

# **Australian hospital statistics 1997–98**

The Australian Institute of Health and Welfare is an independent health and welfare statistics and information agency. The Institute's mission is to inform community discussion and decision making through national leadership in the development and provision of authoritative and timely information on the health and welfare of Australians.

HEALTH SERVICES SERIES

# **Australian hospital statistics 1997–98**

Australian Institute of Health and Welfare  
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### **Australian Institute of Health and Welfare**

Board Chair  
Professor Janice Reid

Director  
Dr Richard Madden

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

Geoff Davis (patient statistics): Phone 02 6244 1049  
Ian Titulaer (hospital statistics): Phone 02 6244 1107  
Australian Institute of Health and Welfare  
GPO Box 570  
Canberra ACT 2601

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# Foreword

Australian Hospital Statistics is now established as the authoritative national information set on activity in all Australian hospitals. *Australian Hospital Statistics 1997–98* is the fourth report in this series, and the third published within twelve months of the end of the reference year, building on similar reports for 1995–96 and 1996–97. As in the previous years, this reflects a huge effort by data providers (in public and private hospitals, and in State and Territory health authorities), and by a large number of Institute staff.

The production of this year's report has been guided by the Institute's Australian Hospital Statistics Advisory Committee which was established in 1998. This Committee includes representatives of the State and Territory health authorities and a range of other hospital data users. The members have generously helped the Institute to shape the report to suit the needs of users and assisted the Institute with forward planning for future hospital statistics reports. The open and frank discussions within the Committee have, in one year, gone a long way towards more harmonised Australian hospital statistics.

This year's report sees Chapter 2 providing a focus on hospital performance indicators, again released in a timely manner through publication in this report. Other new initiatives are the inclusion of maps depicting hospitalisation rates by geographical area, summary information from the Department of Health and Aged Care's 1997–98 National Hospital Cost Data Collection and an expanded range of accompanying tables on the Institute's Internet site, including some for Australian Refined Diagnosis Related Groups, version 4.0.

Next year, Australian Hospital Statistics will, for the first time, report hospital activity using the ICD-10-AM classification. Four States and Territories introduced this classification on 1 July 1998 and the remainder are to do so on 1 July 1999. The Institute will map 1998–99 data provided by the latter group from ICD-9-CM to ICD-10-AM for the publication.

The data that form the basis of this report are under continuing review and are being further developed through a range of initiatives under the National Health Information Agreement. It is anticipated that these developments, improved timeliness in data provision and report preparation, further input from the Australian Hospital Statistics Advisory Committee and feedback from users of this report will combine over the next few years to continue to improve the Institute's reporting of hospital data.

Richard Madden  
Director  
June 1999

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Within the Institute, the report was prepared by Geoff Davis, Narelle Grayson, Paul Halliday, Jenny Hargreaves, Paul Magnus, Ruth Penm, Janis Shaw and Ian Titulaer. John Goss and Tony Hynes provided advice on the hospital expenditure data and Warwick Conn prepared the medical workforce data. Warwick Emanuel and David Hamilton prepared and managed the databases. Amanda Nobbs coordinated the printing and publication process.

Jenny Hargreaves and Janis Shaw managed the project.

# Abbreviations

ABS	Australian Bureau of Statistics
ACHS	Australian Council on Healthcare Standards
AGPS	Australian Government Publishing Service
AIHW	Australian Institute of Health and Welfare
ALOS	Average length of stay
AN-DRG	Australian National Diagnosis Related Group
AR-DRG	Australian Revised Diagnosis Related Group
ASGC	Australian Standard Geographical Classifications
CC	Complications and comorbidities
C.D.E.	Common bile duct exploration
CGC	Commonwealth Grants Commission
conn.	Connective
def.	Deficiency
DHSH	Department of Human Services and Health
diag.	Diagnosis
dis.	Diseases
DPIE	Department of Primary Industry and Energy
DRG	Diagnosis Related Group
DVA	Department of Veterans' Affairs
ECMO	Extracorporeal membrane oxygenation
HASAC	Health and Allied Services Advisory Council
ICD-9-CM	International Classification of Diseases, 9th revision, Clinical Modification
ICD-10-AM	International Statistical Classification of Diseases, and Related Health Problems, 10 <sup>th</sup> Revision, Australian Modification
IFRAC	Inpatient fraction
mal.	Malignant
MDC	Major Diagnostic Category
n.a.	Not available
nec	Not elsewhere classified
NHCDC	National Hospital Cost Data Collection
NHMBWG	National Health Ministers Benchmarking Working Group
NIOOS	Non-inpatient occasions of service
n.p.	Not published
OECD	Organisation for Economic Cooperation and Development
op.	Operation
procs	Procedures
re.	Related to
SCRCSSP	Steering Committee for the Review of Commonwealth/State Service Provision
SLA	Statistical Local Area
sub.	Subcutaneous
VMO	Visiting Medical Officer
W	With
W/O	Without
..	Not applicable



# Highlights

## Hospitals, beds and staff

- There were 763 public acute hospitals operating in Australia in 1997–98.
- Although this figure suggests an increase in the number of hospitals since 1996–97, the variation is mostly due to changes in administrative arrangements which occur from year to year, and data are not comparable. A more useful indicator of the quantum of hospital services is the number of available beds. In 1997–98 there were 55,735 beds, a small decline from 56,836 beds reported in the previous year.
- One bed was available for every 332 Australians. This ranged from one bed for every 211 persons in remote areas to one bed for every 366 in metropolitan areas.
- Salaries and wages were 63% of total hospital operating costs in 1997–98.
- Nurses and salaried medical officers made up a little over half (53%) of total full time equivalent staff of public hospitals. The ratio was five nurses to one salaried doctor.

## Patient numbers and lengths of stay

- The throughput of patients of both public and private hospitals in Australia continues to increase from year to year.
- Between 1996–97 to 1997–98, separations from public acute hospitals increased by 3% and from private hospitals increased by 6%. The private hospitals' share of overall patient separations was 32% in 1997–98.
- Numbers of patient days in public acute hospitals were approximately equal to patient days in the previous year—15.2 million. Private hospital patient days increased by 3% to 6.0 million and were 27% of all patient days.
- The average length of stay in hospitals decreased in 1997–98, to 4.1 days from 4.2 days in 1996–97, following the overall pattern of decline shown in previous years. Private hospital stays averaged 3.3 days compared with 4.0 in public acute hospitals.
- A major factor in the shorter lengths of stay was an increased number of same day separations, now close to half of all separations (46.3%). For patients staying at least one night, average lengths of stay have fallen marginally over recent years.
- Fewer patients were admitted as private patients in public hospitals during 1997–98. Less than one in 10 public hospital patients were private patients, compared to one in six in 1993–94.

# Patient characteristics

## Age, sex and Indigenous status

- Females accounted for 54% of separations in 1997–98 although they comprised 50.3% of the population. There were more separations for females than males in all age groups from 15 to 54 years, which includes women who attend for childbirth, and in the 75 years and over age groups, where women outnumber men in the population.
- Australians aged over 65 years, comprising 12% of the total population, accounted for 31% of total hospital separations and 46% of patient days. The average length of stay for these patients was 6.0 days, compared with 4.1 days for all patients.
- Aboriginal and Torres Strait Islander peoples had almost twice the separation rate of the overall Australian population, 86% higher, after allowing for age structure. This higher rate is likely to be an underestimate because the identification of Aboriginal and Torres Strait Islanders as patients is incomplete.

## Diagnoses, procedures and AN-DRGs

- Principal diagnoses in the National Health Priority Areas of cardiovascular health, cancer control, injury prevention and control, mental health and diabetes accounted for 41% of total patient days in 1997–98, representing more than 9 million patient days.
- Mental disorders (3.1 million patient days) and cardiovascular disease (2.5 million patient days) contributed most to this Priority Areas total.
- Patient days associated with diabetes as a principal diagnosis (166,495) were less than for other Priority Areas. However, when diabetes as an additional diagnosis was counted, the number of patient days increased to 2.2 million.
- For three out of four hospital separations, there was an operation or other procedure reported. *Operations on the digestive system* were the most commonly reported procedure in private hospitals. In public hospitals, *operations on the cardiovascular system* were the most commonly reported.
- The most common Australian National Diagnosis Related Group (AN-DRG) in public hospitals in 1997–98 was *Admit for renal dialysis*, accounting for 10.2% of total public hospital separations. Other common AN-DRGs included *Chemotherapy* (3.6%), and *Vaginal delivery without complicating diagnosis* (3.0%).
- The corresponding top three AN-DRGs in the private sector were *Other gastroscopy for non-major digestive disease without complications and comorbidities*, accounting for 6.0% of total private hospital separations, *Other colonoscopy without complications and comorbidities* (5.4%) and *Lens procedures without vitrectomy and without complications and comorbidities* (3.8%).

# 1 Introduction

*Australian Hospital Statistics 1997–98* follows the Australian Institute of Health and Welfare's (AIHW's) earlier Hospital Utilisation and Costs Study reports and the most recent report in this series, *Australian Hospital Statistics 1996–97* (AIHW 1998a).

The data were supplied to the Institute by the State and Territory health authorities, and by the Department of Veterans' Affairs for the hospital it operated in New South Wales until September 1997. Data were of two main types. The first, collated by the Institute as the National Public Hospital Establishments Database, included information about public hospitals, their resources, expenditure and revenue, and summary information on services provided to admitted and non-admitted patients. The second type, collated as the National Hospital Morbidity Database, was patient-level data on the diagnoses and other characteristics of admitted patients in both public and private hospitals, and on the hospital care they received.

The collection and reporting of the data in this report were undertaken by the Institute under the auspices of the Australian Health Ministers' Advisory Council through the National Health Information Agreement. Most of the data collected were as specified in the National Minimum Data Set for Institutional Health Care and data element definitions were as specified for 1997–98 in the *National Health Data Dictionary, Version 6.0* (National Health Data Committee 1997).

## This report

This report summarises 1997–98 data reported to the National Public Hospital Establishments Database and the National Hospital Morbidity Database. This chapter describes the two databases and briefly discusses their overall limitations. It also includes a note about the availability of this report and additional data on the Internet.

Chapter 2 presents hospital performance indicator data, drawn from both the databases and a number of other sources. This information was spread through a number of chapters in *Australian Hospital Statistics 1996–97* but has been consolidated into one chapter for this report. The indicators are those that have been developed by and published in previous years in reports of the National Health Ministers' Benchmarking Working Group (NHMBWG) and have also been adopted by the Steering Committee for the Review of Commonwealth/State Service Provision (SCRCSSP).

Chapter 3 summarises other data on public hospitals, mainly from the National Public Hospital Establishments Database. Chapters 5 to 10 present a range of patient-based information from the National Hospital Morbidity Database. Chapter 4 uses both databases to provide an overview of activity in Australian hospitals based on establishment characteristics.

In all chapters, unless otherwise specified:

- the Department of Veterans' Affairs hospital in New South Wales and the public psychiatric hospitals are included in the public hospital (public sector) category; and
- private psychiatric hospitals and private free-standing day hospital facilities are included in the private hospital (private sector) category.

The appendixes provide more detailed technical notes on the data and analyses than are included in the chapters. Summary information from the Department of Health and Aged Care's 1997–98 National Hospital Cost Data Collection is provided in Appendix 8. This Collection is the source of Australian National Diagnosis Related Group (AN-DRG) cost weight and average cost information used in Chapters 2, 4, 5 and 10.

## **The National Public Hospital Establishments Database**

The National Public Hospital Establishments Database holds a record for each public hospital in Australia. It is collated from the routine administrative collections of public acute hospitals, psychiatric hospitals, drug and alcohol hospitals and dental hospitals in all States and Territories. The hospital operated in New South Wales until September 1997 by the Department of Veterans' Affairs is also included.

Exceptions within the public sector are hospitals not within the jurisdiction of the State and Territory health authorities (for example, hospitals run by correctional authorities in some jurisdictions and those in off-shore territories). In addition, some records in the Database represent part-year or part-reported data.

Information is included on hospital resources (beds, staff and specialised services), recurrent expenditure, non-appropriation revenue and services to admitted and non-admitted patients. Data on capital expenditure and depreciation are also collected for each jurisdiction. The collection is based on the establishment-level activity and resource data elements, and the system-level data elements, of the National Minimum Data Set for Institutional Health Care.

Validation processes for 1997–98 data involved detailed consultation by the Institute with data providers in each State and Territory, to ensure data quality. Nevertheless, the collection does have some limitations and missing values; although the data collections are based on national data item definitions, in some cases the actual definitions used may have varied among the States and Territories.

## **The National Hospital Morbidity Database**

The National Hospital Morbidity Database is a compilation of electronic summary records collected in admitted patient morbidity data collection systems in Australian hospitals. Data relating to admitted patients in almost all hospitals are included: public acute hospitals, public psychiatric hospitals, private acute hospitals, private psychiatric hospitals and private free-standing day hospital facilities.

- Exceptions within the public sector were hospitals not within the jurisdiction of a State or Territory health authority or the Department of Veterans' Affairs (hospitals operated by the Department of Defence, for example, and hospitals located in off-shore territories). In addition, data were not supplied for some lodges attached to public hospitals in Western Australia, a mothercraft hospital in the Australian Capital Territory, one small 'outpatient clinic' in Queensland and most separations for three small district hospitals in Tasmania.
- In the private sector, exceptions were the one private hospital in the Northern Territory, the private free-standing day hospital facilities in the Australian Capital Territory, about 4500 New South Wales private hospital separations and, in Tasmania, two private free-standing day hospital facilities and one small former public hospital which has recently been privatised.

The data supplied for the National Hospital Morbidity Database were based on the patient-level data items of the National Minimum Data Set for Institutional Health Care. They include demographic, administrative and length of stay data, and data on the diagnoses of the patient, the procedures they underwent in hospital and external causes of injury and poisoning. A process of validation of the morbidity database was jointly undertaken by the Institute and the data providers to ensure data quality. When data were supplied using non-standard definitions or classifications, the Institute mapped them to the *National Health Data Dictionary* definitions, where possible, in collaboration with the data providers.

Records for hospital boarders were removed from the database, in consultation with the data providers, as they are not admitted patients. Records for separations of unqualified neonates (see Glossary) were supplied by all data providers and included in the database. However, as they do not meet admission criteria for all purposes, they have been excluded from this report, except where specified. The exception was for the private hospitals in the Australian Capital Territory, for which unqualified neonates were not able to be identified.

Records for 1997–98 are for hospital separations (discharges, transfers, deaths or changes in type of episode of care) in the period 1 July 1997 to 30 June 1998. Data on patients who were admitted on any date before 1 July 1998 are included, provided that they also separated between 1 July 1997 and 30 June 1998. A record is included for each separation, not for each patient, so patients who separated more than once in the year have more than one record in the database.

## Limitations of the data

The major variations from the *National Health Data Dictionary* definitions, substantial differences in scope, the effects of different populations and other major impacts on data quality have been noted within appropriate sections of this report. These general notes should also be used to guide interpretation of the data.

- Although the *National Health Data Dictionary* definitions form the basis of the two databases, the actual definitions used may have varied among the data providers and from one year to another. In addition, fine details of the scope of the data collections may vary from one jurisdiction to another. Comparisons between the Databases, the States and Territories, reporting years and hospital sectors should therefore be made with reference to the accompanying notes.
- Not all private hospital separations are included in the National Hospital Morbidity Database so the counts of private hospital separations presented in this report are likely to be slight underestimates of the actual counts. In 1996–97, the National Hospital Morbidity Database reported 80,695 (4.6%) fewer separations than the Australian Bureau of Statistics' Private Health Establishments Collection, which has wider coverage. This discrepancy is described further in Appendix 3.
- Each State and Territory has a particular demographic structure that differs from other jurisdictions. Population factors such as age and Indigenous status can have a substantial effect on the nature of health care delivery amongst jurisdictions. For example, the average length of stay in hospital, or the frequency of different procedures, can be affected by the demographic composition of the population in a particular region or jurisdiction.
- Although data on separations from the National Hospital Morbidity Database can reflect an aspect of the burden of disease in the community, they do not usually provide measures of the incidence or prevalence of conditions. This is because not all persons with a type or degree of illness are treated in hospital and the number and pattern of

hospitalisations can be affected by differing admission practices, differing levels and patterns of service provision and multiple admissions for some chronic conditions, in addition to the differing patterns of morbidity in the population.

### **This report and additional data on the Internet**

This report is available on the Internet in PDF format at

**<http://www.aihw.gov.au/publications/health/ahs97-8.html>**

This site also includes additional data from the National Hospital Morbidity Database, in Excel spreadsheets. The spreadsheets provide tables that present further detail on diagnoses, procedures and AN-DRGs, version 3.1 for admitted patients. A short time after this report is published, tables of data on the Australian Refined Diagnosis Related Groups (AR-DRGs), version 4.0 for 1997–98 separations, will also be available on the Internet site. More information about the Internet tables is in Chapters 7, 8 and 10 and Appendix 1.

# 2 Hospital performance indicators

## Introduction

This chapter describes hospital performance indicators in terms of the average cost per separation, average salaries of staff employed, proportion of accredited hospitals, and sentinel procedures and the length of stay for the most common diagnoses. These indicators are determined under the framework developed by the National Health Ministers Benchmarking Working Group (see NHMBWG 1998). The indicators have also been reported previously in *Australian Hospital Statistics 1996–97* and by the Steering Committee for the Review of Commonwealth/State Service Provision (SCRCSSP 1999). The indicators also draw on the casemix classification for acute admitted services. The data relate to the activity and resources of public institutions, and there are also some data presented for private hospitals and for private patients in public hospitals.

Those indicators that can be derived from data collected through the National Minimum Data Set for Institutional Health Care, established under the National Health Information Agreement process, have been included in this report. The principal elements for reviewing the performance of health care service delivery are efficiency (for which the principal indicator is cost per unit of output) and effectiveness (for which broad indicators are quality, appropriateness and access and equity). Indicators available for the current report that provide a measure of hospital efficiency include cost per casemix-adjusted separation in public acute hospitals; average salaries for medical and non-medical staff in public acute hospitals; and average length of stay for AN-DRGs with the highest number of separations. Only two efficiency measures are available for reporting: the proportion of available beds in accredited hospitals, which is the only available measure of quality; and separation rates for selected procedures in public and private hospitals, which is a measure of the appropriateness of acute hospital service delivery. Access and equity indicators are not included in this report.

