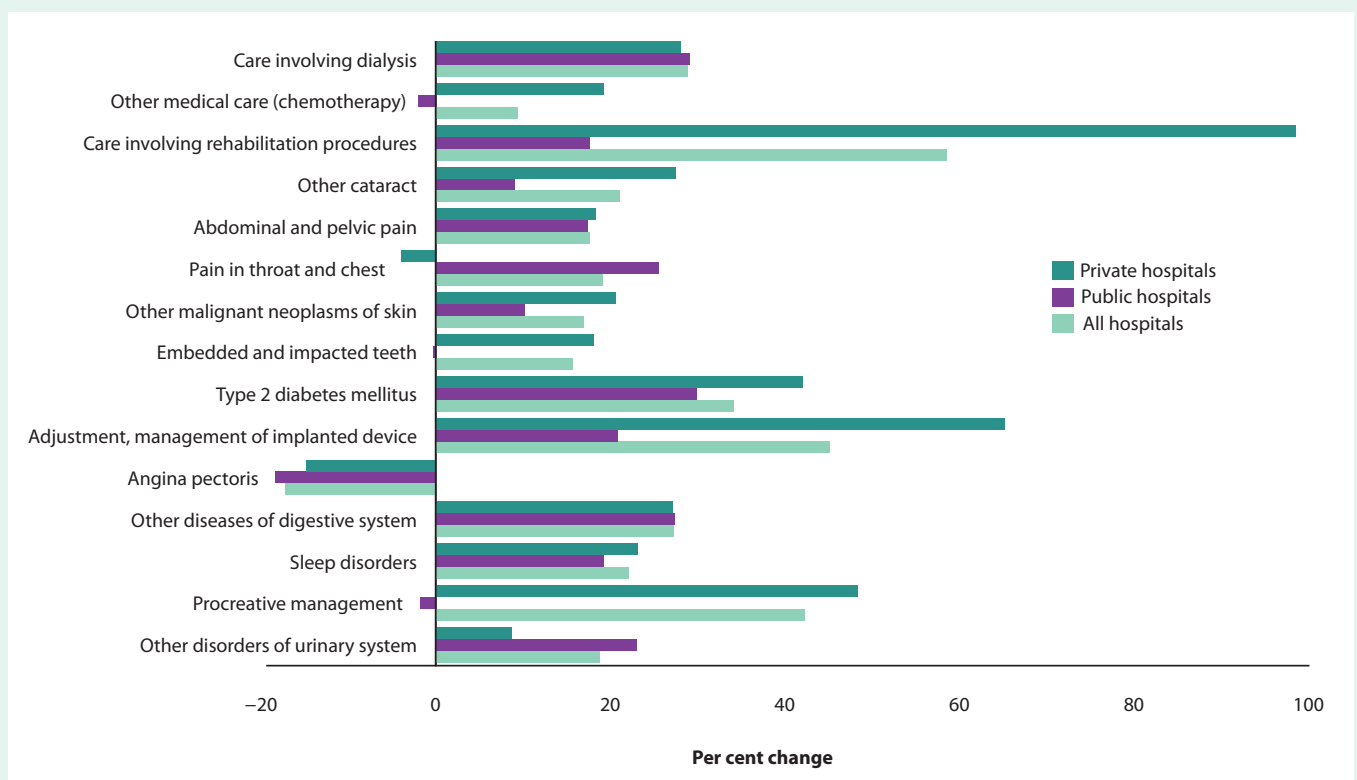
The reasons that patients receive admitted patient care are usually described in terms of a diagnosis. For injury and poisoning, it can also be described in terms of the cause of the injury, for example, a traffic accident or fall. For other types of care, it can be described in terms of a treatment for an ongoing condition (for example, dialysis for renal failure).

In 2008–09, many separations had a principal diagnosis reported that was a cancer (6.8%), a disease of the digestive system (10.3%), a disease of the respiratory system (4.5%), a disease of the circulatory system (5.8%), an injury or poisoning (6.7%), a mental disorder (4.0%) or a condition associated with pregnancy and childbirth (5.9%).

Some high-volume diagnoses have experienced relatively large changes in volume between 2004–05 and 2008–09 in either public or private hospitals or both (Figure 21). For example, separations for care involving dialysis increased by 29% in public hospitals (to 866,000) and 28% in private hospitals (to 185,000). Separations for angina pectoris decreased by 18% in public hospitals (to 47,000) and by 15% in private hospitals (to 20,000).

In 2008–09, injury and poisoning was the principal diagnosis for over 543,000 separations in Australian hospitals. External causes of injury and poisoning commonly reported included transport accidents (61,000),

Figure 21 Change in number of separations for selected principal diagnoses, public and private hospitals, 2004–05 to 2008–09





falls (170,000), accidental poisoning (13,000), intentional self-harm (27,000) and complications of medical and surgical care (107,000) (Figure 22).

Potentially preventable hospitalisations

The selected potentially preventable hospitalisations (PPHs) presented here are thought to have been avoidable if timely and adequate non-hospital care had been provided, either to prevent the condition occurring or to prevent the hospitalisation for the condition. They are identified based on the diagnoses reported for admitted patients.

The 690,000 PPHs represented 8.5% of all separations in 2008–09.

Overall, the number of PPHs per 1,000 persons increased by an average of 1.6% per year between 2004–05 and 2007–08, and decreased by 7.9% between 2007–08 and 2008–09. However, this decrease is likely to reflect a change in the way in which diabetes-related conditions were reported.

For chronic conditions, excluding diabetes, PPHs rose with increasing remoteness. There were 8.7 PPHs per 1,000 population in *Major cities*, and 18.0 per 1,000 in *Very remote* areas (Figure 23).

For acute conditions, the pattern was the same, ranging from 12.5 per 1,000 in *Major cities* to 30.7 per 1,000 in *Very remote* areas.

Figure 22 Injury and poisoning separations by cause, 2008–09

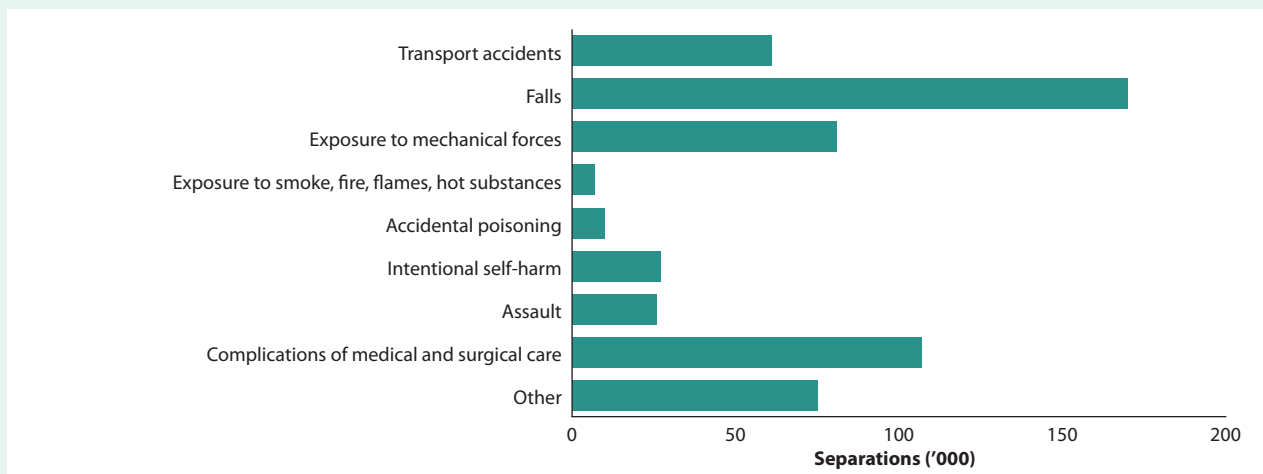
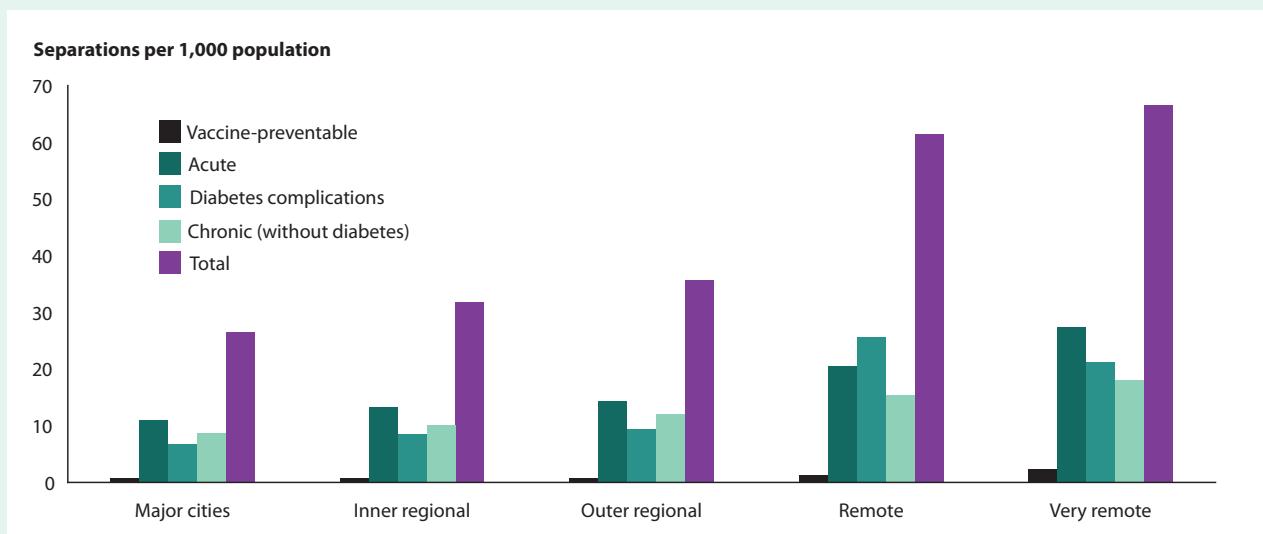


Figure 23 Potentially preventable hospitalisations by remoteness area of usual residence, 2008–09



The number of PPHs per 1,000 population varied with socioeconomic status (derived as an approximation from data on where patients live). For all three categories—vaccine-preventable, acute and chronic—the rates were highest for those classified as being in the lowest SES group and lowest for those classified as being in the highest SES group (1.0 and 0.6 per 1,000, 16.4 and 11.8 per 1,000, and 22.2 and 10.8 per 1,000, respectively).

What care was provided?

The care that is provided can be described in terms of:

- the overall type of care: medical (not involving a procedure), surgical (involving an operating room procedure), or other (involving a non-operating room procedure such as endoscopy)
- the intent of care: acute, sub-acute (such as rehabilitation or palliative care) or non-acute (such as maintenance care)
- the type of surgical or other procedure undertaken.

Medical, surgical or other care

In public hospitals, most separations were for *Medical* care—74% in 2008–09. Between 2004–05 and 2008–09, separations increased more for *Medical* care (16.2%), than for *Surgical* care (10.1%) and *Other* care (9.9%) (Figure 24).

In private hospitals, more separations were for *Surgical* care—41% in 2008–09. Between 2004–05 and 2008–09, separations increased most for *Medical* care (17.3%), followed by *Surgical* care (16.8%) and *Other* care (15.8%) (Figure 25).

Intent of care

Most hospital separations are for acute care, that is, care with the intent to cure the condition, alleviate symptoms or manage childbirth. Acute care was reported in 2008–09 for 93% of separations and 83% of patient days for public hospitals and for 94% of separations and 88% of patient days for private hospitals.

Rehabilitation, or improved functioning, was the next most commonly reported intent of care. It was reported for 2008–09 for 1.6% of separations and 7.9% of patient days for public hospitals, and for 4.2% of separations and 9.8% of patient days for private hospitals. More information about non-acute care is on page 26.

Procedures

Procedures can be surgical or non-surgical, can be used to treat or diagnose a condition, or be of a patient support nature, such as anaesthesia.

In 2008–09, one or more procedures were reported for 83% of separations in Australian hospitals.

Over 94% of separations from private hospitals recorded a procedure, compared with 76% from public hospitals. Overall, 55% of separations that reported a procedure occurred in the public sector.

In 2008–09, many separations had a procedure reported that was on the urinary system (16.0%), the digestive system (13.5%), the musculoskeletal system (6.7%) or the cardiovascular system (3.9%). Also commonly reported were separations with imaging services (8.3%) and separations with non-invasive, cognitive and other interventions, including allied health and general anaesthesia (60.9%).

Figure 24 Separations for *Medical, Surgical* and *Other* care, public hospitals, 2004–05 to 2008–09

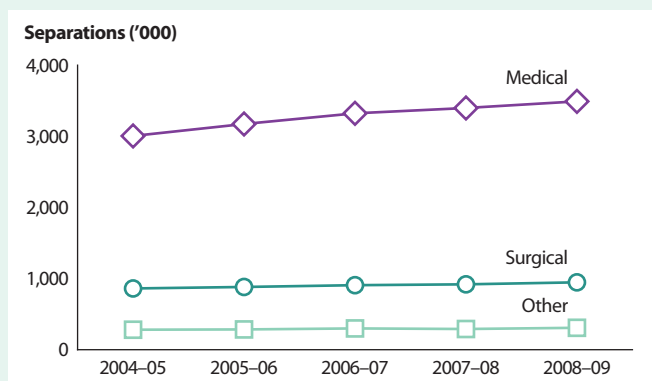
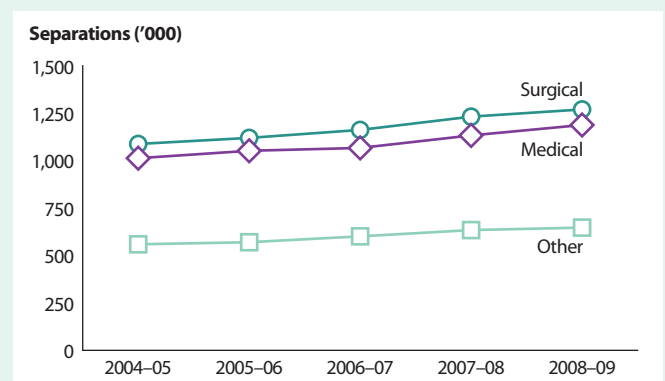


Figure 25 Separations for *Medical, Surgical* and *Other* care, private hospitals, 2004–05 to 2008–09

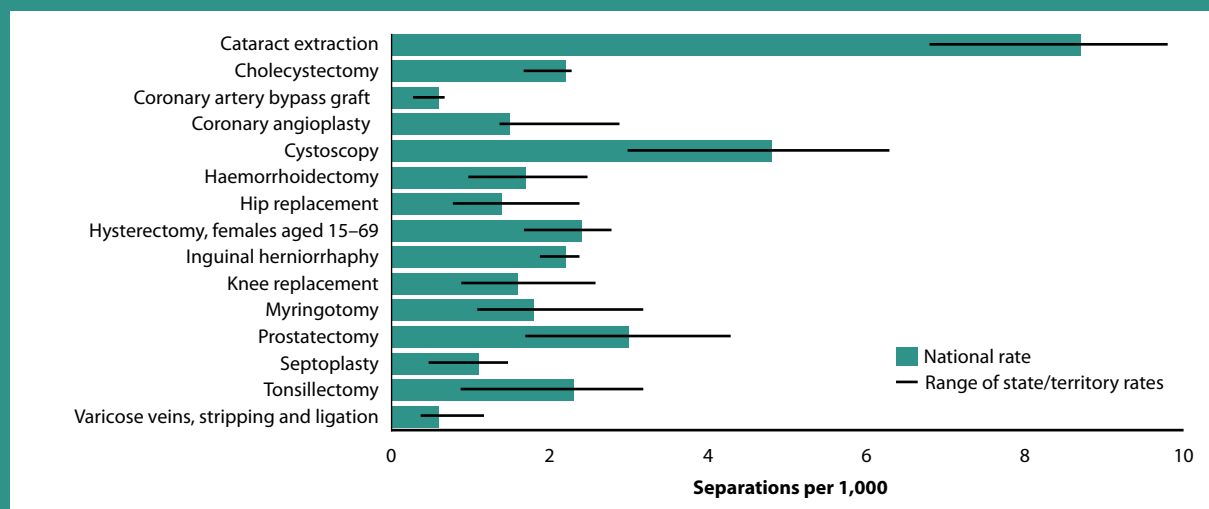


Hospital performance: rates of service—hospital procedures

The rates for these hospital procedures are presented as an indicator of appropriateness and may also be indicators of accessibility of care. The procedures presented here are those used in the NHA performance indicator—Rates of services: hospital procedures.