Improving data quality is a key strategy in the development of performance reporting in the hospital sector. Those indicators for which regular high quality data are available have benefited from collaborative data development and standardisation processes which health agencies have had in place under the National Health Information Agreement process. However, data for a substantial number of performance indicators required for reporting under the agreed framework remain unavailable for reporting. The effort required to implement a new performance indicator is not trivial in a national service delivery system as large and as complex as exists in the health services field. The National Health Information Agreement provides an established process for endorsing national data standards and for including new data elements in national minimum data sets. Through this process, the Institute is initiating developmental work for the future reporting of a wider range of hospital sector performance indicators.

## Cost per casemix-adjusted separation

Table 2.1 shows the total cost per casemix-adjusted separation for all States and Territories for 1997–98. At the national level, the cost per casemix-adjusted separation was \$2,575. A large portion of these costs is attributed to nursing salaries and medical labour costs; nationally these costs are \$691 and \$471 respectively, per casemix-adjusted separation.

This performance indicator is a measure of the average cost of providing care for an admitted patient (whether an overnight-stay patient or a same day patient), adjusted for the relative complexity of the patient’s clinical condition and for the hospital services provided.

A full description of the methodology used to derive the cost per casemix-adjusted separation figures is provided at Appendix 5. Users of the indicator should refer to the information in that appendix when interpreting the data. Note that the calculation of these figures is sensitive to a number of assumptions made to overcome deficiencies in available data. In particular:

- capital costs (including depreciation where available) are not included in numerators (see Tables 3.8 and 3.10 for available data on capital expenditure and depreciation);
- recurrent expenditure on admitted patients (the numerator) is estimated in different ways by jurisdictions applying an inpatient fraction (see Glossary) to recurrent expenditure for admitted and not-admitted patients combined; and
- adjustment of separations for case complexity (‘casemix’) is achieved using average cost weights within jurisdictions for acute episodes of care only, even though non-acute episodes are included in the separations data from which the denominator is constructed.

Users of the indicator should also note that a new standardised methodology for determining scope limitations for hospitals included in the calculation has been adopted for 1997–98—see Appendix 5.

## Average salaries and wages expenditure

Average salaries paid to public hospital staff by States and Territories are presented in Table 2.2. A number of jurisdictions were unable to report staffing numbers and salaries for the different nurse categories and, therefore, average nursing salaries have been produced as a single figure for this report. As noted elsewhere in this report (see Chapter 3), some States and Territories have difficulty in differentiating ‘other personal care staff’ and ‘domestic and other staff’. Thus, some of the variation in average salaries reported within these categories may be a result of different reporting practices.

The data show variation in the distribution of labour costs among jurisdictions. States and Territories that reported the highest rates of staff resources did not necessarily report higher costs per casemix-adjusted separation (Table 2.1). The variations in the data are likely to be affected by different practices in ‘outsourcing’ services, and different arrangements for purchasing domestic and catering functions among jurisdictions. Where services are outsourced, the ratio of salary to non-salary costs will be reduced. The degree of outsourcing of high paid versus low paid staff will be a factor that affects the comparison of averages, for example; outsourcing the domestic services and retaining domestic service managers to oversee the activities of the contractors. Table 3.6 provides supplementary information on the number of staff per separation and per 1,000 patient days to allow the homogeneity of these data to be assessed.



Salaries paid to nurses, overall, were relatively consistent nationally. Average salaries paid to salaried medical officers, in contrast, showed a marked variation across jurisdictions. Information on average payments to visiting medical officers for sessions and services in public hospitals is not available. The total number of medical practitioners who provided services in public hospitals is presented at Table 3.7.

## Hospital accreditation

Available administrative indicators of hospital quality include a number of accreditation, certification and award schemes. In particular the number of hospitals that have accreditation by Australian Council on Healthcare Standards (ACHS) has been used by NHMBWG and SCRCSSP as process indicator of quality. Table 2.2 presents a comparison of the percentage of hospitals accredited by the Australian Council on Healthcare Standards (ACHS 1998) between the public and private sectors. ACHS accreditation is awarded for a fee on application to those hospitals that demonstrate a continuing adherence to the ACHS quality assurance standards, and is regarded as one of the few indicators of hospital quality that is available nationally. Data for public hospitals are based on 1997–98 reports and data for private hospitals are based on 1996–97 reports and excludes the private free-standing day hospital facilities. Nationally, 42% (332) of all public hospitals were accredited, and accounted for 69% (38,366) of all public hospital beds reported for 1997–98. In the private sector, 73% (234) of acute hospitals were accredited, and accounted for 87% (20,084) of acute private hospital beds reported for 1996–97.

Comparison of ACHS accreditation rates shown in Table 2.2 among the States and Territories is limited because of the voluntary nature of a hospital's participation in the award scheme and because accreditation at any point in time does not assume a fixed or continuing status for a hospital. In addition, ACHS accreditation of larger hospitals can substantially increase the proportion of beds that are accredited in a jurisdiction. There are little or no data on the numbers of hospitals covered by competing national and international quality standard organizations, such as ISO 9000 certification. Although other organizations offer similar services, ACHS is the most widely used and its accreditation status is reported in other national publications such as the *Report on Government Services 1999* (SCRCSSP 1999) and the *Third National Report on Health Sector Performance Indicators* (NHMBWG in press).

It should be noted that private hospital data presented in this table are for 1996–97. Given that there have been increases in accreditation rates for public hospitals between 1996–97 and 1997–98, it is likely that the accreditation rates for private hospitals presented in these tables may be underestimated. The change in accreditation rates for private hospitals between 1995–96 and 1996–97 was due in part to an increased identification of hospitals that were accredited. Changes in the amalgamation of public hospital services may also affect the variation in the number of accredited hospitals, and thus the number of available beds, over time (see Chapter 3 for a discussion of this issue).

## Separation rates for selected procedures

Separation rates for 'sentinel' procedures have been selected because of the frequency with which they are undertaken and because they are often elective and discretionary, that is, there are often treatment alternatives available (NHMBWG 1998). Thus, the population rates for separations for which these procedures are reported is an indicator of the appropriateness of care delivered within hospitals. The additional procedures in the table

were included after consultation with States and Territories. Users of this indicator should note that the Northern Territory was unable to supply data for the private hospital operating in that jurisdiction, and therefore figures for the Northern Territory should be interpreted with caution; this will affect those procedures that are more likely to be performed in private hospitals, which will be under counted in data.

Table 2.4 provides information, by State or Territory of usual residence of the patient, on separation rates for a range of procedures including caesarean section, lens insertion, coronary artery bypass graft and appendicectomy. Separations were included for which the selected procedures were reported either as the principal procedure and/or an additional procedure. The ICD-9-CM codes that have been used to define each of the procedures are listed in Appendix 6. Age- and sex-standardised separation rates are presented to take account of the different age and sex structures of the populations of the States and Territories.

In order to compare intervention rates across jurisdictions, the standardised rate for each procedure for each State and Territory is accompanied by the standardised rate for all other jurisdictions excluding the reference State or Territory. For example, the rate for appendicectomy in Victoria was 1.50 separations per 1,000 population. The standardised rate for all other States and Territories combined was 1.42 per 1,000 population. Thus, Victoria had a separation rate for appendicectomy that was 5.7% higher than the rate for all other jurisdictions combined. This difference was statistically significant (that is, there is less than 1% chance that the difference between Victoria and the other jurisdictions occurred by chance).

The most common of the procedures were endoscopy, lens insertions and arthroscopy separations for which were reported at a rate of 24.39, 5.38 and 5.10 per 1,000 population, respectively. There was marked variation in rates among the jurisdictions for these (and other) procedures; some of this may reflect differences in the coverage of private free-standing day hospital facilities in the database. These are lacking for the Australian Capital Territory and some Tasmanian facilities.

Caesarean section was the fourth most common of the selected procedures. The rate was highest in Queensland and lowest in the Australian Capital Territory (3.27 and 2.38 per 1,000 population, respectively). The Northern Territory was also low at 2.58 separations per 1,000 population. Further information on caesarian sections compared to other delivery data can be found in *Australia's mothers and babies 1996* (Day, Sullivan and Lancaster 1999). These data show that as a proportion of deliveries for 1996, caesarian sections in the Northern Territory were not lower than New South Wales or Tasmania. As a result, we can assume that the lack of private hospital data has influenced the rate for the Northern Territory.

The separation rate for coronary artery bypass graft procedures was highest in New South Wales (at 1.00 per 1,000 population) and Victoria had the highest rate for angioplasty (at 1.06 per 1,000 population). Separations for hip replacements were most frequent in Tasmania (at 1.41 per 1,000 population) as were separations for hysterectomy (at 2.10 per 1,000 population). South Australia has the same separation rate for hysterectomy as Tasmania. Separations for tonsillectomy were significantly more frequent in South Australia (at 2.73 per 1,000 population) than in other jurisdictions.

## Average lengths of stay for the top 10 AN-DRGs

Within the performance indicator framework for the hospital sector, the average length of stay for overnight separations for the most commonly reported AN-DRGs is an indicator of efficiency in service delivery. Table 2.5 presents data on the average length of stay for overnight separations for the ten AN-DRGs for which the highest number of overnight separations were reported for 1997–98. These data are not equivalent to the data presented in the tables in Chapter 10 as same day separations were excluded, as were separations with lengths of stay over 365 days.

There were some changes in the order and content of the top ten AN-DRGs between 1996–97 and 1997–98. *Lens procedures without vitrectomy and without complications and comorbidities* (AN-DRG 099) and *Medical back problems age <75 without complications and comorbidities* (AN-DRG 455) made way for *Major affective disorders* (AN-DRG 843) and *Caesarean delivery without complicating diagnosis* (AN-DRG 670). The other AN-DRGs changed order.

The table illustrates variation in the average length of stay for some AN-DRGs across the States and Territories and between the sectors. *Major affective disorders* (AN-DRG 843), had the longest average lengths of stay, of 16.8 days nationally with considerable variation between sectors and across jurisdictions, ranging from 13.2 days to 23.8 days. Following this, length of stay for *Chronic obstructive airways disease* (AN-DRG 177) and *Heart failure and shock* (AN-DRG 252) was just over 8 days nationally and *Vaginal delivery without complicating diagnosis* (AN-DRG 674), which had an average length of stay overall of 3.71 days: 3.3 days in the public sector and 5.2 days in the private sector. *Knee procedures* (AN-DRG 421) had an average length of stay of just over 2 days.

**Table 2.1: Cost per casemix-adjusted separation, selected public acute hospitals,<sup>(a)</sup> States and Territories, 1997–98**

Variable	NSW	Vic	Qld	WA	SA	Tas <sup>(b)</sup>	ACT	NT <sup>(c)</sup>	Total
Total separations ('000) <sup>(d)</sup>	1,202	911	665	341	331	75	57	52	3,635
Average cost weight <sup>(e)</sup>	1.02	1.02	0.98	0.96	0.99	0.98	0.97	0.76	1.00
Casemix-adjusted separations ('000) <sup>(f)</sup>	1,231	929	654	326	329	73	55	40	3,637
Total recurrent expenditure (\$m)	4,211	2,992	1,940	1,268	961	253	254	170	12,050
Inpatient fraction <sup>(g)</sup>	0.74	0.74	0.78	0.74	0.82	0.76	0.77	0.78	0.75
Public patient day proportion <sup>(h)</sup>	0.78	0.85	0.90	0.85	0.85	0.81	0.88	0.95	0.84
Unqualified neonates ('000)	56	37	32	16	13	3	3	2	163
<b>Excluded separations</b>									
Separations for excluded hospitals ('000) <sup>(i)(j)</sup>	71	18	20	4	16	6	1	0	129
Percent of all separations	5.9	1.9	3.0	1.3	4.8	7.7	1.2	..	3.5
Expenditure for excluded hospitals (\$m)	491	101	193	53	109	22	2	..	950
Inpatient fraction for excluded hospitals	0.78	0.45	0.71	0.76	0.96	1.00	1.00	..	0.75
Unadjusted cost per separation	5,430	2,608	6,908	9,158	6,541	3,772	2,523	..	5,551
<b>Non-medical labour costs per casemix-adjusted separation (\$)</b>									
Nursing	698	670	674	748	645	720	876	875	691
Diagnostic/allied health	187	229	176	223	163	187	293	203	199
Administrative	172	184	160	247	183	186	265	216	183
Other staff	226	199	218	270	134	233	154	433	215
Superannuation <sup>(i)</sup>	148	102	131	143	112	160	268	131	131
<i>Total non-medical labour costs</i>	<i>1,431</i>	<i>1,384</i>	<i>1,359</i>	<i>1,631</i>	<i>1,237</i>	<i>1,486</i>	<i>1,856</i>	<i>1,858</i>	<i>1,419</i>
<b>Other recurrent costs per casemix-adjusted separation (\$)</b>									
Domestic services	52	62	77	84	74	61	100	165	66
Repairs/maintenance	60	61	54	72	113	68	94	66	65
Medical supplies	178	177	197	213	165	281	298	142	186
Drug supplies	121	115	133	127	116	116	166	199	123
Food supplies	35	37	23	26	21	30	44	32	31
Administration	111	122	121	161	166	75	178	215	126
Other	107	64	14	168	94	169	202	205	88
<i>Total other recurrent costs</i>	<i>664</i>	<i>638</i>	<i>619</i>	<i>851</i>	<i>749</i>	<i>800</i>	<i>1,082</i>	<i>1,024</i>	<i>685</i>
<b>Total excluding medical labour costs</b>	<b>2,095</b>	<b>2,022</b>	<b>1,978</b>	<b>2,482</b>	<b>1,986</b>	<b>2,286</b>	<b>2,938</b>	<b>2,882</b>	<b>2,104</b>
<b>Medical labour costs per casemix-adjusted separation (\$)</b>									
Public patients									
Salaried/sessional staff	262	304	279	282	259	273	350	382	280
VMO payments	161	70	60	130	140	96	250	74	114
Private patients (estimated) <sup>(j)</sup>	119	66	37	72	73	84	85	25	77
<i>Total medical labour costs</i>	<i>542</i>	<i>440</i>	<i>376</i>	<i>484</i>	<i>472</i>	<i>453</i>	<i>685</i>	<i>481</i>	<i>471</i>
<b>Total including medical labour costs</b>	<b>2,637</b>	<b>2,462</b>	<b>2,354</b>	<b>2,966</b>	<b>2,458</b>	<b>2,739</b>	<b>3,623</b>	<b>3,363</b>	<b>2,575</b>

- (a) States and Territories have excluded psychiatric hospitals, drug and alcohol services, mothercraft hospitals, dental hospitals, hospices, rehabilitation facilities and multi purpose services from this table. Hospitals satisfying the New South Wales definition of community non-acute hospitals have also been excluded for all jurisdictions.
- (b) Tasmania is the only jurisdiction with a significant payroll tax burden. As a result, payroll tax has been estimated at 6.7% of salary plus superannuation and removed from the above. Consequently the above data do not balance with Table 3.8.
- (c) These figures should be interpreted in conjunction with the consideration of cost disabilities associated with hospital service delivery in the Northern Territory (see Chapter 3).
- (d) From the National Hospital Morbidity Database, including same day separations and excluding unqualified neonates.
- (e) Average cost weight from the National Hospital Morbidity Database, based on acute and unspecified separations only using the 1997–98 revised AN-DRG version 3.1 cost weights (DHAC, unpublished).
- (f) Casemix-adjusted separations is the product of Total separations and Average cost weight.
- (g) Inpatient fractions have been estimated using the HASAC method for 15 selected and 3 excluded hospitals in Queensland, 10 excluded hospitals in New South Wales, 1 included and 1 excluded hospital in the Australian Capital Territory, 4 included and 1 excluded hospitals in Western Australia, 8 selected and 3 excluded hospitals in South Australia, 1 network of 19 hospitals in Tasmania.
- (h) Eligible public patient days as a proportion of total patient days, excluding unqualified neonates.
- (i) In the Northern Territory the major superannuation scheme is funded by Treasury—hospitals make no contribution. The superannuation for this jurisdiction was estimated using the average of the other States and Territories. Consequently, the above data do not balance with Table 3.8.
- (j) Estimated private patient medical costs calculated as the sum of salary/sessional and VMO payments divided by the number of public patient days multiplied by the number of private patient days. This is an estimate of the medical costs for all non-public patients, including private, compensable and ineligible.
- .. not applicable

**Table 2.2: Average salary (\$), full time equivalent staff,<sup>(a)</sup> public acute and psychiatric hospitals, States and Territories, 1997–98**

Staffing category	NSW	Vic	Qld	WA	SA <sup>(b)</sup>	Tas <sup>(c)</sup>	ACT	NT	Total
Salaried medical officers	85,202	109,760	87,698	91,859	72,091	85,417	88,520	92,955	90,744
Nurses	47,976	51,128	44,500	46,019	41,836	45,137	48,128	47,340	47,188
Other personal care staff	33,753	27,948	30,464	31,868	n.a.	45,465	33,906	34,363	31,267
Diagnostic & health professionals	42,052	49,018	46,296	45,045	40,240	49,502	47,922	69,569	45,132
Administrative & clerical staff	44,038	38,228	33,630	36,773	30,714	34,672	41,396	36,352	38,142
Domestic & other staff	35,638	41,958	31,476	33,078	27,083	29,354	34,979	37,189	34,755
<b>Total staff</b>	<b>47,464</b>	<b>52,070</b>	<b>44,165</b>	<b>45,173</b>	<b>40,426</b>	<b>44,315</b>	<b>49,533</b>	<b>48,791</b>	<b>47,101</b>

(a) Where average full time equivalent staff numbers were not available, staff numbers at 30 June 1998 were used.

(b) *Other personal care staff* are included in *Diagnostic & health professionals* and *Domestic & other staff*.

(c) For Tasmania staff numbers were only available for the 3 major hospitals which accounted for 93% of total separations and 75% of total patient days. Staff numbers for the remaining 19 hospitals were not available. Data are for those 3 hospitals only.

n.a. not available.

**Table 2.3: Number of hospitals<sup>(a)</sup> and available beds<sup>(b)</sup> by sector and accreditation status,<sup>(c)</sup> States and Territories<sup>(d)</sup>**

Hospital accreditation	NSW <sup>(e)</sup>	Vic	Qld	WA	SA <sup>(f)</sup>	Tas <sup>(g)</sup>	ACT <sup>(e)</sup>	NT <sup>(f)</sup>	Total
<b>Public hospitals</b>									
Accredited hospitals	112	85	41	31	46	4	2	1	322
Non-accredited hospitals	109	62	149	65	34	18	1	4	442
Hospitals accredited (%)	51	58	22	32	58	18	67	20	42
<i>Total public hospitals</i>	<i>221</i>	<i>147</i>	<i>190</i>	<i>96</i>	<i>80</i>	<i>22</i>	<i>3</i>	<i>5</i>	<i>764</i>
Accredited beds	12,591	9,752	6,650	3,559	3,826	933	758	297	38,366
Non-accredited beds	7,114	2,585	4,159	1,705	1,372	145	10	280	17,370
Beds accredited (%)	64	79	62	68	74	87	99	51	69
<i>Total available beds for admitted patients</i>	<i>19,705</i>	<i>12,337</i>	<i>10,809</i>	<i>5,264</i>	<i>5,198</i>	<i>1,078</i>	<i>768</i>	<i>577</i>	<i>55,736</i>
<b>Private hospitals<sup>(h)</sup></b>									
Accredited hospitals	76	78	34	16	24	6	n.p.	n.p.	234
Non-accredited hospitals	13	23	16	11	18	4	n.p.	n.p.	85
Hospitals accredited (%)	85	77	68	59	57	60	n.p.	n.p.	73
<i>Total private hospitals</i>	<i>89</i>	<i>101</i>	<i>50</i>	<i>27</i>	<i>42</i>	<i>10</i>	<i>n.p.</i>	<i>n.p.</i>	<i>319</i>
Accredited beds	5,874	5,623	4,333	1,765	1,947	542	n.p.	n.p.	20,084
Non-accredited beds	503	535	688	498	419	239	n.p.	n.p.	2,882
Beds accredited (%)	92	91	86	78	82	69	n.p.	n.p.	87
<i>Total available beds for admitted patients</i>	<i>6,377</i>	<i>6,158</i>	<i>5,021</i>	<i>2,263</i>	<i>2,366</i>	<i>781</i>	<i>n.p.</i>	<i>n.p.</i>	<i>22,966</i>
<b>All hospitals<sup>(h)</sup></b>									
Accredited hospitals	188	163	75	47	70	10	n.p.	n.p.	553
Non-accredited hospitals	122	85	165	76	52	22	n.p.	n.p.	522
Hospitals accredited (%)	61	66	31	38	57	31	n.p.	n.p.	51
<i>Total hospitals</i>	<i>310</i>	<i>248</i>	<i>240</i>	<i>123</i>	<i>122</i>	<i>32</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1,075</i>
Accredited beds	18,465	15,375	10,983	5,324	5,773	1,475	n.p.	n.p.	57,395
Non-accredited beds	7,617	3,120	4,847	2,203	1,791	384	n.p.	n.p.	19,962
Beds accredited (%)	71	83	69	71	76	79	n.p.	n.p.	74
<i>Total available beds for admitted patients</i>	<i>26,082</i>	<i>18,495</i>	<i>15,830</i>	<i>7,527</i>	<i>7,564</i>	<i>1,859</i>	<i>n.p.</i>	<i>n.p.</i>	<i>77,357</i>

(a) Apparent differences in the number of hospitals reported are, in many instances, caused more by changes in administrative or reporting arrangements than by actual differences in the number of buildings.

(b) Where average available beds for the year were not available, bed numbers at 30 June 1998 were used.

(c) Accreditation status at 30 June 1998.

(d) Public hospital data are for 1997–98, private hospital data are for 1996–97.

(e) Australian Capital Territory private hospital data are included with New South Wales.

(f) Northern Territory private hospital data are included with South Australia.

(g) Tasmania has increased the number of hospitals reported compared with previous years.

(h) Excludes private free-standing day hospital facilities.

n.p. not published.

*Note:* Private hospital data are provided from the Australian Bureau of Statistics Private Health Establishments Collection and accreditation data are provided by the Australian Council on Healthcare Standards.

**Table 2.4: Separation statistics for selected procedures<sup>(a)</sup> by State or Territory of usual residence, all hospitals,<sup>(b)</sup> States and Territories, 1997–98**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(c)</sup>
<b>Appendicectomy</b>									
Separations <sup>(d)</sup>	8,298	6,676	5,000	2,852	1,851	625	446	209	25,959
Separations within State of residence (%)	98	99	99	99	98	99	96	97	
Separation rate <sup>(e)</sup>	1.38	1.50	1.48	1.59	1.32	1.38	1.40	1.00	1.44
Separation rate <sup>(e)</sup> for other States	1.47	1.42	1.43	1.42	1.45	1.44	1.44	1.45	
Difference, State/Territory & national rate (%)	-6.1	5.7	3.2	11.8	-9.0	-4.3	-2.9	-31.0	
Significance of difference	**	**	–	**	**	–	–	**	
<b>Coronary artery bypass graft</b>									
Separations <sup>(d)</sup>	6,855	4,625	2,911	1,166	1,268	394	197	70	17,487
Separations within State of residence (%)	95	99	99	99	99	96	20	0	
Separation rate <sup>(e)</sup>	1.00	0.93	0.85	0.68	0.74	0.76	0.82	0.64	0.89
Separation rate <sup>(e)</sup> for other States	0.84	0.88	0.90	0.91	0.91	0.90	0.90	0.89	
Difference, State/Territory & national rate (%)	20.1	4.9	-6.2	-25.8	-18.5	-15.5	-8.4	-27.9	
Significance of difference	**	**	**	**	**	**	–	**	
<b>Angioplasty</b>									
Separations <sup>(d)</sup>	6,385	5,274	2,046	1,630	1,483	443	164	68	17,496
Separations within State of residence (%)	95	99	99	100	99	99	1	0	
Separation rate <sup>(e)</sup>	0.93	1.06	0.59	0.92	0.88	0.85	0.64	0.53	0.89
Separation rate <sup>(e)</sup> for other States	0.87	0.83	0.95	0.89	0.89	0.89	0.89	0.89	
Difference, State/Territory & national rate (%)	7.7	27.1	-38.5	3.9	-1.3	-4.7	-28.4	-40.8	
Significance of difference	**	**	**	–	–	–	**	**	
<b>Caesarean section</b>									
Separations <sup>(d)</sup>	16,262	12,419	10,730	5,398	4,325	1,219	758	561	51,675
Separations within State of residence (%)	97	100	99	100	100	100	98	97	
Separation rate <sup>(e)</sup>	2.72	2.78	3.27	3.06	3.20	2.99	2.38	2.58	2.90
Separation rate <sup>(e)</sup> for other States	3.00	2.95	2.82	2.89	2.88	2.90	2.91	2.91	
Difference, State/Territory & national rate (%)	-9.3	-5.7	16.1	6.0	11.0	3.1	-18.4	-11.2	
Significance of difference	**	**	**	**	**	–	**	**	
<b>Cholecystectomy</b>									
Separations <sup>(d)</sup>	15,512	10,731	8,030	3,271	3,745	1,008	543	191	43,034
Separations within State of residence (%)	97	99	99	100	100	98	97	86	
Separation rate <sup>(e)</sup>	2.33	2.20	2.30	1.80	2.32	2.05	1.86	1.24	2.22
Separation rate <sup>(e)</sup> for other States	2.16	2.22	2.20	2.26	2.21	2.22	2.22	2.23	
Difference, State/Territory & national rate (%)	8.2	-1.0	4.4	-20.4	4.8	-7.7	-16.5	-44.3	
Significance of difference	**	–	**	**	**	**	**	**	

(continued)

**Table 2.4 (continued): Separation statistics for selected procedures,<sup>(a)</sup> by State or Territory of usual residence, all hospitals,<sup>(b)</sup>  
States and Territories, 1997–98**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(c)</sup>
<b>Endoscopy</b>									
Separations <sup>(u)</sup>	168,476	126,678	92,493	39,671	34,923	11,288	3,766	1,895	479,222
Separations within State of residence (%)	98	99	99	100	100	99	95	91	
Separation rate <sup>(e)</sup>	24.91	25.59	26.31	21.87	20.92	22.04	13.33	13.67	24.39
Separation rate <sup>(e)</sup> for other States	24.12	23.99	23.98	24.65	24.71	24.45	24.56	24.47	
Difference, State/Territory & national rate (%)	3.3	6.7	9.7	-11.3	-15.3	-9.9	-45.7	-44.1	
Significance of difference	**	**	**	**	**	**	**	**	
<b>Hip replacement</b>									
Separations <sup>(u)</sup>	7,094	5,965	3,207	1,841	2,164	767	313	49	21,402
Separations within State of residence (%)	95	98	99	100	100	99	92	53	
Separation rate <sup>(e)</sup>	0.99	1.14	0.91	1.05	1.17	1.41	1.34	0.66	1.05
Separation rate <sup>(e)</sup> for other States	1.08	1.02	1.08	1.05	1.04	1.04	1.05	1.05	
Difference, State/Territory & national rate (%)	-8.4	12.3	-15.7	-0.6	12.4	35.7	27.7	-37.5	
Significance of difference	**	**	**	–	**	**	**	**	
<b>Hysterectomy</b>									
Separations <sup>(u)</sup>	11,253	8,217	6,557	3,385	3,410	1,050	610	163	34,650
Separations within State of residence (%)	96	100	99	100	100	99	91	91	
Separation rate <sup>(e)</sup>	1.67	1.65	1.83	1.78	2.10	2.10	1.87	0.94	1.75
Separation rate <sup>(e)</sup> for other States	1.79	1.78	1.73	1.74	1.71	1.74	1.74	1.75	
Difference, State/Territory & national rate (%)	-6.7	-7.0	5.6	2.0	22.7	21.1	7.4	-46.3	
Significance of difference	**	**	**	–	**	**	–	**	
<b>Lens insertion</b>									
Separations <sup>(u)</sup>	40,201	27,434	23,858	8,577	7,405	2,054	711	329	110,576
Separations within State of residence (%)	98	99	98	100	100	99	93	88	
Separation rate <sup>(e)</sup>	5.55	5.19	6.78	4.93	3.86	3.63	3.24	4.65	5.38
Separation rate <sup>(e)</sup> for other States	5.29	5.45	5.09	5.42	5.54	5.43	5.41	5.38	
Difference, State/Territory & national rate (%)	4.9	-4.8	33.1	-9.2	-30.3	-33.1	-40.1	-13.6	
Significance of difference	**	**	**	**	**	**	**	**	
<b>Tonsillectomy</b>									
Separations <sup>(u)</sup>	10,306	9,245	6,319	2,947	3,665	679	484	119	33,765
Separations within State of residence (%)	97	99	99	100	100	99	98	70	
Separation rate <sup>(e)</sup>	1.74	2.15	1.89	1.67	2.73	1.50	1.56	0.55	1.91
Separation rate <sup>(e)</sup> for other States	2.00	1.84	1.92	1.94	1.84	1.92	1.92	1.93	
Difference, State/Territory & national rate (%)	-12.9	16.8	-1.3	-14.0	48.2	-22.1	-18.5	-71.7	
Significance of difference	**	**	–	**	**	**	**	**	

(continued)



**Table 2.4 (continued): Separation statistics for selected procedures,<sup>(a)</sup> by State or Territory of usual residence, all hospitals,<sup>(b)</sup> States and Territories, 1997–98**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(c)</sup>
<b>Myringotomy</b>									
Separations <sup>(d)</sup>	10,678	10,807	6,547	3,642	4,962	867	459	201	38,165
Separations within State of residence (%)	96	99	99	100	100	99	98	89	
Separation rate <sup>(e)</sup>	1.76	2.48	1.96	2.07	3.68	1.88	1.54	0.88	2.14
Separation rate <sup>(e)</sup> for other States	2.33	2.03	2.18	2.15	2.01	2.15	2.15	2.15	
Difference, State/Territory & national rate (%)	-24.4	22.5	-10.1	-3.7	83.0	-12.2	-28.3	-59.2	
Significance of difference	**	**	**	*	**	**	**	**	
<b>Knee replacement</b>									
Separations <sup>(d)</sup>	6,432	3,595	3,138	1,449	1,750	459	252	19	17,094
Separations within State of residence (%)	95	99	99	100	100	98	94	53	
Separation rate <sup>(e)</sup>	0.92	0.71	0.92	0.85	0.98	0.85	1.12	0.18	0.86
Separation rate <sup>(e)</sup> for other States	0.83	0.92	0.85	0.87	0.85	0.86	0.86	0.87	
Difference, State/Territory & national rate (%)	11.2	-22.8	7.9	-1.6	15.1	-1.1	30.4	-79.1	
Significance of difference	**	**	**	–	**	–	**	**	
<b>Prostatectomy</b>									
Separations <sup>(d)</sup>	8,453	7,296	3,364	1,770	2,159	764	354	43	24,203
Separations within State of residence (%)	94	98	99	100	99	100	96	70	
Separation rate <sup>(e)</sup>	1.21	1.43	0.98	1.04	1.20	1.42	1.57	0.55	1.22
Separation rate <sup>(e)</sup> for other States	1.22	1.15	1.27	1.24	1.22	1.21	1.21	1.22	
Difference, State/Territory & national rate (%)	-0.7	24.6	-22.8	-16.0	-1.4	16.9	28.9	-54.9	
Significance of difference	–	**	**	**	–	**	**	**	
<b>Arthroscopy</b>									
Separations <sup>(d)</sup>	29,656	25,535	14,250	9,834	12,670	2,219	1,524	588	96,291
Separations within State of residence (%)	96	98	99	100	100	98	90	66	
Separation rate <sup>(e)</sup>	4.62	5.43	4.13	5.39	8.37	4.70	4.93	3.20	5.10
Separation rate <sup>(e)</sup> for other States	5.34	4.99	5.31	5.07	4.81	5.11	5.10	5.11	
Difference, State/Territory & national rate (%)	-13.6	9.0	-22.4	6.3	73.9	-7.9	-3.3	-37.5	
Significance of difference	**	**	**	**	**	**	–	**	

(a) The procedures are defined using ICD-9-CM codes in Appendix 6. Procedures include National Health Minister's Benchmarking Working Group sentinel procedures and additional procedures requested by States and Territories.

(b) Excludes private hospitals in the Northern Territory and private free-standing day hospital facilities in the ACT and some private free-standing day hospital facilities in Tasmania.

(c) Includes *Other Territories*.

(d) Excludes multiple procedures during the same separation within the same sentinel group.

(e) Rate per 1,000 population was directly age- and sex-standardised to the Australian population at 30 June 1991.

– not significant, \* significant at 5%, \*\* significant at 1%.

**Table 2.5: Average length of stay (days) for the 10 AN-DRGs with the highest number of separations,<sup>(a)</sup> excluding same day separations, by hospital sector, States and Territories, 1997–98**

AN-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
674 Vaginal Delivery W/O Complicating Diagnosis	Public	3.29	3.40	2.95	3.45	3.22	4.00	2.97	3.88	3.28
	Private	5.15	5.34	5.20	5.14	4.98	4.29	5.43	n.a.	5.16
	<i>Total</i>	<i>3.62</i>	<i>3.88</i>	<i>3.54</i>	<i>3.94</i>	<i>3.67</i>	<i>4.12</i>	<i>3.60</i>	<i>3.88</i>	<i>3.71</i>
177 Chronic Obstructive Airways Disease	Public	7.96	6.75	7.52	7.82	7.09	8.41	8.94	7.63	7.56
	Private	11.06	9.95	10.45	10.77	9.24	9.74	11.31	n.a.	10.34
	<i>Total</i>	<i>8.27</i>	<i>7.43</i>	<i>8.30</i>	<i>8.50</i>	<i>7.50</i>	<i>8.80</i>	<i>9.41</i>	<i>7.63</i>	<i>8.06</i>
367 Cholecystectomy W/O CDE	Public	3.46	3.31	2.65	3.80	3.07	2.82	3.56	4.72	3.27
	Private	3.11	3.62	3.27	3.68	3.48	3.33	3.35	n.a.	3.35
	<i>Total</i>	<i>3.33</i>	<i>3.42</i>	<i>2.91</i>	<i>3.75</i>	<i>3.22</i>	<i>3.09</i>	<i>3.47</i>	<i>4.72</i>	<i>3.30</i>
252 Heart Failure & Shock	Public	8.01	7.17	7.23	7.46	7.34	9.32	10.06	8.01	7.61
	Private	10.67	9.52	9.95	10.21	9.39	9.06	12.76	n.a.	9.87
	<i>Total</i>	<i>8.30</i>	<i>7.78</i>	<i>7.96</i>	<i>7.93</i>	<i>7.77</i>	<i>9.23</i>	<i>10.41</i>	<i>8.01</i>	<i>8.05</i>
122 Tonsillectomy &/or Adenoidectomy	Public	1.53	1.26	1.19	1.40	1.40	1.34	1.46	1.34	1.35
	Private	1.21	1.32	1.09	1.20	1.33	1.30	1.19	n.a.	1.23
	<i>Total</i>	<i>1.39</i>	<i>1.28</i>	<i>1.14</i>	<i>1.30</i>	<i>1.37</i>	<i>1.32</i>	<i>1.36</i>	<i>1.34</i>	<i>1.30</i>
187 Bronchitis & Asthma Age<50 W/O CC	Public	2.27	2.08	2.30	2.28	2.36	2.17	2.60	2.86	2.26
	Private	2.62	2.99	3.00	2.15	4.11	2.08	5.67	n.a.	2.91
	<i>Total</i>	<i>2.28</i>	<i>2.15</i>	<i>2.40</i>	<i>2.27</i>	<i>2.49</i>	<i>2.15</i>	<i>2.63</i>	<i>2.86</i>	<i>2.31</i>
320 Inguinal & Femoral Hernia Procedures Age>9	Public	2.66	2.13	1.80	2.44	2.50	2.05	2.32	2.20	2.32
	Private	2.56	2.35	2.02	2.55	2.80	2.32	2.19	n.a.	2.41
	<i>Total</i>	<i>2.61</i>	<i>2.24</i>	<i>1.92</i>	<i>2.50</i>	<i>2.65</i>	<i>2.23</i>	<i>2.24</i>	<i>2.20</i>	<i>2.36</i>
843 Major Affective Disorders	Public	16.94	16.11	13.24	19.89	15.27	13.19	16.85	13.52	15.93
	Private	23.83	19.41	18.04	17.08	18.07	15.98	16.30	n.a.	19.11
	<i>Total</i>	<i>18.12</i>	<i>17.33</i>	<i>14.74</i>	<i>19.09</i>	<i>16.20</i>	<i>13.95</i>	<i>16.77</i>	<i>13.52</i>	<i>16.85</i>
670 Caesarean Delivery W/O Complicating Diagnosis	Public	5.40	5.26	4.66	5.28	5.38	5.57	5.37	6.10	5.22
	Private	7.01	7.17	6.73	7.46	6.67	6.31	7.58	n.a.	6.98
	<i>Total</i>	<i>5.85</i>	<i>5.93</i>	<i>5.54</i>	<i>6.15</i>	<i>5.86</i>	<i>5.97</i>	<i>6.21</i>	<i>6.10</i>	<i>5.84</i>
421 Knee procedures	Public	2.89	2.38	2.21	2.11	2.17	2.74	2.13	3.88	2.42
	Private	1.82	1.90	1.97	1.93	1.96	1.67	1.49	n.a.	1.89
	<i>Total</i>	<i>2.07</i>	<i>2.03</i>	<i>2.04</i>	<i>1.97</i>	<i>2.02</i>	<i>1.88</i>	<i>1.69</i>	<i>3.88</i>	<i>2.03</i>

(a) Separations for which the type of episode of care was reported as acute, or was not reported, and the length of stay was less than 366 days.

n.a. not available.