Figure 26 presents separations per 1,000 population for selected hospital procedures. The national rate is accompanied by the range of rates for these procedures by state or territory. There was some variation among states and territories for the selected procedures. For example, the national rate for *Cataract extraction* was 8.7 per 1,000 population, but the state/territory rate ranged from 6.8 per 1,000 to 9.8 per 1,000 population.

Figure 26 Separations per 1,000 population for selected hospital procedures, 2008–09



What was the safety and quality of the care?

Little information is routinely available on the safety and quality of admitted patient care in hospitals. Information on adverse events treated in hospital and readmission

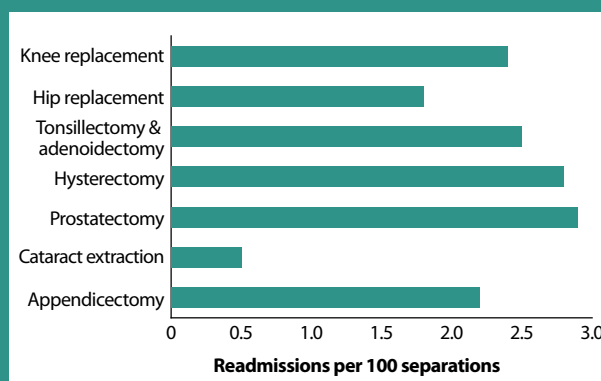
following surgery provides incomplete information on the safety of hospital care. There is no routinely available information on aspects of quality such as the effectiveness, continuity or responsiveness of hospital services.

Hospital performance: readmissions following surgery

The proportion of separations for selected types of surgery that result in readmission to hospital within 28 days is regarded as an indicator of the safety and quality of admitted patient care in hospitals. Data for this indicator are only available for public hospitals, and only for readmissions to the hospital in which the surgery was performed. Readmissions to other hospitals are not included, so the readmission rates are likely to be underestimated.

In 2008–09, knee replacements, tonsillectomy and/or adenoidectomy, hysterectomy and prostatectomy were followed by readmissions on about 3% of occasions. Readmissions following cataract surgery were relatively much rarer (Figure 27).

Figure 27 Readmissions within 28 days to the same public hospital following selected types of surgery, 2008–09



Hospital performance: separations with adverse events

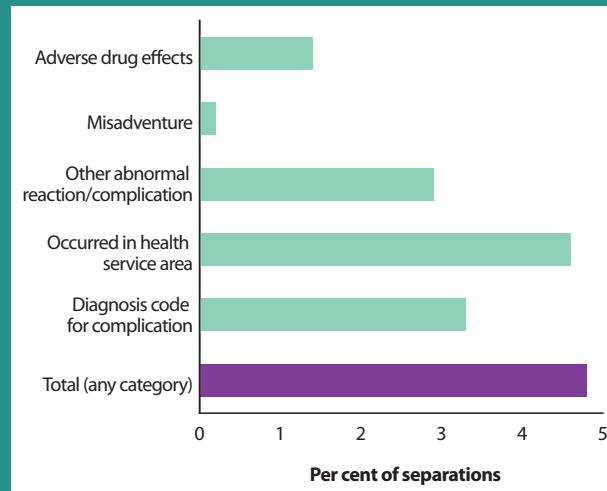
Separations with adverse events are regarded as an indicator of safety for hospitals. Adverse events are defined as incidents in which harm resulted to a person receiving health care. They include falls, and medication and medical device problems, some of which may be preventable.

The routinely collected data on admitted patient care contains information on selected types of adverse events in health care that have resulted in, or have affected, hospital admissions, rather than all adverse events that occurred in hospitals. The former Australian Council for Safety and Quality in Health Care estimated that an adverse event occurs in about 10% of hospitalisations in Australia.

In 2008–09, there were 390,000 separations that included a report of an adverse event (4.8 per 100 separations) (Figure 28). There were 5.6 per 100 separations in public hospitals and 3.6 per 100 separations in private hospitals. The data for public and private hospitals are not comparable because their casemixes differ and recording practices may be different.

Commonly reported adverse events included procedures causing abnormal reactions/ complications (235,000), adverse effects of drugs (114,000), haemorrhage and haematoma (36,000), and infections (32,000).

Figure 28 Proportion of separations with an adverse event reported, by type of adverse event, 2008–09

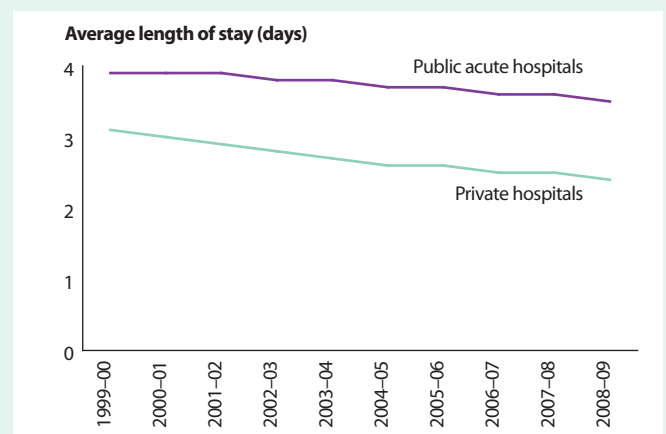


How long did patients stay?

Information on the average length of stay summarises how long admitted patients stay in hospital.

Including both same-day care (which is counted as one day's stay, even if it is only for a few hours) and overnight care (care that is for at least one night), the average length of stay was 3.2 days in 2008–09, 2.4 days in private hospitals and 3.5 days in public acute hospitals. These averages have been decreasing over time (Figure 29), reflecting the fact that the proportion of separations that are day-only has been increasing.

Figure 29 Average length of stay, public acute and private hospitals, 1999–2000 to 2008–09



Hospital performance: relative stay index

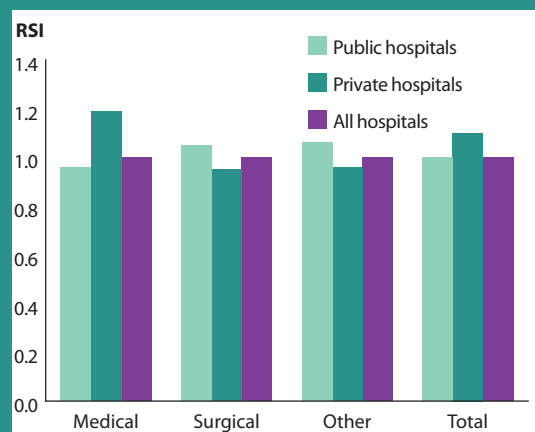
Relative stay indexes (RSIs) summarise the length of stay for admitted patients, with adjustments for casemix (the types of patients treated and the types of treatments provided). They are regarded as indicators of the efficiency of hospitals.

An RSI greater than 1.0 indicates that an average patient's length of stay is higher than would be expected, given the casemix for the separations being considered. An RSI of less than 1.0 indicates that the length of stay was less than would have been expected.