Abbreviations: CC — complications and comorbidities, CDE — common bile duct exploration, W/O — without, W — with.

# 3 Overview of public hospital establishments

## Introduction

This chapter describes the public hospital sector in terms of the number of hospitals, availability of hospital beds, number of medical practitioners, staff employed and specialised services provided. This chapter also provides information on public hospital expenditure, revenue and capital expenditure. The main source of data reported in this chapter is the National Public Hospital Establishments Database.

The data in this chapter relate to public hospitals, however, data on private hospitals is also presented in several comparative tables: time-series comparison, description of the number of hospitals and hospital beds by hospital sector and the medical workforce (Tables 3.1, 3.2 and 3.7). The data for the one Department of Veterans' Affairs hospital are included in the data for New South Wales, and represents estimated data for the three months activity before it was privatised.

## Hospitals by sector, 1993–94 to 1997–98

A range of data on hospitals, available beds, expenditure and revenue are presented in Table 3.1. Over the five-year period a number of jurisdictions changed from accounting on a cash basis to accrual accounting. A number of other changes to reporting arrangements have occurred over the period, and therefore comparisons across years are limited.

The count of public hospitals is subject to variation due to changes in administrative arrangements from year to year, and so provide limited comparative data. The number of beds in public hospitals, which is a more stable measure, has decreased by 9% from 61,260 to 55,735 since 1993–94. The number of beds in overnight private hospitals has increased by 8% with an increase from 21,241 beds in 1993–94 to 22,966 beds in 1996–97, while the number of private free-standing day hospital facilities has grown by 38%, from 111 to 153, in the same period.

Expenditure reported from 1993–94 to 1996–97 increased at a higher rate in the private sector than expenditure reported in the public sector from 1993–94 to 1997–98. Revenue for the public sector has remained relatively stable while private sector revenue has kept pace with expenditure.

## Hospitals and hospital beds

Information on the number of hospitals and hospital beds available by State and Territory is provided in Table 3.2. Data in this table are provided for both public hospitals (using 1997–98 data) and private hospitals (using 1996–97 data). Nationally, there were 1,236 hospitals, of which 764 were public hospitals. Public hospitals provided 55,735 beds

nationally (70% of the national total), compared to the 24,129 beds provided in private hospitals (30% of beds nationally).

Apparent changes and differences in the number of hospitals reported by States and Territories are mainly caused by changes in administrative or reporting arrangements and not necessarily by changes to the number of hospital campuses or buildings. Some groups of hospitals have been amalgamated into single units since the 1996–97 report and have been counted as one unit in the 1997–98 report. Conversely some hospitals which were previously counted under networks in 1996–97 have been counted separately in 1997–98. Such changes in reporting had a greater effect on data reported for Victoria and Tasmania than for other jurisdictions. In addition, the service delivery structure differs between jurisdictions and the count of hospitals in States and Territories does not provide useful comparative data.

It is on account of changes in reporting at the hospital campus level that comparing increases or decreases in the number of available beds across years has become a more reliable indicator of shifts in the availability of hospital services. Nationally, there were 1,101 fewer available beds in public hospitals in 1997–98 when compared with 1996–97. However, an apparent decline in available beds reported in Tasmania is largely due to improvements in reporting arrangements. This represents a national decline of 2.0% in available public hospital beds, although there have been small increases in Victoria and Queensland.

## **Hospital size**

Table 3.3 presents information on the distribution of hospitals by their size, which has been determined by the number of available beds. The median bed size of public hospitals Australia-wide was 28 beds. There were more small sized hospitals, particularly in those jurisdictions that cover large geographic areas. The majority of beds were in larger hospitals and in more densely populated areas. Again the caveats about the definitions of hospitals need to be regarded.

## **Regional distribution of beds**

The distribution of public hospital beds across metropolitan, rural and remote areas is presented in Table 3.4. Information on the number of available beds per 1,000 population is also provided as a comparative measure across States and Territories. This table does not, however, provide data on the distribution and availability of private hospital beds, nor does it take account of the differences in areas serviced by a hospital or the different types of services provided. The availability of beds ranged between 2.7 beds per 1,000 population nationally in metropolitan areas, 3.6 beds per 1,000 population in rural areas and 4.7 beds per 1,000 population in remote areas. However, there is not an exact geographic fit between population distribution and the distribution of hospital services. Hospitals based in central locations may also serve patients who reside in rural and remote areas of a State or Territory or in other jurisdictions.

There is a higher rate of public hospital beds in rural and remote areas than in metropolitan areas. The higher rate of beds in non-metropolitan areas also balances other health infrastructure differentials such as the shortages of medical practitioners in rural and remote areas (Strong et al. 1998, AIHW in press (b)). This difference in the supply of beds also affects utilisation rates by hospital sector (see Figures 5.1 and 5.2). Many of the rural and remote hospitals have a high proportion of nursing home type patients who in metropolitan areas are cared for in nursing homes or hostels.

## Specialised services

Data relating to the availability of specialised services (such as obstetric/maternity services, intensive care units, cancer treatment centres and organ transplant services) for all States and Territories are presented in Table 3.5. By far, the most common specialised services offered by hospitals nationally were obstetric/maternity services, domiciliary care units and nursing home care units. By contrast, acute spinal cord injury units and pancreas, heart and liver transplant services were provided by only a few hospitals nationally, reflecting the highly specialised nature of those services and the limited demand. Data on specialised services were not available for all hospitals and are under counted for some jurisdictions.

## Staffing

Information on the number of staff employed in public hospitals by State and Territory is presented in Table 3.6. Data on full time equivalent staff are reported here as the average available staff for the year. The collection of data by staffing category is not consistent among States and Territories—for some jurisdictions, best estimates in some staffing categories only are reported. New South Wales, Western Australia and Tasmania were unable to provide information by nurse categories, although data on total nurse numbers are provided.

Nationally, over 175,024 full time equivalent staff were employed in the public hospital sector in 1997–98. 45% (78,239) of public hospital staff were nurses; registered nurses were the largest group in those States and Territories that reported a break-down of the nursing categories.

There were over 15,387 salaried medical officers employed in public hospitals throughout Australia, representing 9% of the public hospital labour force. Information on numbers of visiting medical officers (VMOs), who are contracted by hospitals to provide services to public patients and paid on a sessional or fee-for-service basis in public hospitals, is not available due to problems in the collection of systematic data on the hours, sessions and/or services provided by VMOs in many hospitals. (See Table 3.8 for data on payments to VMOs.) The total number of medical practitioners is presented in Table 3.7.

In order to allow comparison of staffing profiles across the jurisdictions, data are also presented as full time equivalent staff per 1,000 separations and 1,000 patient days. It should be noted, however, that the rates are based on total separations reported and no adjustment has been made for the differing casemix treated within States and Territories. Differences between jurisdictions may also reflect differing levels of contracted services. For example, lower levels of salaried medical staff are balanced by higher levels of expenditure on VMOs.

There is some variation across jurisdictions shown by the data in terms of the number of full time equivalent staff employed per 1,000 separations. Nationally, nurses were the largest staff group (20.7 per 1,000 separations), compared with smaller numbers of salaried medical staff (4.1 per 1,000 separations).

The number of full time equivalent staff per 1,000 patient days ranged from 12.4 full time equivalent staff per 1,000 patient days in Western Australia, to 10.1 in New South Wales. In particular, the number of nurses employed per 1,000 patient days treated varied from 5.4 in the Australian Capital Territory and Tasmania to 4.5 in Victoria. Nationally, 4.7 nurses were employed per 1,000 patient days. The difference between the States and Territories in terms of full time equivalent staff per 1,000 patient days was less pronounced than the differences per 1,000 separations.

Variation in some staffing categories (in particular, 'other personal care staff' and 'domestic & other staff') is most likely due to different reporting practices within the States. Queensland, in particular, has noted that there is little difference between these categories, and that an employee may perform different functions within these two categories on different days. South Australia has not provided data on 'other personal care staff' and these staff are included in the diagnostic/allied health and domestic staffing categories. Variation in the number of salaried medical officers per 1,000 separations and patient days may also be due to availability of VMOs.

Advice from the States and Territories indicates that there has been an increase in the outsourcing of services with a large labour-related component (e.g. food services and domestic services). Increased outsourcing may explain some of the apparent decline in full time equivalent staff in some staffing categories and also some of the differences between the States and Territories.

## **Medical practitioners in public and private hospitals**

The data presented in Table 3.7 shows that the majority of medical practitioners in both the public and private hospital sector practised in primarily clinical roles and most were specialists. Medical practitioners employed in administrative positions were the largest group in non-clinical practice, but accounted for only 1.2% of all medical practitioners working in either public or private hospitals.

These data include all practitioners registered with the appropriate registration board in each State and Territory. This table differs in scope and source from data presented elsewhere in this report because it is based on a survey of medical practitioners rather than on data provided by hospitals, and provides a count of the persons who practiced rather than the number of full time equivalents. Each medical practitioner must renew practice registration annually and these surveys are conducted in conjunction with the renewals. The response rate of those surveyed is estimated at 87%, adjusting for practitioners who may be registered in more than one jurisdiction but who are counted in only one (AIHW in press (b)). For each sector, practitioners are counted once only, according to the category of work occupying the most hours per week. However, the same practitioner can be counted in both the public and private sectors. Coverage may exclude practitioners with a conditional registration for fixed periods and who do not receive a renewal notice, or practitioners with a recent initial registration.

## **Recurrent expenditure**

Commonwealth and State government expenditure for 1997–98 on public hospitals, including the Department of Veterans' Affairs hospital in New South Wales and public psychiatric hospitals, accounts for over one-third of all government sector expenditure on health in this period (AIHW in press (a)). For the purpose of this report, expenditure is a mixture of:

- expenditure for hospitals in the States and Territories that reported on an accrual basis relating to 1997–98 and
- payments made during 1997–98 for those States and Territories that reported on a 'cash' basis.

Data reported to the National Public Hospital Establishments Database are not comparable with other data sources (for example, data reported in the Institute's annual *Health Expenditure Bulletin* (AIHW in press (a))). The data presented in this report excludes

expenditure for population health, primary and community based services administered by hospitals, and trust fund expenditure.

Nationally, recurrent expenditure on public acute and psychiatric hospitals was \$13.0 billion in 1997–98. Information on gross recurrent expenditure, categorised into salary and non-salary expenditure, is presented in Table 3.8. Real recurrent expenditure in 1997–98 was \$12.8 billion (referenced to 1996–97 constant prices) and there was a real increase in recurrent expenditure in the 1997–98 year of 5.2% (real recurrent expenditure in 1996–97 was \$12.2 billion).

The largest share of expenditure was for salary payments. Even when payments to VMOs and payments for outsourced services, which include large labour components are excluded, salary payments accounted for 63% of the \$13.0 billion spent within the public hospital system. Salary payments include salaries and wages, payments to staff on paid leave, workers' compensation and salaries paid to contract staff where the contract was for the supply of labour and where full time equivalent staffing data are available.

Medical and surgical supplies (which include consumable supplies only and not equipment purchases), administrative expenses and drug supplies were the major non-salary expenses for public hospitals nationally.

Depreciation has also been reported in Table 3.8, and the data show that there is inconsistency between States and Territories in reporting, ranging from 4.5% of total expenditure in New South Wales to 1.0% in Tasmania. It is anticipated that as accrual accounting becomes universally adopted by health authorities, comparable data on depreciation will become available.

## Capital expenditure

Capital expenditure (excluding general revenue payments received from State or Territory Governments) is reported in Table 3.10. These data were extracted from data reported previously in the Australian Bureau of Statistics' Public Finance Database (ABS 1999), with the exception of Victorian data which is sourced from the Victorian Department of Human Services annual report for that year. For 1997–98, capital expenditure was equivalent to 9% of recurrent expenditure. By jurisdiction, this varied from the equivalent of 19% of recurrent expenditure in Queensland, where a major rebuilding and capital works program is under way, to the equivalent of 3% of recurrent expenditure in the Northern Territory and Victoria.

Capital expenditure varies considerably from year to year and these data should be interpreted with caution. Under accrual accounting, depreciation data provides an annual report on capital expenditure ('smoothed-out' over a period of years). Increasing efficiency in recurrent expenditure can be achieved through capital expenditure on improved buildings and equipment. Capital expenditure can also be cyclical. For example, a vehicle fleet may be replaced every two years. Shifts in costs between capital and recurrent expenditure can also be caused by changes in, for example, leasing arrangements. The participation of the private sector in providing capital for public hospital services may also be a source of difference between jurisdictions.

This is the first time that capital expenditure has been reported in this series, and the data are not yet available in the format specified in the *National Health Data Dictionary*. The Institute will continue to seek to improve reporting on capital expenditure and depreciation through the National Health Information Agreement process and through consultation with the Australian Bureau of Statistics.

## Revenue

Hospital revenue (excluding general revenue payments received from State or Territory governments) is reported in Table 3.9. In this table, States and Territories have reported revenue against three categories: patient revenue, recoveries (income from the use of hospital facilities by salaried medical officers or private practitioners exercising their rights of private practice, and other recoveries), and other revenues. In data reported for Queensland, 'patient revenue' includes revenue for items such as pharmacy and ambulance, which could be considered as 'recoveries'.

Australian public hospitals received \$1.1 billion in revenue in 1997–98. This was equivalent to 8% of total recurrent expenditure. Revenue as a proportion of total expenditure was, however, variable across States and Territories. Public hospital revenue in Tasmania represented 16% of expenditure, whereas public hospital revenue in Queensland and South Australian was equivalent to only 5% of expenditure.

Patient revenue, the largest revenue category, accounted for 55% of all revenue, and was equivalent to 5% of total expenditure.

## Quality of establishments data

Timeliness and quality of hospital performance indicators has improved substantially over recent years, however limitations remain, particularly due to the quality of financial reporting. During 1999, the National Health Data Committee is undertaking to resolve inconsistent financial reporting in consultation with senior finance and information officers in the States and Territories. Recommendations are to be developed for improved classification standards and methods for consistent identification and reporting at the hospital or health service delivery level. This will include areas of expenditure that have been identified as being inconsistently reported, such as:

- expended revenue from trust funds;
- expenditure at the area (or district/regional) health service administration level;
- group services expenditure (e.g. central laundry and pathology services); and
- salary oncosts including superannuation and workers' compensation.

It should also be noted that, because some States and Territories have not fully implemented accrual accounting procedures and systems, expenditure and revenue presented in the current report are mixtures of expenditure/payments and revenue/receipts, respectively. Depreciation represents a significant portion of expenditure where jurisdictions report on an accrual basis, and has been excluded from expenditure totals to ensure comparability across jurisdictions. As noted above, moves toward accrual accounting will improve the quality of financial data.

There are particular caveats that should be noted for Tasmanian data, and it is not possible to compare previous years' information with the current report. The collection of these data is becoming more refined every time it is undertaken. For example, the apparent reductions in staff numbers and available beds between 1996–97 to 1997–98 are due to improvements in reporting arrangements.



**Table 3.1: Summary of hospitals, Australia, 1993–94 to 1997–98**

	1993–94	1994–95	1995–96 <sup>(a)</sup>	1996–97 <sup>(b)</sup>	1997–98
<b>Public acute and psychiatric hospitals</b>					
Hospitals <sup>(c)</sup>	746	745	756	727	734
Available beds	61,260	59,273	59,720	56,836	55,735
Beds per 1,000 population	3.4	3.3	3.3	3.1	3.0
Non-admitted occasions of service <sup>(c)</sup>	n.a.	31,567,409 <sup>(e)</sup>	34,543,875	32,030,998	32,605,248
Total salary expenditure (\$'000)	6,897,956	7,039,268 <sup>(f)</sup>	7,704,239	7,839,999	8,242,305
Total non-salary expenditure (\$'000)	3,690,172	3,710,175 <sup>(f)</sup>	4,160,121	4,320,898	4,783,440
Total recurrent expenditure (\$'000)	10,588,128	10,749,443 <sup>(f)</sup>	11,864,360	12,160,897	13,025,745
Total revenue (\$'000)	1,083,619	1,130,468	1,116,942	1,009,502	1,068,763
<b>Private hospitals</b>					
Hospitals	329	328	323	319	n.a.
Available beds	21,241	22,370	22,757	22,966	n.a.
Beds per 1,000 population	1.2	1.2	1.3	1.2	n.a.
Total recurrent expenditure (\$'000)	2,225,893	2,503,067	2,823,781	3,087,710	n.a.
Total revenue (\$'000)	2,491,674	2,763,174	3,083,859	3,374,271	n.a.
<b>Private free-standing day hospital facilities</b>					
Day hospital facilities	111	125	140	153	n.a.
Total recurrent expenditure (\$'000)	61,092	70,044	80,238	95,410	n.a.
Total revenue (\$'000)	76,502	85,805	99,305	119,215	n.a.

(a) Data for 1995–96 have been corrected since originally published in *Australian Hospital Statistics 1995–96* by the issuing of an errata.

(b) From 1996–97 New South Wales excluded population health and primary and community-based program expenditure, and expended trust funds, which had been included prior to 1995–96. This causes a discontinuity in the expenditure data between 1995–96 and 1996–97.

(c) Apparent differences in the number of hospitals reported are, in many instances, caused more by changes in administrative or reporting arrangements than by actual differences in the number of buildings. Networking in 1996–97 caused a large apparent drop in numbers.

(d) Excludes public psychiatric hospitals. Reporting arrangements have varied significantly across years.

(e) Excludes Western Australia

(f) Excludes some Victorian public psychiatric hospitals

n.a. not available.

**Table 3.2: Number of hospitals<sup>(a)</sup> and available beds by hospital sector<sup>(b)</sup> and type, States and Territories**

	NSW <sup>(c)</sup>	Vic	Qld	WA	SA <sup>(d)</sup>	Tas	ACT <sup>(c)</sup>	NT <sup>(d)</sup>	Total
<b>Hospitals</b>									
Public acute hospitals	212	146	182	88	79	19	3	5	734
Public psychiatric hospitals <sup>(e)</sup>	9	1	8	8	1	3	0	0	30
<i>Total public hospitals</i>	<i>221</i>	<i>147</i>	<i>190</i>	<i>96</i>	<i>80</i>	<i>22</i>	<i>3</i>	<i>5</i>	<i>764</i>
Private free-standing day hospital facilities	81	22	21	9	12	3	5	0	153
Private other <sup>(f)</sup>	87	101	50	27	41	10	2	1	319
<i>Total private hospitals</i>	<i>168</i>	<i>123</i>	<i>71</i>	<i>36</i>	<i>53</i>	<i>13</i>	<i>7</i>	<i>1</i>	<i>472</i>
<b>Total hospitals</b>	<b>389</b>	<b>270</b>	<b>261</b>	<b>132</b>	<b>133</b>	<b>35</b>	<b>10</b>	<b>6</b>	<b>1,236</b>
<b>Available beds</b>									
Public acute hospitals	18,497	12,284	9,898	4,810	4,694	1,078	768	577	52,606
Public psychiatric hospitals <sup>(e)</sup>	1,208	53	911	453	504	n.a.	..	..	3,129
<i>Total beds available in public hospitals</i>	<i>19,705</i>	<i>12,337</i>	<i>10,809</i>	<i>5,263</i>	<i>5,198</i>	<i>1,078</i>	<i>768</i>	<i>577</i>	<i>55,735</i>
Private free-standing day hospital facilities	657	164	188	60	72	22	n.p.	..	1,163
Private other <sup>(f)</sup>	6,377	6,158	5,021	2,263	2,366	781	n.p.	n.p.	22,966
<i>Total beds available in private hospitals</i>	<i>7,034</i>	<i>6,322</i>	<i>5,209</i>	<i>2,323</i>	<i>2,438</i>	<i>803</i>	<i>n.p.</i>	<i>n.p.</i>	<i>24,129</i>
<b>Total available beds</b>	<b>26,739</b>	<b>18,659</b>	<b>16,018</b>	<b>7,586</b>	<b>7,636</b>	<b>1,881</b>	<b>768</b>	<b>577</b>	<b>79,864</b>

(a) The number of hospitals reported can be affected by administrative and/or reporting arrangements and is not necessarily a measure of the number of physical hospital buildings or campuses.

(b) Public hospital data are for 1997–98, private hospital data are for 1996–97.

(c) Available beds in *private* hospitals for the Australian Capital Territory are included with New South Wales.

(d) Available beds in *private other* hospitals for the Northern Territory are included with South Australia.

(e) Includes public psychiatric and alcohol and drug hospitals.

(f) Includes private acute and private psychiatric hospitals.

n.a. not available.

.. not applicable.

n.p. not published.

Note: Private hospital data are provided from the Australian Bureau of Statistics Private Health Establishments Collection.

**Table 3.3: Number of public acute and psychiatric hospitals<sup>(a)</sup> and available beds by hospital size, States and Territories, 1997–98**

Hospital size <sup>(b)</sup>	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Hospitals</b>									
Less than 11	12	45	74	40	7	13	1	0	192
11–50	120	44	80	36	56	6	0	2	344
51–100	34	26	11	8	7	0	0	1	87
101–200	33	10	9	6	4	1	1	1	65
201–500	15	18	13	4	4	2	0	1	57
501+	7	4	3	2	2	0	1	0	19
<b>Total</b>	<b>221</b>	<b>147</b>	<b>190</b>	<b>96</b>	<b>80</b>	<b>22</b>	<b>3</b>	<b>5</b>	<b>764</b>
<b>Available beds</b>									
Less than 11	70	137	201	248	46	47	10	..	759
11–50	3,196	1,106	2,074	889	1,556	113	..	50	8,984
51–100	2,495	1,828	872	553	483	..	..	60	6,291
101–200	4,794	1,363	1,313	998	593	135	167	170	9,533
201–500	4,706	5,364	4,012	1,151	1,376	783	..	297	17,689
501+	4,444	2,539	2,337	1,424	1,144	..	591	..	12,479
<b>Total</b>	<b>19,705</b>	<b>12,337</b>	<b>10,809</b>	<b>5,263</b>	<b>5,198</b>	<b>1,078</b>	<b>768</b>	<b>577</b>	<b>55,735</b>

(a) The number of hospitals reported can be affected by administrative and/or reporting arrangements and is not necessarily a measure of the number of physical hospital buildings or campuses.

(b) Size is based on the number of available beds.

.. not applicable.

**Table 3.4: Number of hospitals<sup>(a)</sup> and available beds per 1,000 population by metropolitan, rural and remote region, public acute and psychiatric hospitals, States and Territories, 1997–98**

Region	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Hospitals</b>									
Capital cities	54	48	28	22	15	5	3	1	176
Other metropolitan centres	14	2	5	..	..	..	..	..	21
<i>Total metropolitan</i>	<i>68</i>	<i>50</i>	<i>33</i>	<i>22</i>	<i>15</i>	<i>5</i>	<i>3</i>	<i>1</i>	<i>197</i>
Large rural centres	11	6	8	..	1	2	..	..	28
Small rural centres	25	11	6	4	5	1	..	..	52
Other rural areas	98	78	56	33	47	12	0	0	324
<i>Total rural</i>	<i>134</i>	<i>95</i>	<i>70</i>	<i>37</i>	<i>53</i>	<i>15</i>	<i>0</i>	<i>0</i>	<i>404</i>
Remote centres	..	..	16	8	..	..	..	2	26
Other remote areas	19	2	71	29	12	2	..	2	137
<i>Total remote</i>	<i>19</i>	<i>2</i>	<i>87</i>	<i>37</i>	<i>12</i>	<i>2</i>	<i>..</i>	<i>4</i>	<i>163</i>
<b>Total all regions</b>	<b>221</b>	<b>147</b>	<b>190</b>	<b>96</b>	<b>80</b>	<b>22</b>	<b>3</b>	<b>5</b>	<b>764</b>
<b>Available beds per 1,000 population</b>									
Capital cities	2.9	2.5	3.1	2.8	3.0	2.5	2.5	3.5	2.8
Other metropolitan centres	2.0	3.2	2.2	..	..	..	..	..	2.2
<i>Total metropolitan</i>	<i>2.8</i>	<i>2.5</i>	<i>2.9</i>	<i>2.8</i>	<i>3.0</i>	<i>2.5</i>	<i>2.5</i>	<i>3.5</i>	<i>2.7</i>
Large rural centres	4.7	4.1	4.3	..	3.9	3.4	..	..	4.3
Small rural centres	3.8	3.7	2.6	3.2	4.5	2.4	..	..	3.5
Other rural areas	4.2	2.7	2.6	3.2	5.1	1.1	..	..	3.3
<i>Total rural</i>	<i>4.1</i>	<i>3.2</i>	<i>3.2</i>	<i>3.2</i>	<i>4.9</i>	<i>2.1</i>	<i>..</i>	<i>..</i>	<i>3.6</i>
Remote centres	..	..	3.9	3.5	..	..	..	6.5	4.2
Other remote areas	7.0	2.3	7.1	4.0	6.5	3.2	..	1.0	5.1
<i>Total remote</i>	<i>7.0</i>	<i>2.3</i>	<i>5.6</i>	<i>3.8</i>	<i>6.5</i>	<i>3.2</i>	<i>..</i>	<i>3.2</i>	<i>4.7</i>
<b>Total all regions</b>	<b>3.1</b>	<b>2.7</b>	<b>3.2</b>	<b>2.9</b>	<b>3.5</b>	<b>2.3</b>	<b>2.5</b>	<b>3.1</b>	<b>3.0</b>

(a) The number of hospitals reported can be affected by administrative and/or reporting arrangements and is not necessarily a measure of the number of physical hospital buildings or campuses.

.. not applicable.

**Table 3.5: Number of public acute hospitals with specialised services, States and Territories, 1997–98<sup>(a)</sup>**

Specialised services	NSW	Vic <sup>(b)</sup>	Qld	WA	SA	Tas	ACT	NT	Total
Acute renal dialysis unit	13	7	6	4	5	2	1	2	40
Acute spinal cord injury unit	2	1	1	1	1	0	0	0	6
AIDS unit	14	4	4	6	0	1	1	1	31
Alcohol and drug unit	24	15	7	2	0	0	0	1	49
Burns unit (level III)	4	2	3	2	2	1	0	0	14
Cardiac surgery unit	11	7	3	4	5	1	1	0	32
Clinical genetics unit	6	6	3	3	2	0	1	0	21
Coronary care unit	36	30	17	6	4	3	2	2	100
Diabetes unit	19	15	11	14	8	3	1	1	72
Domiciliary care service	104	105	15	44	43	1	0	3	315
Geriatric assessment unit	53	29	10	16	10	1	1	0	120
Hospice care unit	36	35	13	16	8	3	0	0	111
Infectious diseases unit	10	9	8	2	3	1	1	2	36
Intensive care unit (level III)	41	24	3	2	5	3	1	1	80
In-vitro fertilisation unit	3	4	0	1	2	1	0	0	11
Maintenance renal dialysis centre	23	51	15	8	5	2	1	2	107
Major plastic/reconstructive surgery unit	10	13	6	7	9	2	1	0	48
Neonatal intensive care unit (level III)	15	5	3	4	3	1	1	2	34
Neurosurgical unit	11	7	6	4	4	1	1	0	34
Nursing home care unit	56	87	19	41	43	4	1	0	251
Obstetric/maternity service	105	77	66	37	52	6	3	5	351
Oncology unit	26	20	14	9	7	4	1	0	81
Psychiatric unit/ward	28	34	14	16	30	3	2	2	129
Refractory epilepsy unit	2	4	0	3	0	1	0	0	10
Rehabilitation unit	45	30	12	10	9	3	1	2	112
Sleep centre	9	8	5	2	1	1	0	0	26
Specialist paediatric service	40	35	22	11	8	3	2	4	125
Transplantation unit—bone marrow	8	6	2	4	2	1	1	0	24
Transplantation unit—heart (including heart/lung)	1	2	1	1	0	0	0	0	5
Transplantation unit—liver	3	2	2	1	1	0	0	0	9
Transplantation unit—pancreas	1	1	0	0	0	0	0	0	2
Transplantation unit—renal	10	6	1	3	2	0	0	0	22

(a) Excludes psychiatric and drug and alcohol hospitals.

(b) Victorian data may be a slight underestimate as some small networks reported at network rather than campus level. Consequently if two campuses within the network had a specialised type of service, it was counted as one.

*Note:* These data for some jurisdictions were not available for all hospitals so the number of services is therefore under-enumerated.

**Table 3.6: Average full time equivalent staff,<sup>(a)</sup> staff per 1,000 separations and staff per 1,000 patient days, public acute and psychiatric hospitals, States and Territories, 1997–98**

Staffing category	NSW	Vic	Qld <sup>(b)</sup>	WA <sup>(c)</sup>	SA <sup>(d)</sup>	Tas <sup>(e)</sup>	ACT	NT	Total
<b>Full time equivalent staff numbers</b>									
Salaried medical officers	5,392	3,511	2,774	1,400	1,512	304	284	210	15,387
Registered nurses	n.a.	14,457	11,983	6,848	5,790	n.a.	1,143	800	n.a.
Enrolled nurses	n.a.	2,257	2,263	746	1,527	n.a.	186	141	n.a.
Student nurses	n.a.	..	..	4	..	n.a.	0	3	n.a.
Trainee/pupil nurses	n.a.	..	..	n.a.	54	n.a.	0	0	n.a.
<i>Total nurses</i>	<i>28,517</i>	<i>16,714</i>	<i>14,246</i>	<i>7,598</i>	<i>7,371</i>	<i>1,520</i>	<i>1,329</i>	<i>944</i>	<i>78,239</i>
Other personal care staff	1,722	1,405	786	484	..	26	33	88	4,544
Diagnostic & allied health professionals	8,193	5,993	3,611	2,262	1,739	361	440	149	22,748
Administrative & clerical staff	7,307	6,383	4,290	3,031	2,601	513	466	303	24,894
Domestic & other staff	10,674	5,192	6,089	3,289	2,451	716	288	513	29,212
<b>Total staff</b>	<b>61,805</b>	<b>39,198</b>	<b>31,796</b>	<b>18,064</b>	<b>15,674</b>	<b>3,440</b>	<b>2,840</b>	<b>2,207</b>	<b>175,024</b>
<b>Full time equivalent staff per 1,000 separations</b>									
Salaried medical officers	4.2	3.8	4.0	4.0	4.4	4.1	4.9	4.0	4.1
Registered nurses	n.a.	15.6	17.5	19.8	16.7	n.a.	19.6	15.2	n.a.
Enrolled nurses	n.a.	2.4	3.3	2.2	4.4	n.a.	3.2	2.7	n.a.
Student nurses	n.a.	..	..	0.0	..	n.a.	0.0	0.1	n.a.
Trainee/pupil nurses	n.a.	..	..	n.a.	0.2	n.a.	0.0	..	n.a.
<i>Total nurses</i>	<i>22.4</i>	<i>18.0</i>	<i>20.8</i>	<i>21.9</i>	<i>21.3</i>	<i>20.3</i>	<i>22.7</i>	<i>17.9</i>	<i>20.7</i>
Other personal care staff	1.4	1.5	1.1	1.4	n.a.	0.3	0.6	1.7	1.2
Diagnostic & allied health professionals	6.4	6.5	5.3	6.5	5.0	4.8	7.5	2.8	6.0
Administrative & clerical staff	5.7	6.9	6.3	8.7	7.5	6.9	8.0	5.7	6.6
Domestic & other staff	8.4	5.6	8.9	9.5	7.1	9.6	4.9	9.7	7.7
<b>Total staff per 1,000 separations</b>	<b>48.5</b>	<b>42.2</b>	<b>46.4</b>	<b>52.1</b>	<b>45.2</b>	<b>46.0</b>	<b>48.6</b>	<b>41.9</b>	<b>46.4</b>

(continued)

**Table 3.6: (continued) Average full time equivalent staff,<sup>(a)</sup> staff per 1,000 separations and staff per 1,000 patient days, public acute and psychiatric hospitals, States and Territories, 1997–98**

Staffing category	NSW	Vic	Qld <sup>(b)</sup>	WA <sup>(c)</sup>	SA <sup>(d)</sup>	Tas <sup>(e)</sup>	ACT	NT	Total
<b>Full time equivalent staff per 1,000 patient days</b>									
Salaried medical officers	0.9	0.9	0.9	1.0	1.0	1.1	1.2	1.1	0.9
Registered nurses	n.a.	3.9	3.9	4.7	3.9	n.a.	4.7	4.2	n.a.
Enrolled nurses	n.a.	0.6	0.7	0.5	1.0	n.a.	0.8	0.7	n.a.
Student nurses	n.a.	..	..	0.0	..	n.a.	0.0	0.0	n.a.
Trainee/pupil nurses	n.a.	..	..	n.a.	0	n.a.	0.0	..	n.a.
<i>Total nurses</i>	<i>4.7</i>	<i>4.5</i>	<i>4.6</i>	<i>5.2</i>	<i>5.0</i>	<i>5.4</i>	<i>5.4</i>	<i>5.0</i>	<i>4.7</i>
Other personal care staff	0.3	0.4	0.3	0.3	n.a.	0.1	0.1	0.5	0.3
Diagnostic & allied health professionals	1.3	1.6	1.2	1.5	1.2	1.3	1.8	0.8	1.4
Administrative & clerical staff	1.2	1.7	1.4	2.1	1.8	1.8	1.9	1.6	1.5
Domestic & other staff	1.7	1.4	2.0	2.3	1.7	2.5	1.2	2.7	1.7
<b>Total staff per 1,000 patient days</b>	<b>10.1</b>	<b>10.5</b>	<b>10.3</b>	<b>12.4</b>	<b>10.6</b>	<b>12.2</b>	<b>11.6</b>	<b>11.7</b>	<b>10.5</b>

(a) Where average full time equivalent staff numbers were not available, staff numbers at 30 June 1998 were used.

(b) Many hospitals were unable to provide a split between *Registered* and *Enrolled nurses*. In these cases, the data are a best estimate only.

(c) *Other personal care staff* for Western Australia excludes staff on retention who do not work regular hours. Many hospitals were unable to provide a split between nurse categories and these have been coded as *Registered nurses*.

(d) South Australian *Other personal care staff* are included in *Diagnostic & health professionals* and *Domestic & other staff*. Most *Trainee/pupil nurses* are enrolled in tertiary institutions.

(e) For Tasmania staff numbers were only available for the three major hospitals, which account for 93% of total separations and 75% of total patient days. Staff numbers for the remaining 19 hospitals were not available. Data has been calculated using only those 3 hospitals.

n.a. not available.

.. not applicable.