In 2008–09, there were relatively shorter lengths of stay for *Medical* separations in public hospitals (0.96, compared with 1.19 in private hospitals), and for *Surgical* separations in private hospitals (0.95, compared with 1.05 in public hospitals) (Figure 30).

Overall, the relative length of stay was lower in public hospitals than in private hospitals.

Figure 30 Relative stay index (directly standardised), for *Medical, Surgical and Other* care, public and private hospitals, 2008–09

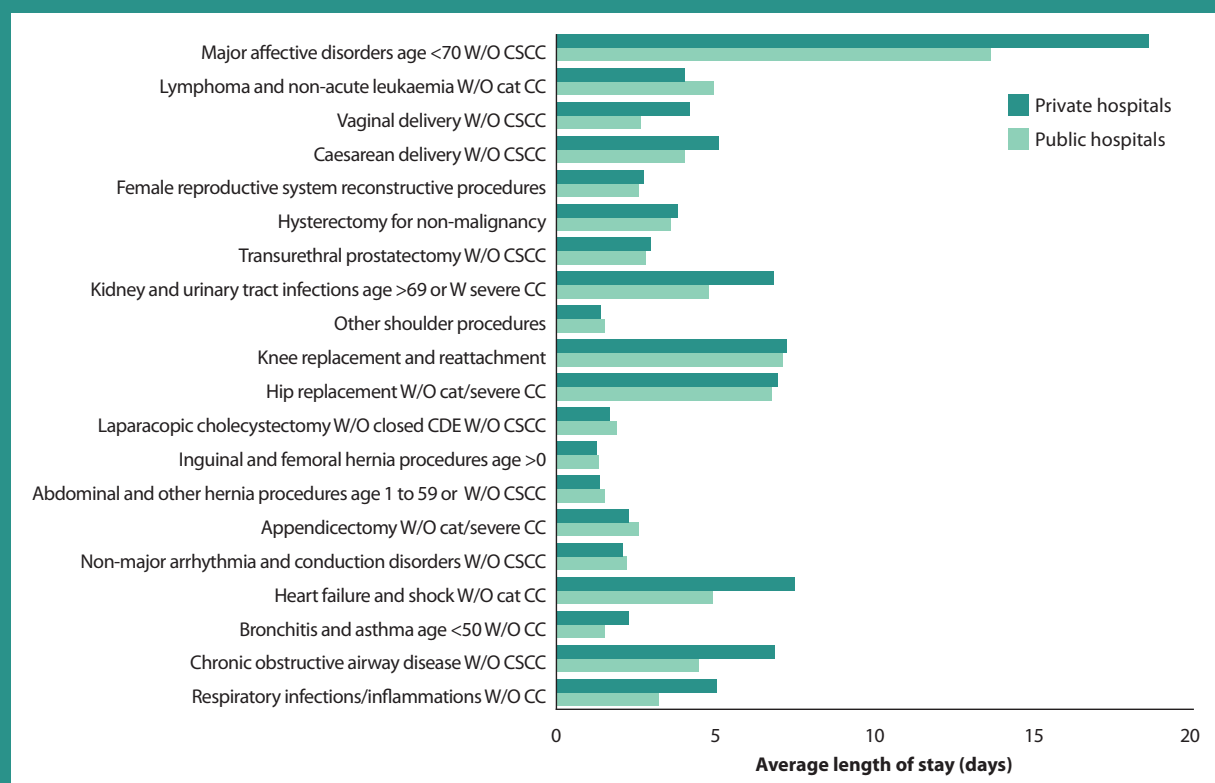


Hospital performance: average length of stay for selected types of separations

The average length of stay for 20 selected types of separations (defined using Australian Refined Diagnosis Related Groups, AR-DRGs) is regarded as an indicator of the efficiency of hospitals.

Figure 31 presents the average lengths of stay for these 20 selected AR-DRGs in public and private hospitals. There were notable differences (more than 1 day) in the average length of stay between public and private hospitals for seven of these AR-DRGs. The average length of stay for *Major affective disorders age <70 without catastrophic or severe complications or comorbidities* was 13.6 days for public hospitals and 18.6 days for private hospitals.

Figure 31 Average length of stay (days) for selected types of separations, public and private hospitals, 2008–09



cat catastrophic, CC complications or comorbidities, CDE common bile duct exploration, CCCC catastrophic or severe complications or comorbidities, W with, W/O without

Hospital performance: cost per casemix-adjusted separation

The average cost per separation is a measure of efficiency of admitted patient services. Patients with more complex conditions are likely to cost more than patients with less complex conditions. In order to compare the average cost per admitted patient across hospitals, it is necessary to adjust for the average complexity of patients treated in each hospital. This is called 'casemix adjustment'.

The average cost per casemix-adjusted separation in public hospitals increased from \$3,410 in 2004–05 to \$4,471 in 2008–09 (not adjusted for inflation).

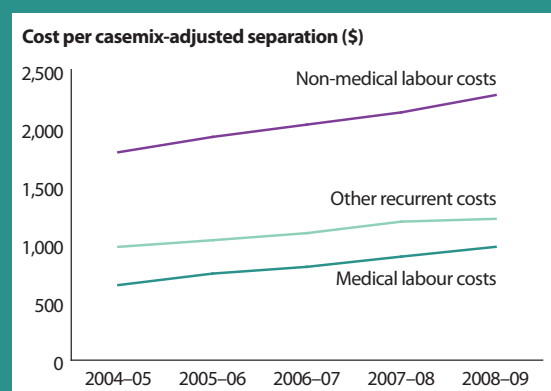
This represents a total increase of 27.5% in this period, an average increase of 6.3% annually (Figure 32).

In 2008–09 the average cost comprised:

- \$2,281 for non-medical labour expenditure
- \$974 for medical labour expenditure
- \$1,215 for other recurrent expenditure.

Other recurrent expenditure costs include domestic services; repairs and maintenance; administration; and medical, drug and food supplies.

Figure 32 Cost per casemix-adjusted separation, public hospitals, 2004–05 to 2008–09



How much did it cost?

We have information on average costs for public hospitals, but not for private hospitals. The cost of care (expenditure by the hospital) varies according to the length of stay, procedures undertaken and the care needs of the patient.

Who paid for the care?

Over half of separations in 2008–09 were public patients (53%, mainly those funded through Australian Health Care Agreements). *Private health insurance* accounted for a further

37%, and *Self-funded* patients and *Department of Veterans' Affairs* patients accounted for about 4% each (Figure 33).

Between 2004–05 and 2008–09, there was an overall increase in separations of 3.8% per year. Separations funded by *Private health insurance* increased by more than the overall increase (5.6% per year) (Figure 34).

Figure 34 Average annual change in number of separations by selected principal source of funds, 2004–05 to 2008–09

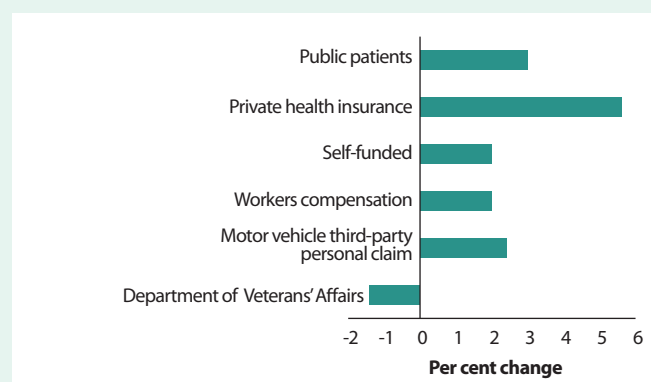
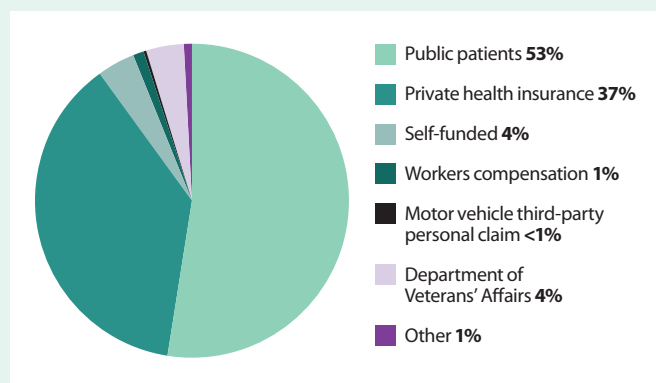


Figure 33 Proportion of separations by principal source of funds, 2008–09 (per cent)





Admitted patient care: same-day acute care

Same-day admitted patient care occurs when the patient is admitted and separated on the same day. This section reports on same-day acute care (referred to as same-day care), where the care was not for rehabilitation or other non-acute care (which together made up 2.6% of same-day care).

In 2008–09, 4.5 million, or 55.5% of separations, were same-day acute care separations. This included 2.4 million or 49.9% of separations from public hospitals and 2.1 million or 63.9% of separations from private hospitals.

Between 2004–05 and 2008–09, the proportion of same-day separations increased from 53.9% to 55.5%. On average, the number of same-day separations increased by 4.0% per year for public hospitals, and 5.1% per year for private hospitals.

Who used these services?

Indigenous Australians were hospitalised on a same-day basis at about three times the rate of other Australians.

Almost one in four same-day separations were for care involving dialysis (over 1.0 million). After excluding dialysis, the rate of same-day separations for Aboriginal and Torres Strait Islander people was lower than the rate for other Australians (Figure 35).

Figure 35 Same-day acute separations per 1,000 population, by Indigenous status, all hospitals, 2008–09



Persons usually resident in *Very remote* areas had 295 same-day separations per 1,000 population, compared with 204 per 1,000 nationwide.

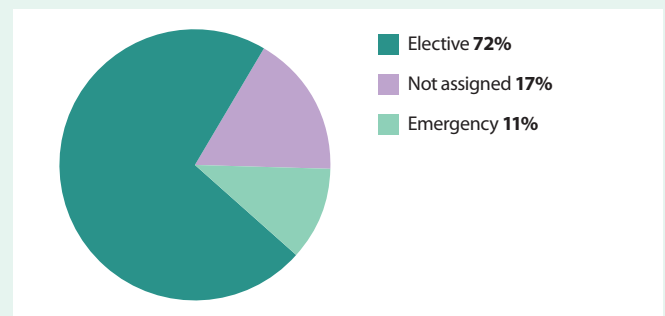
Same-day separation rates were similar for different socioeconomic status (SES) groups, ranging from 187 per 1,000 population for the second lowest SES group to 211 per 1,000 for the middle SES group.

How urgent was the care?

Admissions to hospital can be categorised as emergency (required within 24 hours), or elective (required at some stage beyond 24 hours). For some admissions, such as obstetric admissions, and planned care, such as dialysis, emergency/elective status is not assigned.

Over 71% of same-day separations were for elective care, 11% were for emergency care and about 17% were other care (not assigned) (Figure 36).

Figure 36 Same-day acute separations by urgency of admission, 2008–09



Why did people receive this care?

The most common principal diagnoses for same-day acute separations were:

- Care involving dialysis (over 1.0 million separations for renal failure)
- Other medical care (322,000 separations, mainly chemotherapy for cancer)
- Other cataract (126,000 separations).

What care was provided?

In both public and private hospitals, the majority of same-day acute separations were for *Medical care*.

Around 6.9 million procedures were reported for same-day separations. In public hospitals, about 82% of same-day separations involved a procedure and about 96% of total separations in private hospitals involved a procedure (2 million).

The most common procedure was haemodialysis, followed by pharmacotherapy.

Who paid for the care?

In public hospitals, almost 87% of same-day separations were public patients.

In private hospitals, *Private health insurance* funded about 77% of same-day separations.

Admitted patient care: overnight acute care

Overnight admitted patient care occurs when the patient is admitted and separated on different days (stays at least one night). This section reports on overnight acute care (referred to as overnight care), where the care was not for rehabilitation or other non-acute care (which made up 5.0% of overnight separations).

In 2008–09, 3.3 million or 40.9% of separations were overnight acute care separations. This included 2.3 million or 47.2% of separations from public hospitals and 1.0 million or 31.4% of separations from private hospitals.

Between 2004–05 and 2008–09, the number of overnight separations increased, on average, by 2.8% per year for public hospitals and by 1.7% per year for private hospitals.

Who used these services?

Indigenous Australians were hospitalised overnight at about twice the rate for other Australians.

Persons usually resident in Very remote areas had 252 overnight separations per 1,000 population, compared with 151 per 1,000 nationwide.

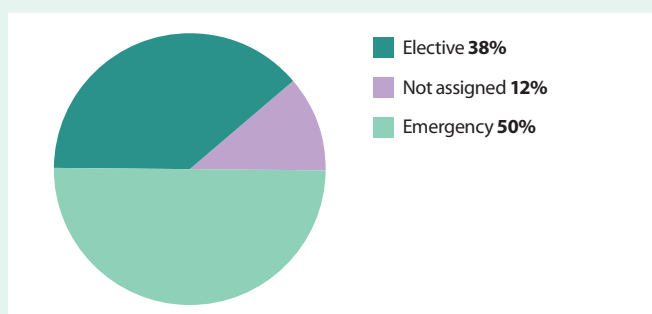
Separation rates varied by socioeconomic status, from 128 per 1,000 population for the highest SES group to 169 per 1,000 for the lowest SES group.

How urgent was the care?

Admissions to hospital can be categorised as emergency (required within 24 hours), or elective (required at some stage beyond 24 hours). For some, such as obstetric admissions (over 240,000 separations), emergency/elective status is not assigned.

About 50% of overnight separations were for emergency care, 38% were for elective care and about 12% were other planned care (not assigned) (Figure 37).

Figure 37 Overnight acute separations by urgency of admission, 2008–09



Why did people receive this care?

The most common principal diagnoses for overnight separations included:

- Pain in the throat and chest (over 66,000 separations)
- Pneumonia (55,000 separations)
- Sleep disorders (55,000 separations)
- Various heart-related conditions (over 171,000 separations), such as Heart failure, Angina pectoris, Acute myocardial infarction (heart attack) and Atrial fibrillation and flutter.

What care was provided?

In public hospitals, over 64% of overnight separations were for *Medical* care.

In private hospitals, over 52% of overnight separations were for *Surgical* care.

How long did patients stay?

The average length of stay for overnight acute separations was 5.4 days for public hospitals and 4.8 days for private hospitals.

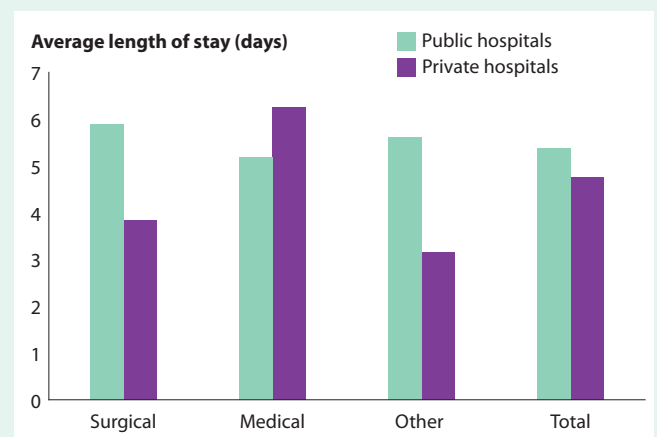
The average length of stay for *Medical* care was greater in private hospitals, and was notably higher in public hospitals than in private hospitals for *Surgical* and *Other* care (Figure 38).

Who paid for the care?

In public hospitals, almost 84% of overnight separations were public patients.

In private hospitals, *Private health insurance* funded about 83% of overnight separations.