**Table 3.7: Medical practitioners working in public and private hospitals,<sup>(a)</sup> by type of occupation, States and Territories, December 1997**

Occupation <sup>(b)</sup>	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Clinician									
Primary care	1,112	714	159	169	185	56	37	16	2,431
Hospital non-specialist	1,560	260	935	477	220	73	99	69	3,624
Specialist	3,277	3,056	1,386	843	997	215	140	87	9,913
Specialist-in-training	1,370	1,112	734	377	336	69	63	35	4,061
<i>Total</i>	<i>7,319</i>	<i>5,142</i>	<i>3,214</i>	<i>1,866</i>	<i>1,738</i>	<i>412</i>	<i>338</i>	<i>207</i>	<i>20,029</i>
Administrator	96	96	41	22	21	2	3	2	281
Teacher/educator	17	12	4	3	12	0	0	0	49
Researcher	50	32	4	7	10	0	0	0	103
Public health physician	31	22	38	19	29	7	6	2	153
Occupational health physician	31	4	4	2	4	0	0	0	45
Other	77	68	50	41	4	12	18	0	271
<b>Total public</b>	<b>7,623</b>	<b>5,376</b>	<b>3,356</b>	<b>1,960</b>	<b>1,818</b>	<b>432</b>	<b>365</b>	<b>210</b>	<b>20,930</b>
<b>Private hospitals</b>									
Clinician									
Primary care	661	130	110	34	42	7	8	6	992
Hospital non-specialist	168	21	83	24	30	15	5	0	345
Specialist	1,518	833	380	240	154	87	33	18	3,245
Specialist-in-training	183	67	48	14	28	8	3	0	352
<i>Total</i>	<i>2,530</i>	<i>1,051</i>	<i>620</i>	<i>311</i>	<i>254</i>	<i>117</i>	<i>49</i>	<i>23</i>	<i>4,933</i>
Administrator	11	6	9	3	0	0	0	0	29
Teacher/educator	3	4	0	0	1	0	0	0	9
Researcher	2	0	1	0	0	0	0	0	3
Public health physician	8	2	0	0	0	0	0	0	11
Occupational health physician	3	2	0	0	0	0	0	0	6
Other	35	16	17	5	0	3	2	0	78
<b>Total private</b>	<b>2,593</b>	<b>1,082</b>	<b>648</b>	<b>320</b>	<b>255</b>	<b>120</b>	<b>50</b>	<b>23</b>	<b>5,069</b>

(a) The annual medical labour force survey gives medical practitioners the option to report up to three jobs which are related to their medical qualifications. Therefore, a practitioner can report a job in both public and private sectors and be counted in each sector.

(b) A medical practitioner who reports working as a clinician in any medical-related job is counted as a clinician in these data. For example, a practitioner whose main job is as a researcher but who also reports some clinical work will be counted as a clinician. An administrator who does research as a second job will be counted as an administrator if that is his/her main job. 'Main job' is the job in which the most hours per week are worked.

Source: AIHW in press(b)



**Table 3.8: Recurrent expenditure (\$'000), public acute and psychiatric hospitals, States and Territories, 1997-98**

Recurrent expenditure category	NSW <sup>(a)</sup>	Vic	Qld <sup>(b)</sup>	WA <sup>(c)</sup>	SA <sup>(d)</sup>	Tas <sup>(e)</sup>	ACT	NT <sup>(f)</sup>	Total
Salaried medical officers	459,417	385,375	243,293	128,575	109,021	25,988	25,130	19,483	1,396,282
Registered nurses	n.a.	763,087	555,257	322,387	254,487	n.a.	57,229	39,393	1,991,840
Enrolled nurses	n.a.	91,467	78,690	27,165	52,085	n.a.	6,741	5,136	261,284
Student nurses	n.a.	..	..	96	..	n.a.	0	127	223
Trainee/pupil nurses	n.a.	..	..	n.a.	1,801	n.a.	0	0	1,801
<i>Total nurses</i>	<i>1,368,128</i>	<i>854,554</i>	<i>633,947</i>	<i>349,648</i>	<i>308,373</i>	<i>68,594</i>	<i>63,970</i>	<i>44,656</i>	<i>3,691,870</i>
Other personal care staff	58,123	39,253	23,944	15,424	n.a.	1,168	1,106	3,014	142,032
Diagnostic & health professionals	344,519	293,770	167,173	101,874	69,979	17,853	21,064	10,366	1,026,598
Administrative & clerical staff	321,787	243,990	144,287	111,464	79,874	17,770	19,303	11,026	949,501
Domestic & other staff	380,399	217,849	191,673	108,783	66,385	21,022	10,067	19,059	1,015,237
Not reported	..	6,221	..	..	..	14,564	..	..	20,785
<b>Total salary &amp; wages expenditure</b>	<b>2,932,373</b>	<b>2,041,012</b>	<b>1,404,317</b>	<b>815,768</b>	<b>633,632</b>	<b>166,959</b>	<b>140,640</b>	<b>107,604</b>	<b>8,242,305</b>
Payments to visiting medical officers	287,256	88,131	52,511	57,230	59,753	9,110	18,014	3,762	575,767
Superannuation payments	280,095	130,131	122,833	64,888	50,166	16,917	19,351	n.a.	684,381
Drug supplies	211,696	144,191	115,179	56,823	49,426	11,368	11,927	10,140	610,750
Medical & surgical supplies	305,760	224,306	168,892	93,841	68,330	27,399	21,407	7,243	917,178
Food supplies	67,806	46,759	22,568	12,755	10,479	3,499	3,225	1,611	168,702
Domestic services	98,305	79,748	72,873	37,835	33,277	6,932	7,273	8,398	344,641
Repairs & maintenance	111,798	78,305	49,112	32,739	51,173	6,945	6,788	3,384	340,244
Patient transport	33,900	13,529	12,525	9,432	7,926	2,431	1,405	4,342	85,490
Administrative expenses	210,560	159,436	111,627	72,867	72,782	16,207	12,839	10,950	667,268
Interest payments	210	494	n.a.	25,456	n.a.	0	4	n.a.	26,164
Depreciation	222,508	n.a.	n.a.	52,731	n.a.	2,843	10,528	n.a.	288,610
Other recurrent expenditure	162,622	85,151	950	41,737	33,116	18,213	13,136	6,103	361,028
Not reported	..	1,827	..	..	..	..	..	..	1,827
<b>Total non-salary expenditure excluding depreciation</b>	<b>1,770,008</b>	<b>1,052,008</b>	<b>729,070</b>	<b>505,603</b>	<b>436,428</b>	<b>119,021</b>	<b>115,369</b>	<b>55,933</b>	<b>4,783,440</b>
<b>Total expenditure excluding depreciation</b>	<b>4,702,381</b>	<b>3,093,020</b>	<b>2,133,387</b>	<b>1,321,371</b>	<b>1,070,061</b>	<b>285,980</b>	<b>256,009</b>	<b>163,537</b>	<b>13,025,745</b>

(a) New South Wales expenditure recorded against special purposes and trust funds is excluded.

(b) Queensland *Interest payments* are included in *Administrative expenses*.

(c) Western Australian *Superannuation* may vary substantially from previous years which were largely based on cash rather than accrual accounting.

(d) South Australian *Other personal care staff* are included in *Diagnostic & health professionals* and *Domestic & other staff*. *Interest payments* are included in *Administrative expenses*. Most *Trainee/pupil nurses* are enrolled in tertiary institutions. Termination payments are included in *Other recurrent expenditure*.

(e) Tasmanian hospitals pay payroll tax, with most being included in *Administrative expenses* and the remainder in *Other recurrent expenditure*.

(f) Hospitals in the Northern Territory make no contribution to *Superannuation*. *Interest payments* are not reported.

n.a. not available.

.. not applicable.

**Table 3.9: Revenue (\$'000), public acute and psychiatric hospitals, States and Territories, 1997–98**

Revenue source	NSW	Vic	Qld <sup>(a)</sup>	WA	SA	Tas	ACT	NT	Total
Patient revenue	217,260	162,662	69,509	53,379	45,122	25,182	11,077	2,382	586,573
Recoveries	140,406	68,528	15,868	21,304	306	6,166	4,902	2,462	259,942
Other revenue	49,007	91,684	20,197	22,512	3,835	15,099	8,423	11,491	222,248
<b>Total revenue</b>	<b>406,673</b>	<b>322,874</b>	<b>105,574</b>	<b>97,195</b>	<b>49,263</b>	<b>46,447</b>	<b>24,402</b>	<b>16,335</b>	<b>1,068,763</b>

(a) *Patient revenue* includes revenue for items such as pharmacy and ambulance, which may be considered as *Recoveries*.

**Table 3.10: Capital outlays on public acute hospitals (\$'000), States and Territories, 1997–98**

	NSW	Vic <sup>(b)</sup>	Qld	WA	SA	Tas	ACT	NT	Total
Capital transfer payments <sup>(a)</sup>	8,329	n.a.	1,856	0	0	0	0	0	n.a.
Purchase of capital assets	445,769	n.a.	395,006	59,339	102,928	13,253	12,993	4,436	n.a.
Sale of capital assets	-84,543	n.a.	-195	-7,527	-2,583 <sup>(c)</sup>	-2,446	0	-11	n.a.
<b>Net capital outlays</b>	<b>369,555</b>	<b>100,919</b>	<b>396,667</b>	<b>51,812</b>	<b>100,345</b>	<b>10,807</b>	<b>12,993</b>	<b>4,425</b>	<b>1,047,523</b>

(a) These consist mostly of grants to non-profit institutions.

(b) The Victorian data in the ABS Public Finance Database are anomalous. The Victorian Department of Human Services Annual Report 1997–98 (p. 72) indicates that capital expenditure by the Acute Services Program was \$100.919m in 1997–98. This number has been used in place of the data from the ABS Public Finance Database.

(c) Sale of capital assets includes reimbursements received from government agencies for capital expenditure in South Australia.

n.a. not available.

Source: ABS 1999a.

# 4 Overview of activity in Australian hospitals

## Introduction

This chapter presents summary statistics for admitted patients in public and private hospitals, and for non-admitted patients in public hospitals. Information is included on the number of separations for patients and their aggregated and average lengths of stay, presented on the basis of the sector of the hospital (public or private) and the type of hospital within the sector. Later chapters present information on the basis of characteristics of the patients and their hospital stays (Chapters 5 to 10).

Tables 4.1 and 4.2 are derived from the National Hospital Morbidity Database and present summary separation, patient day, average length of stay and average cost weight information by hospital sector and type. Table 4.1 reports the available national statistics for the years 1993–94 to 1997–98 and Table 4.2 reports the statistics for 1997–98 by State and Territory. With the exception of unqualified neonates (see Glossary), all types of episode of care are included, except as noted below for the average cost weight information. That is, separations for which the type of episode of care was rehabilitation care, palliative care, non-acute care and other care are included.

For 1997–98, the hospital sectors and types included are public acute hospitals, public psychiatric hospitals, private free-standing day facilities and other private hospitals. Data are also presented for all public hospitals combined, all acute hospitals (that is, excluding public psychiatric hospitals), all private hospitals and all hospitals.

Tables 4.3 and 4.4 present summary separation and patient day information for public hospitals from the National Public Hospital Establishments Database by type of admitted patient episode. The categories in this table (defined in the *National Health Data Dictionary*) describe the broad programs of health care provided to admitted patients.

In most States and Territories, there are some differences between the reporting of separations and patient days to the National Hospital Morbidity and the National Hospital Establishments Databases as presented in this Chapter. A brief discussion of these differences may be found in the technical notes (Appendix 3).

Data on non-admitted patient occasions of service in public hospitals, also derived from the National Public Hospital Establishments Database, are summarised in Table 4.5. The occasions of service are categorised by service type and provide information on the range of emergency department, outpatient and other non-admitted services provided by public hospitals.

# Admitted patients by sector and hospital type

## Separations

There were 5,563,074 separations reported from public and private acute and psychiatric hospitals in 1997–98 (Table 4.2), an increase of 236,159 (4.4%) compared with 1996–97 (Table 4.1). Public hospital separations increased by 3.5% (128,131) compared with 1996–97 and there was a 6.4% (108,028) increase in the private sector.

Public patient separations comprised 86% of public acute hospital separations, an increase over the 84% reported in 1996–97, 83% in 1995–96, 80% in 1994–95 and 78% reported in 1993–94. Complementary to this, there was a decrease in private patient separations in public acute hospitals. Further detail on patient accommodation status is presented in Chapter 5.

The number of separations reported for public psychiatric hospitals (22,566) rose by 2,204, an increase of 11% when compared with 1996–97. Note that the scope of data in this report differs from the scope of data for public psychiatric hospitals presented in the *National Mental Health Report 1997* (Commonwealth of Australia 1998) which are extracted from the National Survey of Mental Health Services database.

The private sector accounted for 32.2% of the 5.56 million separations (1,792,976), compared with 31.6% (1,684,948) in 1996–97. Private free-standing day hospital facilities accounted for 248,045 or 14% of private sector separations, compared with 221,398 or 13% in 1996–97.

About the same number of separations were reported for each month of the year, for both the public and private sectors (Figures 4.3 and 4.4). However, the fewest separations were reported for January for both sectors, apparent for both same day and non-same day separations.

## Same day separations

1997–98 saw a continuation of the recent annual increases in the proportions of admitted patients being treated on a same day basis, that is, admitted and separated on the same date.

Same day separations have been distinguished from other separations in this report to illustrate the proportions of total separations which they represent, and also to demonstrate the effect on average lengths of stay when patients receiving this type of hospital care are classified as admitted. In most countries of the Organisation for Economic Cooperation and Development (OECD), same day patients are not admitted, and reported average lengths of stay are therefore longer than those calculated for Australia (AIHW 1996a).

In Australia in 1997–98, a total of 2,577,652 separations were on a same day basis, an increase of 8.3% compared with 1996–97 and 52% compared with 1993–94. These separations comprised 46.3% of overall separations (compared with 44.7% (2,380,191) in 1996–97) and there were increases in the proportions of same day patients in both public acute hospitals (from 42.0% to 43.3%) and private hospitals (from 51.0% to 53.1%).

There was some variation amongst the States and Territories in the proportion of separations which were same day separations. For public acute hospitals, New South Wales had a lower proportion than the national average (40.4%), whereas the Australian Capital Territory (50.7%) and the Northern Territory (49.1%) had markedly higher proportions. In the private sector, New South Wales (58.7%) and Victoria (54.0%) reported higher proportions than average. The Australian Capital Territory (38.1%) and Tasmania (39.1%)

reported lower proportions, reflecting the incomplete coverage of private free-standing day hospital facilities for these two jurisdictions.

## Separation rates

The crude separation rate per 1,000 population increased by 2.3% between 1996–97 and 1997–98 for public acute hospitals and by 5.3% for private hospitals (Table 4.1, Figure 4.1). The age-standardised separation rate for all hospitals similarly rose between 1996–97 and 1997–98 (by 2.8%).

Among the States and Territories, the Northern Territory reported the highest crude public acute hospital separation rate in 1997–98 (278.3 per 1,000 population; Table 4.2) and Tasmania reported the lowest (168.9 per 1,000 population). Private hospital separation rates ranged from 57.2 per 1,000 population in the Australian Capital Territory (for which same day facilities were not included in the database) to 113.3 per 1,000 population in Queensland. For all hospitals combined, South Australia reported the highest crude separation rate (333.4 per 1,000 population) and Northern Territory the highest age-standardised separation rate (340.8 per 1,000 population), despite its private hospital not being included in the database.

These rates are likely to have been affected by whether or not separate episodes of care (see Glossary) within a hospital stay were counted as individual separations. The Australian Capital Territory and the Tasmanian private sector had not implemented this method of counting in 1997–98 and this would have had the effect of reducing the number of separations and increasing the average length of stay for these hospitals in comparison with the others.

The crude separation rate for public psychiatric hospitals varied widely, from 0.3 per 1,000 population in Victoria, to 2.9 per 1,000 population in South Australia. This variation reflects differences in the extent to which public psychiatric services have been mainstreamed into public acute hospitals.

## Average cost weight of separations

In Table 4.2, average cost weights are presented for 1997–98 based on the cost weights for the version 3.1 Australian National Diagnosis Related Group (AN-DRG) into which each separation was classified on the basis of demographic and clinical characteristics of the patient. Separations were only included where the type of episode of care was reported as 'acute', or was not reported. Thus separations which were for rehabilitation, palliative care, non-acute care, other care and unqualified neonates were excluded.

The average cost weight information provides a guide to the relative complexity and resource use of admissions within hospitals, with a value of 1.00 representing the theoretical average for all separations. Separate private and public sector cost weights were used, as they reflect the differing cost structures of the two sectors. Public sector cost weights were used for the rows for 'Public acute and private hospitals' and 'Total'.

In Table 4.1, average cost weights for 1996–97 are based on AN-DRG version 3.1 and 1996–97 cost weights, and average cost weights for 1995–96 are based on AN-DRG version 3.0 and its corresponding cost weights. Comparisons of average cost weights between the reporting years and between the sectors should therefore be made with caution. Further information about the AN-DRG classification and cost weights is included in Chapter 10.

Table 4.2 indicates that, within the public sector, most States and Territories had average cost weights close to the national average for public acute hospitals. The Northern Territory was the only exception, with an average cost weight of 0.76. This reflects the high proportion (33%) of separations in the Northern Territory that were for *Admit for renal dialysis* (AN-DRG 572), an AN-DRG with a low relative cost weight (see Chapter 10). Overall, public psychiatric hospital separations had markedly higher cost weights than public acute hospitals, reflecting, at least in part, the longer average lengths of stay in these hospitals.

The validity of comparisons of average cost weights is limited by differences in the extent to which each jurisdiction's psychiatric services are integrated into its public hospital system. For example, in Victoria, almost all public psychiatric hospitals are now mainstreamed and are therefore included in the public acute hospital data. Cost weights are of little use as a measure of resource requirements for these services because the relevant AN-DRGs are much less homogeneous than for other acute services.

The average cost weight for private free-standing day hospitals was markedly lower (0.56) than for other private hospitals (1.02), reflecting the lesser complexity and day-only nature of most admissions in these hospitals. The average cost weights for the 'other' private hospitals did not differ markedly among the States and Territories.

## Patient days

Patient days represent the number of full or partial days stay for patients who separated from hospital during the reporting period, and represent the aggregated length of stay for all patients (see Glossary). They have previously been referred to as bed days. A total of 22,565,356 patient days were reported for 1997–98, 73.3% in the public sector and 26.7% in the private sector.