Figure 38 Average length of stay for overnight acute separations, public and private hospitals, 2008–09



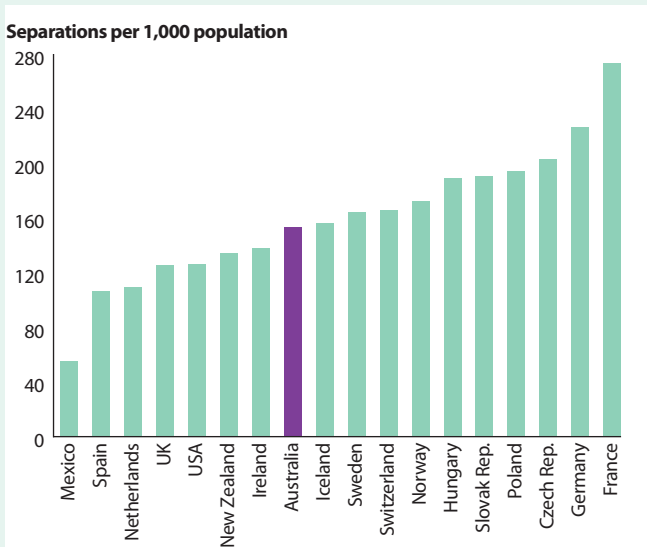


International comparisons

The number of overnight separations per 1,000 persons in Australia for 2008–09 was in the middle of the range that other OECD countries reported for recent years (Figure 39) (OECD 2009).

Comparability of international separation rates is likely to be affected by differences in definitions of hospitals, collection periods and admission practices.

Figure 39 Overnight separations per 1,000 population, Australia, 2008–09, and selected OECD countries, 2007



Rep. Republic.

Notes

1. Data for OECD countries vary in collection periods. Data are for 2007 except for Australia (2008–09) and the USA (2006).
2. Separations include all care types.

Admitted patient care: elective surgery

Separations for elective surgery are defined as having a surgical procedure, and being admitted on an elective basis. Elective surgery can be provided on a same-day basis or in an overnight admission (a hospitalisation that lasts for at least one night). Public elective surgery describes elective surgery provided in public hospitals and elective surgery provided to public patients in private hospitals.

There were over 1.8 million elective surgery separations in 2008–09, 638,000 in the public sector and 1.2 million in the private sector.

The number of elective surgery separations increased between 2004–05 and 2008–09 by 1.7% for public hospitals and 4.1% for private hospitals.

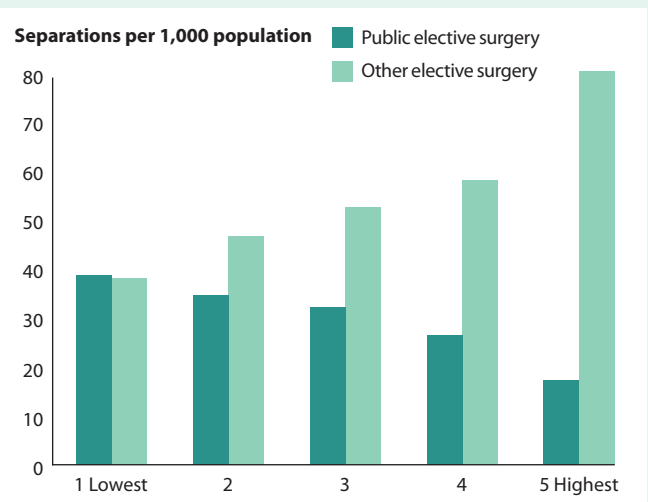
Who used these services?

There was some variation in the rates of access to both public elective surgery and elective surgery for other patients by socioeconomic status (SES).

The public elective surgery separation rate was lowest for those classified as being in the highest SES group (17 per 1,000) and highest for those in the lowest SES group (39 per 1,000).

In contrast, the number of other elective surgery separations per 1,000 population was highest for those classified as being in the highest SES group (71 per 1,000) and decreased with socioeconomic status to 39 per 1,000 population for the lowest SES group (Figure 40).

Figure 40 Separations per 1,000 population for public and other elective surgery, by socioeconomic status group, 2008–09



Hospital performance: waiting times for elective surgery

Median waiting time for elective surgery is a measure of access to elective surgery. Data were available for a subset of elective surgery in public hospitals, defined as those removed from waiting lists for a range of surgical procedures. The median waiting time is the number of days within which 50% of patients were removed from elective surgery waiting lists.

In public hospitals, 50% of patients waited 34 days or less for elective surgery in 2008–09, an increase from 29 days in 2004–05. A total of 2.9% waited more than a year—the least since 2004–05.

- Ophthalmology, Ear, nose and throat surgery and Orthopaedic surgery were the surgical specialties with the longest median waiting times (65, 58 and 53 days respectively) in 2008–09 (Figure 41).
- Cardio-thoracic surgery had the shortest median waiting time (12 days).
- Overall, the median waiting times for patients with neoplasm-related (mostly cancer) principal diagnoses (median 20 days) were 14 days shorter than the median waiting times for patients overall (Figure 42). For Ear, nose and throat surgery, patients with cancer waited 13 days, compared with 57 days overall.

Figure 41 Median waiting time for elective surgery, by specialty of surgeon, 2008–09

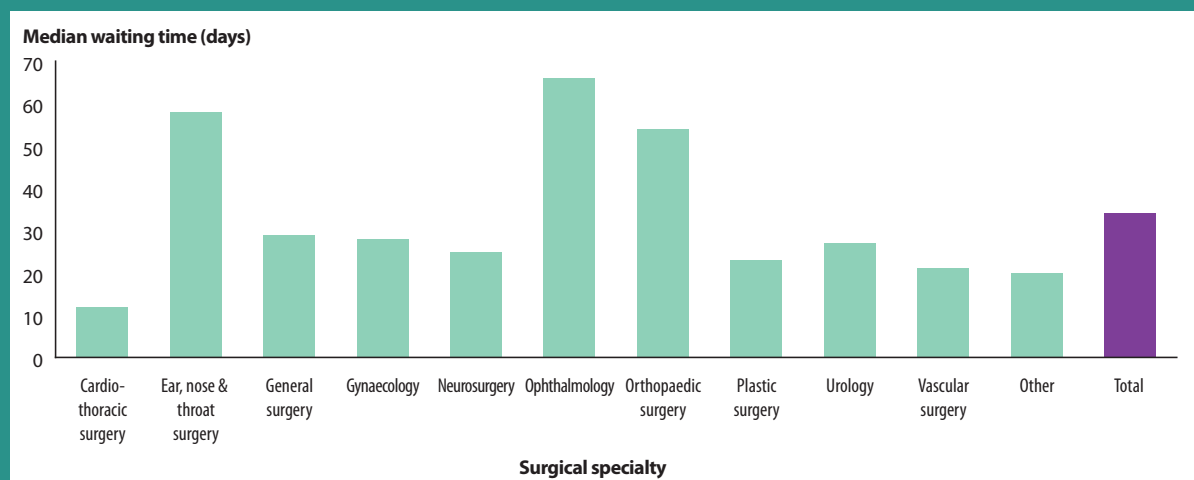
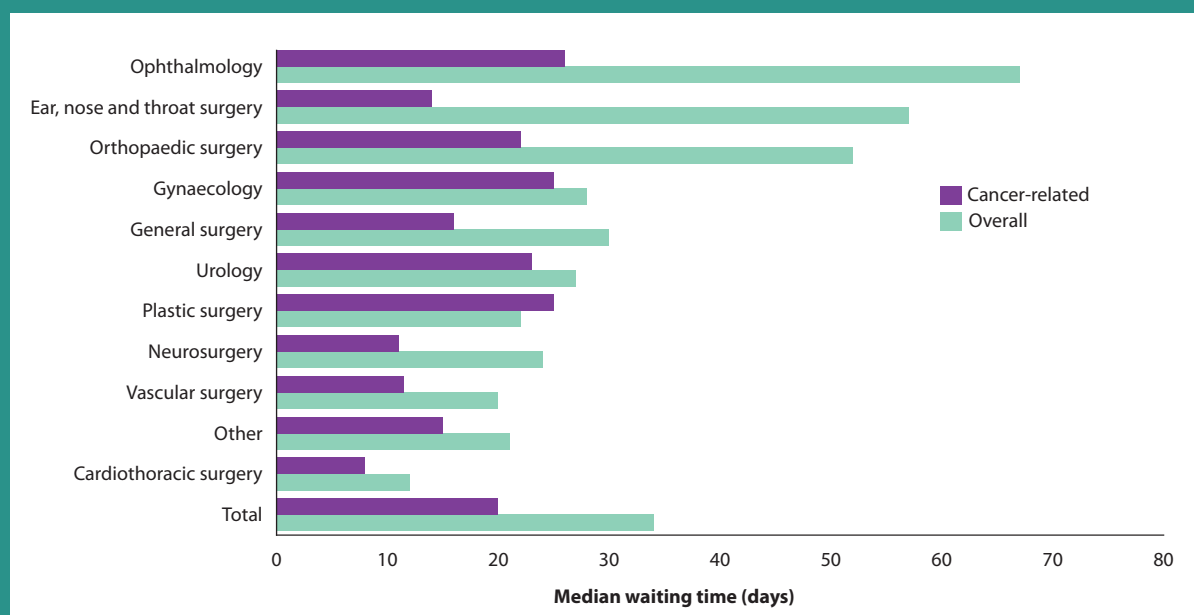