There was a decrease in patient days reported for public acute hospitals (29,649, 0.2%) in 1997–98 compared with 1996–97, but there was an increase reported for private hospitals (170,829, 2.9%). Patient days for public acute and private hospitals combined increased by 0.7% (141,180) and for all hospitals combined, it increased by 0.9% (199,531).

Public psychiatric hospital patient days increased by 4.3% (58,351) nationally. Crude rates for 1997–98 ranged from 7.3 patient days per 1,000 population in Victoria to 160.7 per 1,000 in Queensland.

The number of patient days per 1,000 population in 1997–98 fell by 0.4% for public acute and private hospitals combined compared with 1996–97. Public acute hospital patient days per 1,000 fell by 1.3%, with those for private hospitals increasing by 1.8%. Age-standardised patient days per 1,000 population for all hospitals combined have decreased over the last three years.

Of the States and Territories, the Northern Territory reported the highest number of patient days per 1,000 population for public acute hospitals in 1997–98 (993.4 per 1,000 population) and Tasmania reported the lowest (701.8 per 1,000 population). The highest crude population rate for patient days in private hospitals was reported by Queensland (401.2 per 1,000 population). Age-standardised, the highest rate for all hospitals combined was reported by the Northern Territory (1,313.0 per 1,000 population) and the lowest by Victoria (1084.4 per 1,000 population).

## Average length of stay

The average length of stay for public acute and private hospitals combined was 3.8 days, a reduction from 4.0 days in 1996–97, reflecting the increases in same day separations and a continuation of the trend suggested by the data over the last few years (Figure 4.2). For public acute hospitals, there was a decrease from 4.2 days in 1996–97 to 4.0 days in 1997–98, and decreases for both public and private patients. For private hospitals, the average length of stay was 3.3 days in 1997–98, a reduction from 3.5 days in the previous year. The average length of stay for public psychiatric hospitals decreased from 67.7 days to 62.4 days.

New South Wales reported the longest average length of stay for public acute hospitals (4.4 days) and the Northern Territory reported the shortest (3.6 days). For private hospitals other than free-standing day hospital facilities, Queensland reported the longest average length of stay (4.0 days) and Western Australian reported the shortest (3.4 days).

With same day separations excluded (as is the practice in most OECD countries), average lengths of stay have not reduced as markedly over the last few years (Table 4.1, Figure 4.2). The average length of stay for 1997–98 was shorter than in 1996–97 for public acute hospitals (6.4 days compared with 6.5 days). However, for private hospitals, it was the same as in 1996–97 and in 1994–95 (6.0 days). These figures indicate most of the reductions in average length of stay overall are a result of increasing proportions of same day separations, rather than reductions in length of stay for non-same day stays. The average lengths of stay are within the range of those reported for 1995 average lengths of stay for acute care for other OECD countries (OECD 1997).

## Admitted patients by public hospital program areas

Data on the number of separations and patient days spent in public hospitals, by type of admitted patient episode, are provided in Tables 4.3 and 4.4. The type of admitted patient episode classifies separations and patient days into the broad programs of health care, rather than providing a detailed casemix profile. Detailed information on patient diagnoses and procedures and on the AN-DRGs of admitted patient episodes are provided in later chapters (see Chapters 7, 8 and 10).

Public hospitals reported 3,772,273 separations for 1997–98. By far, the majority of separations were for medical, surgical and obstetrics, which together accounted for 79% of all separations. The next most frequent separation categories were dialysis and Mental health, which accounted for nearly 10% and 3.5% of all separations respectively.

However, Table 4.4, which provides information on the number of patient days spent in public hospitals by type of episode, shows a different picture. Over 16 million patient days were reported for public hospitals in 1997–98. Medical, surgical and obstetric separations again dominated, accounting for the majority of patient days (67%). Mental health separations, which accounted for 3.5% of separations, accounted for nearly 12.5% of all patient days. Other episode types which had high average lengths of stay (as derived from Tables 4.3 and 4.4) included intellectual handicap, nursing home type patients, rehabilitation, and non-medical and social patients. Dialysis and endoscopy had relatively short average lengths of stay (1.0 day and 2.2 days), and thus accounted for relatively fewer patient days.

## Non-admitted patients in public hospitals

Information on non-admitted patient occasions of service delivered by Australian public acute and psychiatric hospitals is provided in Table 4.5.

Over 32 million non-admitted patient occasions of service were delivered to individuals through Australian public acute hospitals in 1997–98. The largest group of these were ‘Other medical/surgical/obstetric’ encounters (37% of the total), followed by ‘Accident and emergency’ services (15.8%) and ‘Pathology’ (10.6%). ‘Allied health’ and ‘Community health’ were also frequently provided services, together accounting for 14.5% of non-admitted patient services. These categories include services such as: physiotherapy, speech therapy, dietary advice, baby clinics, aged care assessment teams and immunisation clinics.

In addition to the services provided to individuals, 468,523 group sessions were delivered through public acute hospitals. These services include group activities conducted in the same areas against which individual non-admitted patient services are recorded. A group service is defined as a service provided to two or more patients, but excludes services provided to two or more family members, which are treated as services provided to an individual. Because of the inconsistent reporting of group sessions against the sub-categories, the total number of sessions only is reported.

Users of these data should note that there is considerable variation in practices amongst States and Territories and between reporting years in the way in which non-admitted patient occasions of service data are collected. In particular, New South Wales does not collect information against some service categories and does not separate diagnostic services into ‘Pathology’ and ‘Radiology and organ imaging’, although these have been able to be estimated. Likewise, South Australian hospitals reported non-admitted patient services using a different set of categories that are not consistent with those used by other States and Territories. Categories for which there is no equivalent category are reported as ‘not applicable’ for both New South Wales and South Australia. Over the last few years, South Australia, Western Australia, Queensland and Tasmania all had changes in reporting arrangements for non-admitted occasions of service. For example, in South Australia the large increase from 8,822 group sessions in 1996–97 to 179,128 group sessions in 1997–98 is due to improved reporting for South Australian country hospitals.

Differing admission practices between the States and Territories will also lead to variation among jurisdictions in the services reported in Table 4.5. States and Territories may also differ in the extent to which these types of services are provided in non-hospital settings (such as community health centres), which is beyond the scope of this data collection.

Data on the number of non-admitted patient occasions of service provided through public psychiatric hospitals are also requested, although data collection in this area is poor. A total of 159,724 services were provided in New South Wales and Queensland, the only States or Territories for which these data have been supplied (Table 4.5). These services include ‘emergency and outpatient’ care and ‘outreach/community’ care provided to individuals or groups. Information collected for these hospitals is not disaggregated further due to the restricted range of services usually provided through psychiatric hospitals.



**Table 4.1: Summary of separation, same day separation, average cost weight, patient day and average length of stay statistics, by hospital type, Australia, 1993–94 to 1997–98**

	1993–94 <sup>(a)(b)</sup>	1994–95 <sup>(a)(b)</sup>	1995–96 <sup>(c)</sup>	1996–97	1997–98
<b>Separations ('000)</b>					
Public acute hospitals <sup>(d)</sup>	3,296	3,420	3,568	3,622	3,748
Public patients <sup>(e)</sup>	2,557	2,720	2,963	3,058	3,222
Private patients	545	489	438	393	355
Public psychiatric hospitals <sup>(f)</sup>	n.a.	n.a.	25	20	23
Private hospitals <sup>(g)</sup>	1,313	1,460	1,577	1,685	1,793
Public acute & private hospitals <sup>(h)</sup>	4,609	4,880	5,146	5,307	5,541
<b>Total</b>	<b>4,609</b>	<b>4,880</b>	<b>5,171</b>	<b>5,327</b>	<b>5,563</b>
<b>Same day separations ('000)</b>					
Public acute hospitals <sup>(d)</sup>	1,128	1,290	1,419	1,520	1,622
Public patients <sup>(e)</sup>	894	1,039	1,197	1,302	1,412
Private patients	181	178	168	160	152
Public psychiatric hospitals <sup>(f)</sup>	n.a.	n.a.	1	1	2
Private hospitals <sup>(g)</sup>	568	673	772	859	953
Public acute & private hospitals <sup>(h)</sup>	1,697	1,964	2,192	2,379	2,575
<b>Total</b>	<b>1,697</b>	<b>1,964</b>	<b>2,192</b>	<b>2,380</b>	<b>2,578</b>
<b>Same day separations as a % of total</b>					
Public acute hospitals <sup>(d)</sup>	34.2	37.7	39.8	42.0	43.3
Public patients <sup>(e)</sup>	35.0	38.2	40.4	42.6	43.8
Private patients	33.2	36.5	38.4	40.9	42.7
Public psychiatric hospitals <sup>(f)</sup>	n.a.	n.a.	5.5	3.9	10.6
Private hospitals <sup>(g)</sup>	43.3	46.1	48.9	51.0	53.1
Public acute & private hospitals <sup>(h)</sup>	36.8	40.1	42.5	44.8	46.5
<b>Total</b>	<b>36.8</b>	<b>40.2</b>	<b>42.4</b>	<b>44.7</b>	<b>46.3</b>
<b>Separations per 1,000 population<sup>(i)</sup></b>					
Public acute hospitals <sup>(d)</sup>	185.6	190.5	196.4	196.6	201.2
Public patients <sup>(e)</sup>	144.0	151.5	163.1	166.0	173.0
Private patients	30.7	27.2	24.1	21.3	19.1
Public psychiatric hospitals <sup>(f)</sup>	n.a.	n.a.	1.7	1.1	1.2
Private hospitals <sup>(g)</sup>	74.7	82.1	87.7	92.4	97.3
Public acute & private hospitals <sup>(h)</sup>	259.5	271.9	283.2	288.0	297.5
<b>Total</b>	<b>259.5</b>	<b>271.9</b>	<b>284.6</b>	<b>289.1</b>	<b>298.7</b>
<b>Total (age-standardised)<sup>(i)</sup></b>	<b>257.0</b>	<b>268.1</b>	<b>279.1</b>	<b>282.7</b>	<b>290.6</b>
<b>Average cost weight of separations<sup>(j)</sup></b>					
Public acute hospitals <sup>(d)</sup>	n.a.	n.a.	1.04	1.02	1.00
Public patients <sup>(e)</sup>	n.a.	n.a.	1.01	0.99	0.97
Private patients	n.a.	n.a.	1.09	1.08	1.07
Public psychiatric hospitals <sup>(f)</sup>	n.a.	n.a.	1.23	1.37	1.58
Private hospitals <sup>(g)</sup>	n.a.	n.a.	0.95	0.94	0.96
Public acute & private hospitals <sup>(h)</sup>	n.a.	n.a.	1.01	0.99	0.98
<b>Total</b>	<b>n.a.</b>	<b>n.a.</b>	<b>1.01</b>	<b>1.00</b>	<b>0.99</b>
<b>Patient days ('000)</b>					
Public acute hospitals <sup>(d)</sup>	15,907	15,567	15,607	15,181	15,152
Public patients <sup>(e)</sup>	12,029	12,086	12,608	12,494	12,460
Private patients	2,529	2,173	1,878	1,622	1,419
Public psychiatric hospitals <sup>(f)</sup>	n.a.	n.a.	948	1,350	1,409
Private hospitals <sup>(g)</sup>	5,117	5,407	5,893	5,834	6,005
Public acute & private hospitals <sup>(h)</sup>	21,024	20,974	21,499	21,015	21,157
<b>Total</b>	<b>21,024</b>	<b>20,974</b>	<b>22,448</b>	<b>22,366</b>	<b>22,565</b>

(continued)

**Table 4.1 (continued): Summary of separation, same day separation, average cost weight, patient day and average length of stay statistics, by hospital type, Australia, 1993–94 to 1997–98**

	1993–94 <sup>(a)(b)</sup>	1994–95 <sup>(a)(b)</sup>	1995–96 <sup>(c)</sup>	1996–97	1997–98
<b>Patient days per 1,000 population<sup>(i)</sup></b>					
Public acute hospitals <sup>(d)</sup>	895.6	867.2	859.1	824.1	813.6
Public patients <sup>(e)</sup>	677.3	673.3	694.1	678.2	669.0
Private patients	142.4	121.0	103.4	88.0	76.2
Public psychiatric hospitals <sup>(f)</sup>	n.a.	n.a.	91.8	73.3	75.6
Private hospitals <sup>(g)</sup>	291.0	304.1	327.6	319.9	325.8
Public acute & private hospitals <sup>(h)</sup>	1,183.8	1,168.4	1,183.5	1,140.7	1,136.0
<b>Total</b>	<b>1,183.8</b>	<b>1,168.4</b>	<b>1,235.7</b>	<b>1,214.0</b>	<b>1,211.7</b>
<b>Total (age-standardised)<sup>(i)</sup></b>	<b>1,157.7</b>	<b>1,133.8</b>	<b>1,187.9</b>	<b>1,161.4</b>	<b>1,150.5</b>
<b>Average length of stay (days)</b>					
Public acute hospitals <sup>(d)</sup>	4.8	4.6	4.4	4.2	4.0
Public patients <sup>(e)</sup>	4.7	4.4	4.3	4.1	3.9
Private patients	4.6	4.4	4.3	4.1	4.0
Public psychiatric hospitals <sup>(f)</sup>	n.a.	n.a.	52.1	67.7	62.4
Private hospitals <sup>(g)</sup>	3.9	3.7	3.7	3.5	3.3
Public acute & private hospitals <sup>(h)</sup>	4.6	4.3	4.2	4.0	3.8
<b>Total</b>	<b>4.6</b>	<b>4.3</b>	<b>4.3</b>	<b>4.2</b>	<b>4.1</b>
<b>Average length of stay, excluding same day separations (days)</b>					
Public acute hospitals <sup>(d)</sup>	6.8	6.7	6.6	6.5	6.4
Public patients <sup>(e)</sup>	6.7	6.6	6.5	6.4	6.1
Private patients	6.4	6.4	6.3	6.3	6.2
Public psychiatric hospitals <sup>(f)</sup>	n.a.	n.a.	54.4	-1689.2	69.7
Private hospitals <sup>(g)</sup>	6.1	6.0	6.4	6.0	6.0
Public acute & private hospitals <sup>(h)</sup>	6.6	6.5	6.5	6.4	6.3
<b>Total</b>	<b>6.6</b>	<b>6.5</b>	<b>6.8</b>	<b>6.8</b>	<b>6.7</b>

(a) For 1993–94 and 1994–95 Victorian private hospital data are incomplete. About 81% of 1993–94 separations and 98% of 1994–95 separations were included.

(b) Data for 1993–94 and 1994–95 have been updated since published in *Australian Hospital Statistics 1996–97*, reflecting exclusion of some non-hospital New South Wales facilities.

(c) Statistical separations were introduced in 1995–96 and would have resulted in an increase in separations reported for that and subsequent years compared with previous years.

(d) Includes the Department of Veterans' Affairs hospitals.

(e) Although public and private patients account for the bulk of separations from public hospitals, there are also separations for other categories of patients, as detailed in Table 5.1.

(f) Public psychiatric hospital data were not included until 1995–96, and that year Queensland was unable to report. Victoria was not able to provide patient days data for all separations in 1995–96 and for 407 separations in 1996–97, as leave days could not be identified.

(g) Includes private psychiatric hospitals and private free-standing day hospital facilities.

(h) Excludes public psychiatric hospitals.

(i) Figures are crude rates per 1,000 population at 31 December of the relevant year or, if indicated as such, directly age-standardised to the Australian population at 30 June 1991. For public psychiatric hospitals and private hospitals, rates were derived using populations of the reporting States and Territories only, without adjustment for incomplete reporting.

(j) Separations for which the type of episode of care was reported as acute, or was not reported. For further details see Chapter 10. Public national cost weights were used for the *Public acute & private hospitals* and *Total* rows. AN-DRG version 3.1 was used for 1996–97 and 1997–98 and version 3.0 was used for 1995–96.

n.a. not available.