Figure 42 Median waiting times, overall and cancer-related, by specialty of surgeon, 2008–09





Admitted patient care: sub-acute and non-acute care

Overall, 3.6% of separations and 15.5% of patient days in 2008–09 were for sub-acute and non-acute admitted patient care. This care includes *Rehabilitation, Palliative care, Maintenance care, Psychogeriatric care* and *Geriatric evaluation and management* (figures 43 and 44). *Rehabilitation* care was the most commonly provided care type. The term ‘non-acute care’ is used below to describe both sub-acute and non-acute care.

The volume of these services increased over the period 2004–05 to 2008–09, particularly for rehabilitation in private hospitals (19%) and maintenance care in public hospitals (9%) (Figure 45).

Who used the services?

About 56% of non-acute separations were for females, and less than 30% of non-acute separations were for people aged under 65 years (Figure 46).

About 1.0% of non-acute separations were for Indigenous Australians, compared to 3.6% of admitted patient separations overall.

Persons usually resident in *Remote* areas had 7 separations per 1,000 population for non-acute care, compared with 13 per 1,000 nationwide.

Separation rates varied by socioeconomic status, from 10 per 1,000 population for those areas classified as being in the lowest SES group to 19 per 1,000 for those areas classified as being in the highest SES group.

Figure 43 Separations for non-acute care, public and private hospitals, 2008–09

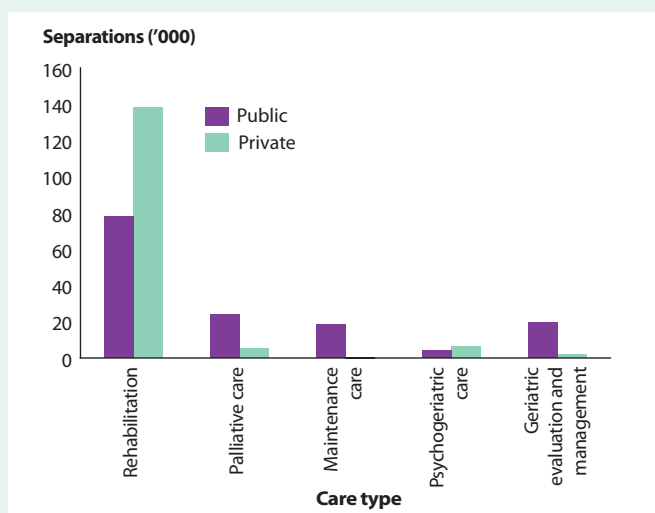


Figure 44 Patient days for non-acute care, public and private hospitals, 2008–09

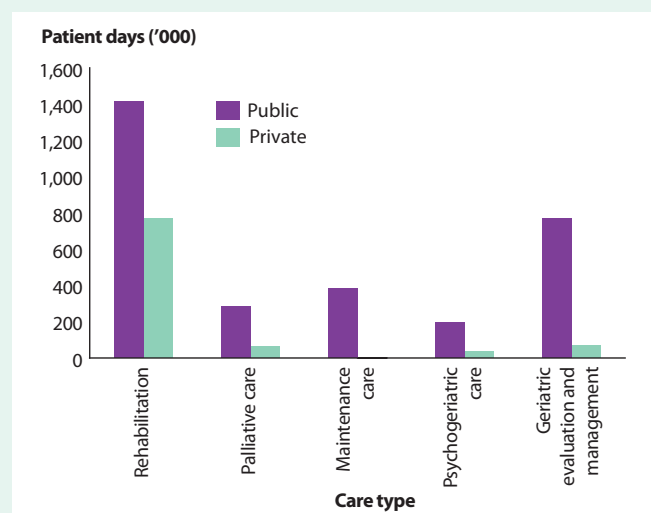


Figure 45 Change in number of separations for non-acute care, public and private hospitals, 2004–05 to 2008–09

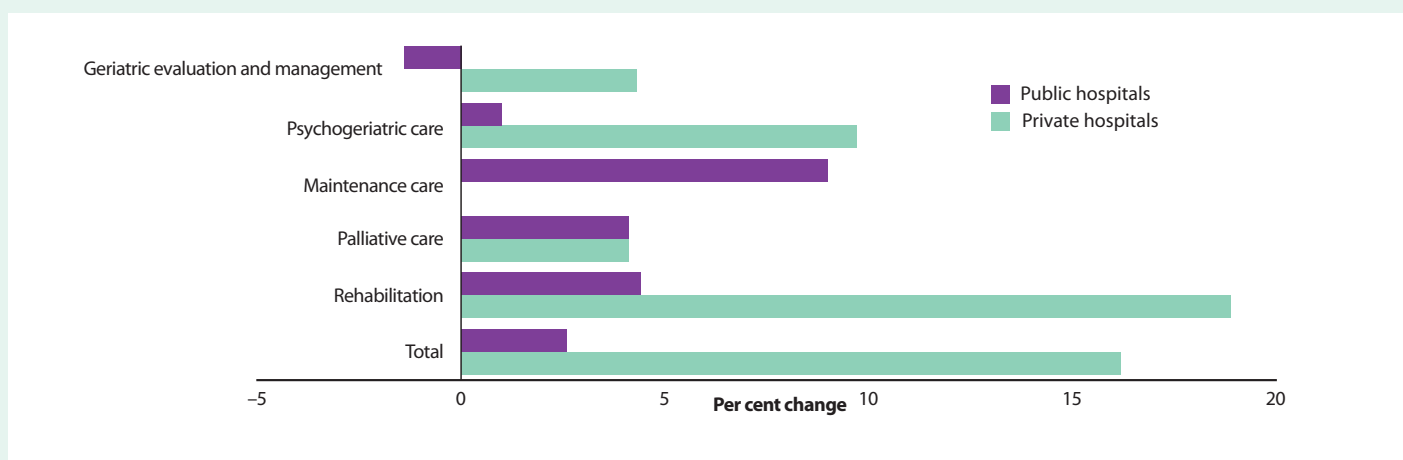
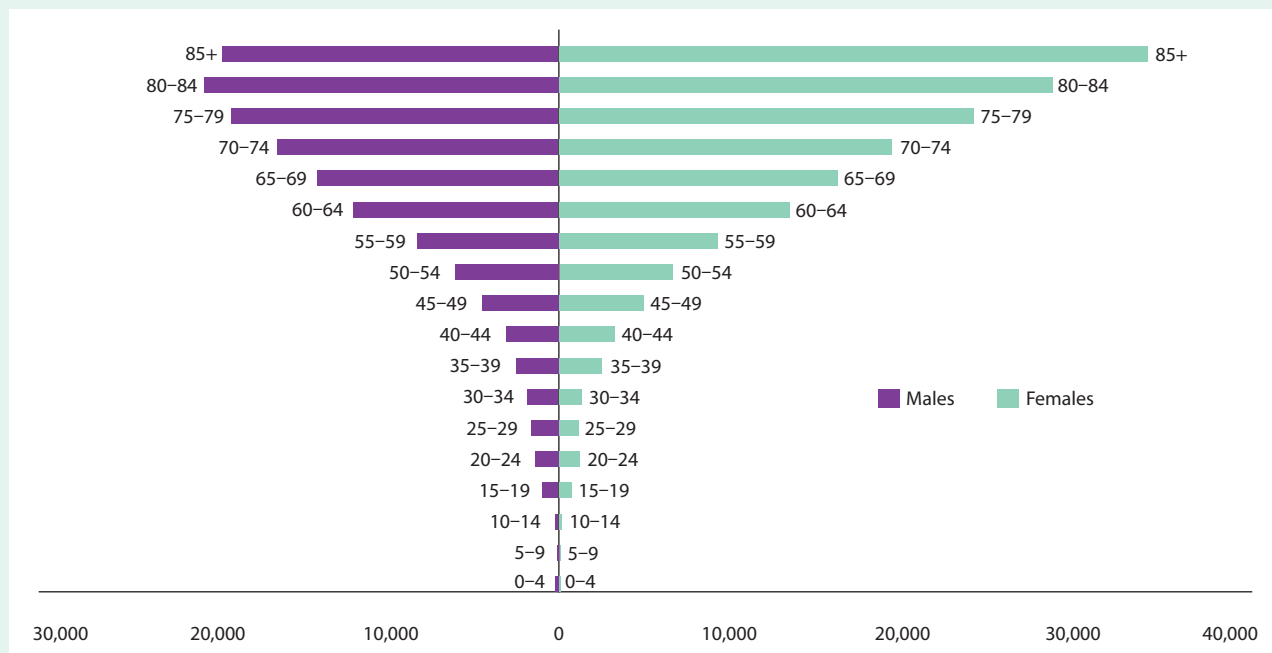


Figure 46 Separations for non-acute care, by sex and age group, 2008–09



How did people access these services?

About half of separations for non-acute care were either transferred from another hospital or that, within the same hospital, the patient’s type of care had changed (for example, from *Acute* care to *Rehabilitation*) (Figure 47). This contrasts with only 5% of separations overall that were transferred or were a care type change.

Over 64% were reported as elective admissions and 31% were other planned care.

Why did people receive this care?

The most common principal diagnosis was for Care involving use of rehabilitation procedures (217,000 separations).

Looking at second diagnoses for separations involving rehabilitation care, the most common were:

- Arthrosis of the knee (28,000 separations)
- Arthrosis of the hip (14,000 separations)
- Fracture of the femur (hip fracture, 13,000 separations).

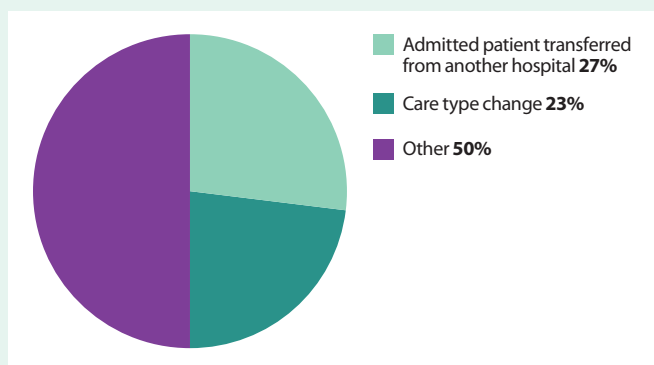
What care was provided?

Around 680,000 procedures or other interventions were reported for non-acute separations. In public hospitals, about 80% of non-acute separations involved a procedure and about 91% of private hospital non-acute separations involved a procedure.

The most common were allied health interventions, including:

- physiotherapy (over 213,000 separations)
- occupational therapy (133,000 separations)
- social work (79,000 separations)
- dietetics (45,000 separations).

Figure 47 Separations for non-acute care, by mode of access, 2008–09



How urgent was the care?

Under 5% of separations for non-acute care were reported as emergency admissions, compared to 27% of separations overall.



How long did patients stay?

The average length of stay for non-acute separations was 6.2 days in private hospitals and 21.1 days in public hospitals:

- For *Rehabilitation*, the average length of stay was 5.6 days in private hospitals and 18.1 days in public hospitals.
- Separations for *Maintenance care* had the longest average length of stay (38.6 days), followed by *Geriatric evaluation and management* (20.9 days) and *Psychogeriatric care* (21.0 days).

Who paid for the care?

In public hospitals, over 78% of non-acute separations were public patients, and 7% were funded by the *Department of Veterans' Affairs*.

In private hospitals, *Private health insurance* funded about 78% of non-acute separations, and 13% were funded by the *Department of Veterans' Affairs*.

How was care completed?

Just over three-quarters of separations for non-acute care were discharged to their usual place of residence, compared with over 92% of all admitted patient separations.

About 6% of separations for non-acute care were discharged or transferred to another hospital or other health care accommodation.

A further 6% were discharged to a residential aged care service (that was not their usual place of residence), compared with 2% overall:

- For *Rehabilitation* 88% of separations were discharged to their usual place of residence, compared with 32% of separations for *Palliative care* (figures 48 and 49)
- Over half (56%) of *Palliative care* separations ended in the death of the patient (Figure 49).

Figure 48 Separations for Rehabilitation care by mode of separation, 2008–09

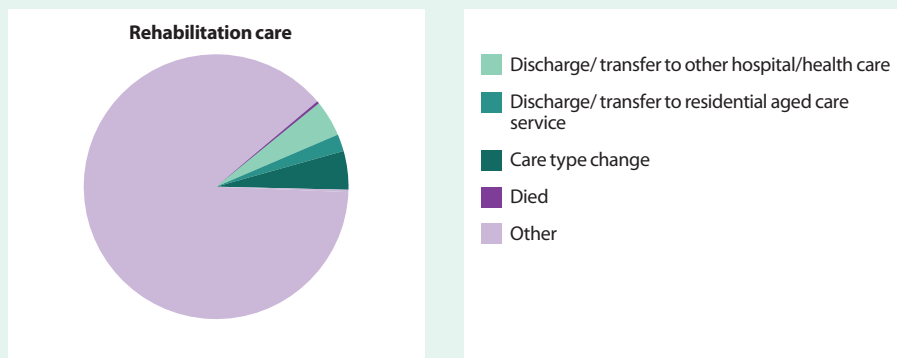
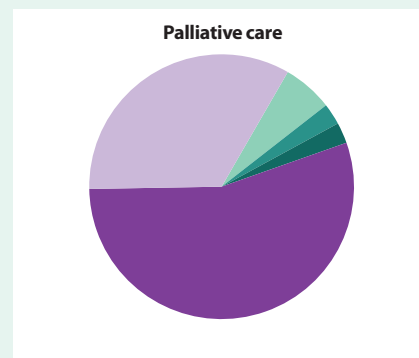


Figure 49 Separations for Palliative care by mode of separation, 2008–09



References

- ABS (Australian Bureau of Statistics) 2010. Private hospitals Australia 2008–09. ABS cat. no. 4390.0. Canberra: ABS.
- AIHW (Australian Institute of Health and Welfare) 2009. Health expenditure Australia 2007–08. Health and welfare expenditure series no. 37. Cat. no. HWE 46. Canberra: AIHW.
- AIHW 2010. Australian hospital statistics 2008–09. Health services series no. 34. Cat. no. HSE 84. Canberra: AIHW.
- OECD (Organisation for Economic Co-operation and Development) 2009. OECD health data 2009: statistics and indicators for 30 countries. Paris: OECD <www.oecd.org/health/healthdata>.