**Table 4.2: Summary of separation, same day separation, average cost weight, patient day and average length of stay statistics, by hospital type, States and Territories, 1997-98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Separations</b>									
Public hospitals <sup>(a)</sup>	1,272,797	928,847	685,345	346,363	346,782	80,389	57,175	52,400	3,770,098
Public acute hospitals	1,261,314	927,327	683,867	343,164	342,459	79,826	57,175	52,400	3,747,532
Public psychiatric hospitals	11,483	1,520	1,478	3,199	4,323	563	..	..	22,566
Private hospitals <sup>(b)</sup>	544,351	484,201	388,078	160,358	147,420	50,997	17,571	n.a.	1,792,976
Private free-standing day hospital facilities	124,238	46,637	57,028	9,473	9,532	1,137	n.a.	..	248,045
Other private hospitals	420,113	437,564	331,050	150,885	137,888	49,860	17,571	n.a.	1,544,931
Public acute & private hospitals <sup>(c)</sup>	1,805,665	1,411,528	1,071,945	503,522	489,879	130,823	74,746	52,400	5,540,508
<b>Total</b>	<b>1,817,148</b>	<b>1,413,048</b>	<b>1,073,423</b>	<b>506,721</b>	<b>494,202</b>	<b>131,386</b>	<b>74,746</b>	<b>52,400</b>	<b>5,563,074</b>
<b>Same day separations</b>									
Public hospitals <sup>(a)</sup>	511,361	430,182	294,007	148,337	149,435	36,807	28,055	26,545	1,624,729
Public acute hospitals	509,351	430,062	293,978	148,295	149,261	36,792	28,055	26,545	1,622,339
Public psychiatric hospitals	2,010	120	29	42	174	15	..	..	2,390
Private hospitals <sup>(b)</sup>	319,544	261,521	202,144	77,397	65,666	19,950	6,701	n.a.	952,923
Private free-standing day hospital facilities	124,238	46,637	57,028	9,473	9,532	1,137	n.a.	..	248,045
Other private hospitals	195,306	214,884	145,116	67,924	56,134	18,813	6,701	n.a.	704,878
Public acute & private hospitals <sup>(c)</sup>	828,895	691,583	496,122	225,692	214,927	56,742	34,756	26,545	2,575,262
<b>Total</b>	<b>830,905</b>	<b>691,703</b>	<b>496,151</b>	<b>225,734</b>	<b>215,101</b>	<b>56,757</b>	<b>34,756</b>	<b>26,545</b>	<b>2,577,652</b>
<b>Same day separations as a % of total</b>									
Public hospitals <sup>(a)</sup>	40.2	46.3	42.9	42.8	43.1	45.8	49.1	50.7	43.1
Public acute hospitals	40.4	46.4	43.0	43.2	43.6	46.1	49.1	50.7	43.3
Public psychiatric hospitals	17.5	7.9	2.0	1.3	4.0	2.7	..	..	10.6
Private hospitals <sup>(b)</sup>	58.7	54.0	52.1	48.3	44.5	39.1	38.1	n.a.	53.1
Private free-standing day hospital facilities	100.0	100.0	100.0	100.0	100.0	100.0	n.a.	..	100.0
Other private hospitals	46.5	49.1	43.8	45.0	40.7	37.7	38.1	n.a.	45.6
Public acute & private hospitals <sup>(c)</sup>	45.9	49.0	46.3	44.8	43.9	43.4	46.5	50.7	46.5
<b>Total</b>	<b>45.7</b>	<b>49.0</b>	<b>46.2</b>	<b>44.5</b>	<b>43.5</b>	<b>43.2</b>	<b>46.5</b>	<b>50.7</b>	<b>46.3</b>
<b>Separations per 1,000 population<sup>(d)</sup></b>									
Public hospitals <sup>(a)</sup>	202.0	200.7	200.1	191.1	233.9	170.1	186.0	278.3	202.4
Public acute hospitals	200.1	200.3	199.6	189.4	231.0	168.9	186.0	278.3	201.2
Public psychiatric hospitals	1.8	0.3	0.4	1.8	2.9	1.2	..	..	1.2
Private hospitals <sup>(b)</sup>	86.4	104.6	113.3	88.5	99.4	107.9	57.2	n.a.	97.3
Private free-standing day hospital facilities	19.7	10.1	16.6	5.2	6.4	2.4	n.a.	..	13.5
Other private hospitals	66.7	94.5	96.6	83.3	93.0	105.5	57.2	n.a.	83.8
Public acute & private hospitals <sup>(c)</sup>	286.5	304.9	312.9	277.9	330.5	276.8	243.2	278.3	297.5
<b>Total</b>	<b>288.3</b>	<b>305.3</b>	<b>313.3</b>	<b>279.6</b>	<b>333.4</b>	<b>278.0</b>	<b>243.2</b>	<b>278.3</b>	<b>298.7</b>
<b>Total (age-standardised)</b>	<b>277.0</b>	<b>292.8</b>	<b>311.4</b>	<b>282.8</b>	<b>313.0</b>	<b>268.2</b>	<b>266.1</b>	<b>340.8</b>	<b>290.6</b>

(continued)

**Table 4.2 (continued): Summary of separation, same day separation, average cost weight, patient day and average length of stay statistics, all hospitals, States and Territories, 1997–98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Average cost weight of separations<sup>(e)</sup></b>									
Public hospitals <sup>(e)</sup>	1.02	1.02	0.98	0.96	1.00	0.97	0.97	0.76	1.00
Public acute hospitals	1.02	1.01	0.98	0.95	0.99	0.97	0.97	0.76	1.00
Public psychiatric hospitals	1.42	1.71	1.73	1.76	1.73	1.53	..	..	1.58
Private hospitals <sup>(f)</sup>	0.92	0.96	0.97	0.95	1.00	1.01	1.07	n.a.	0.96
Private free-standing day hospital facilities	0.56	0.51	0.58	0.52	0.79	0.78	n.a.	..	0.56
Other private hospitals	1.03	1.01	1.04	0.98	1.02	1.01	1.07	n.a.	1.02
Public acute & private hospitals <sup>(g)</sup>	0.99	0.99	0.98	0.95	0.99	0.98	0.99	0.76	0.98
<b>Total</b>	<b>0.99</b>	<b>1.00</b>	<b>0.98</b>	<b>0.96</b>	<b>1.00</b>	<b>0.98</b>	<b>0.99</b>	<b>0.76</b>	<b>0.99</b>
<b>Patient days</b>									
Public hospitals <sup>(e)</sup>	5,967,083	3,728,462	3,090,079	1,460,677	1,486,872	396,996	243,244	187,016	16,560,429
Public acute hospitals	5,489,378	3,694,640	2,539,631	1,308,619	1,357,396	331,709	243,244	187,016	15,151,633
Public psychiatric hospitals	477,705	33,822	550,448	152,058	129,476	65,287	..	..	1,408,796
Private hospitals <sup>(f)</sup>	1,641,136	1,684,185	1,374,361	522,636	536,759	180,984	64,866	n.a.	6,004,927
Private free-standing day hospital facilities	124,238	46,637	57,028	9,473	9,532	1,137	n.a.	..	248,045
Other private hospitals	1,516,898	1,637,548	1,317,333	513,163	527,227	179,847	64,866	n.a.	5,756,882
Public acute & private hospitals <sup>(g)</sup>	7,130,514	5,378,825	3,913,992	1,831,255	1,894,155	512,693	308,110	187,016	21,156,560
<b>Total</b>	<b>7,608,219</b>	<b>5,412,647</b>	<b>4,464,440</b>	<b>1,983,313</b>	<b>2,023,631</b>	<b>577,980</b>	<b>308,110</b>	<b>187,016</b>	<b>22,565,356</b>
<b>Patient days per 1,000 population<sup>(h)</sup></b>									
Public hospitals <sup>(e)</sup>	946.8	805.5	902.0	806.1	1,003.0	839.9	791.3	993.4	889.2
Public acute hospitals	871.0	798.2	741.3	722.2	915.7	701.8	791.3	993.4	813.6
Public psychiatric hospitals	75.8	7.3	160.7	83.9	87.3	138.1	..	..	75.6
Private hospitals <sup>(f)</sup>	260.4	363.8	401.2	288.4	362.1	382.9	211.0	n.a.	325.8
Private free-standing day hospital facilities	19.7	10.1	16.6	5.2	6.4	2.4	n.a.	..	13.5
Other private hospitals	240.7	353.8	384.5	283.2	355.7	380.5	211.0	n.a.	312.3
Public acute & private hospitals <sup>(g)</sup>	1,131.4	1,162.0	1,142.5	1,010.6	1,277.7	1,084.7	1,002.3	993.4	1,136.0
<b>Total</b>	<b>1,207.2</b>	<b>1,169.3</b>	<b>1,303.2</b>	<b>1,094.5</b>	<b>1,365.1</b>	<b>1,222.8</b>	<b>1,002.3</b>	<b>993.4</b>	<b>1,211.7</b>
<b>Total (age-standardised)</b>	<b>1,125.3</b>	<b>1,084.4</b>	<b>1,282.6</b>	<b>1,106.9</b>	<b>1,197.9</b>	<b>1,133.7</b>	<b>1,170.6</b>	<b>1,313.0</b>	<b>1,150.5</b>
<b>Average length of stay (days)</b>									
Public hospitals <sup>(e)</sup>	4.7	4.0	4.5	4.2	4.3	4.9	4.3	3.6	4.4
Public acute hospitals	4.4	4.0	3.7	3.8	4.0	4.2	4.3	3.6	4.0
Public psychiatric hospitals	41.6	22.3	372.4	47.5	30.0	116.0	..	..	62.4
Private hospitals <sup>(f)</sup>	3.0	3.5	3.5	3.3	3.6	3.5	3.7	n.a.	3.3
Private free-standing day hospital facilities	1.0	1.0	1.0	1.0	1.0	1.0	n.a.	..	1.0
Other private hospitals	3.6	3.7	4.0	3.4	3.8	3.6	3.7	n.a.	3.7
Public acute & private hospitals <sup>(g)</sup>	3.9	3.8	3.7	3.6	3.9	3.9	4.1	3.6	3.8
<b>Total</b>	<b>4.2</b>	<b>3.8</b>	<b>4.2</b>	<b>3.9</b>	<b>4.1</b>	<b>4.4</b>	<b>4.1</b>	<b>3.6</b>	<b>4.1</b>

(continued)

**Table 4.2 (continued): Summary of separation, same day separation, average cost weight, patient day and average length of stay statistics, all hospitals, States and Territories, 1997-98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Average length of stay, excluding same day separations (days)</b>									
Public hospitals <sup>(a)</sup>	7.2	6.6	7.1	6.6	6.8	8.3	7.4	6.2	7.0
Public acute hospitals	6.6	6.6	5.8	6.0	6.3	6.9	7.4	6.2	6.4
Public psychiatric hospitals	50.2	24.1	379.9	48.2	31.2	119.1	..	..	69.7
Private hospitals <sup>(b)</sup>	5.9	6.4	6.3	5.4	5.8	5.2	5.4	n.a.	6.0
Private free-standing day hospital facilities	..	..	..	..	..	..	..	..	..
Other private hospitals	5.9	6.4	6.3	5.4	5.8	5.2	5.4	n.a.	6.0
Public acute & private hospitals <sup>(c)</sup>	6.5	6.5	5.9	5.8	6.1	6.2	6.8	6.2	6.3
<b>Total</b>	<b>6.9</b>	<b>6.5</b>	<b>6.9</b>	<b>6.3</b>	<b>6.5</b>	<b>7.0</b>	<b>6.8</b>	<b>6.2</b>	<b>6.7</b>

(a) Includes the Department of Veterans' Affairs hospital in New South Wales.

(b) Includes private psychiatric hospitals.

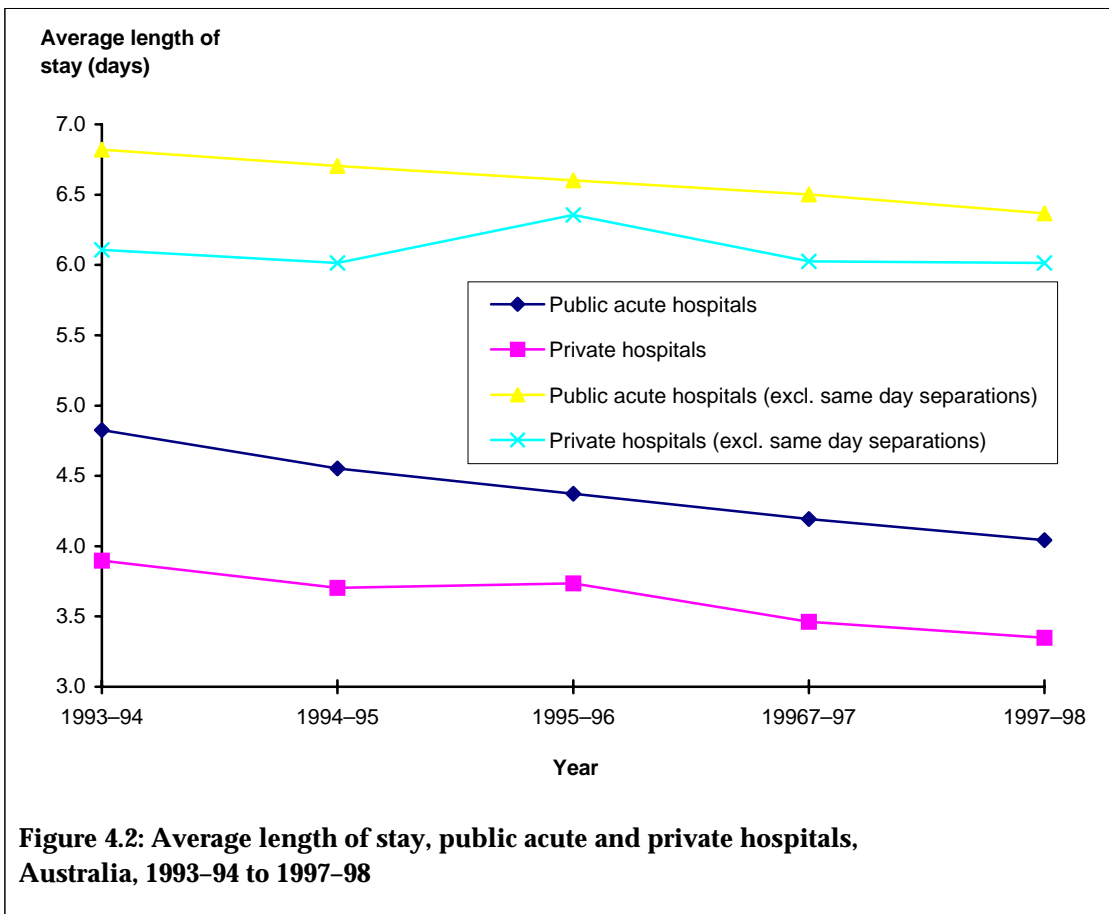
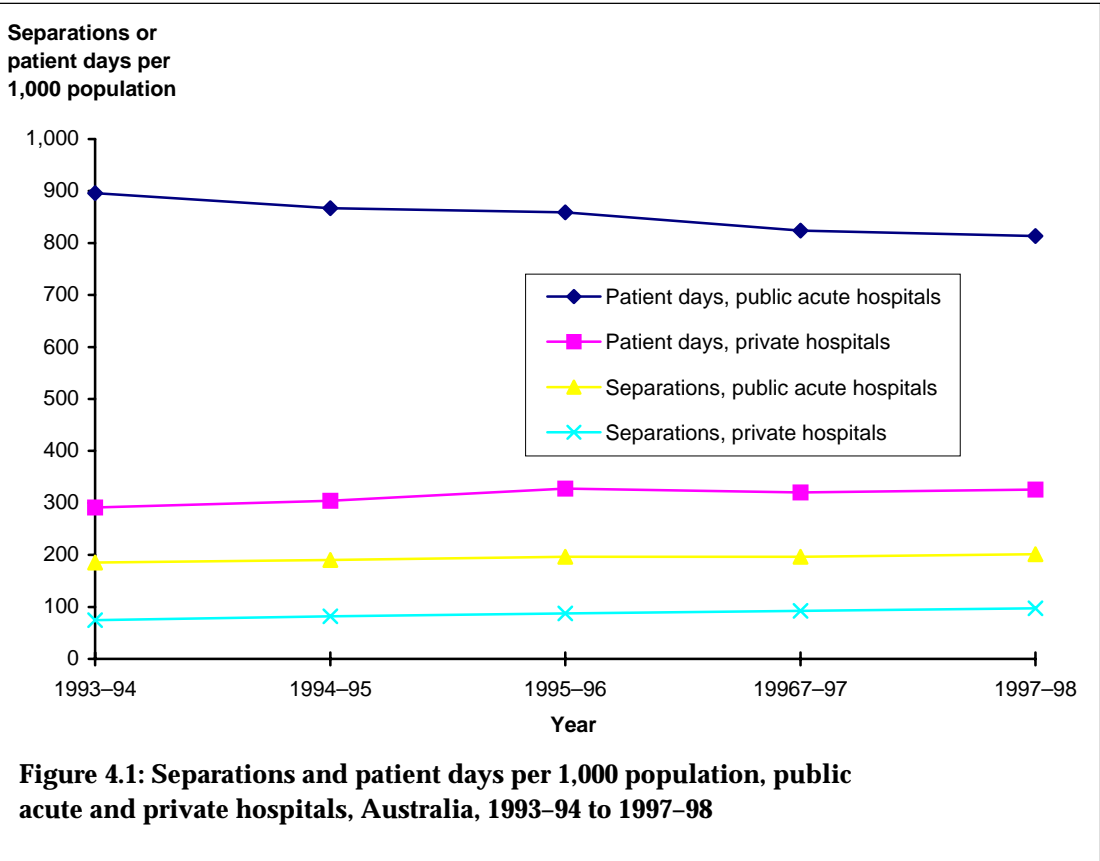
(c) Excludes public psychiatric hospitals.

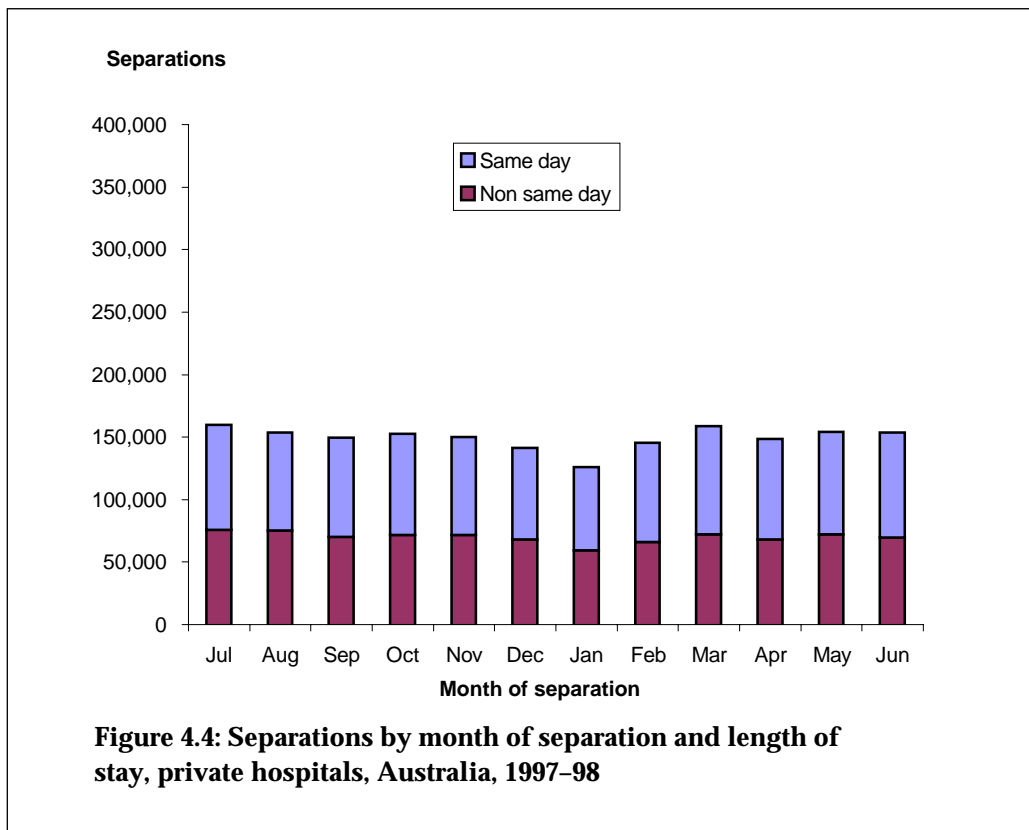
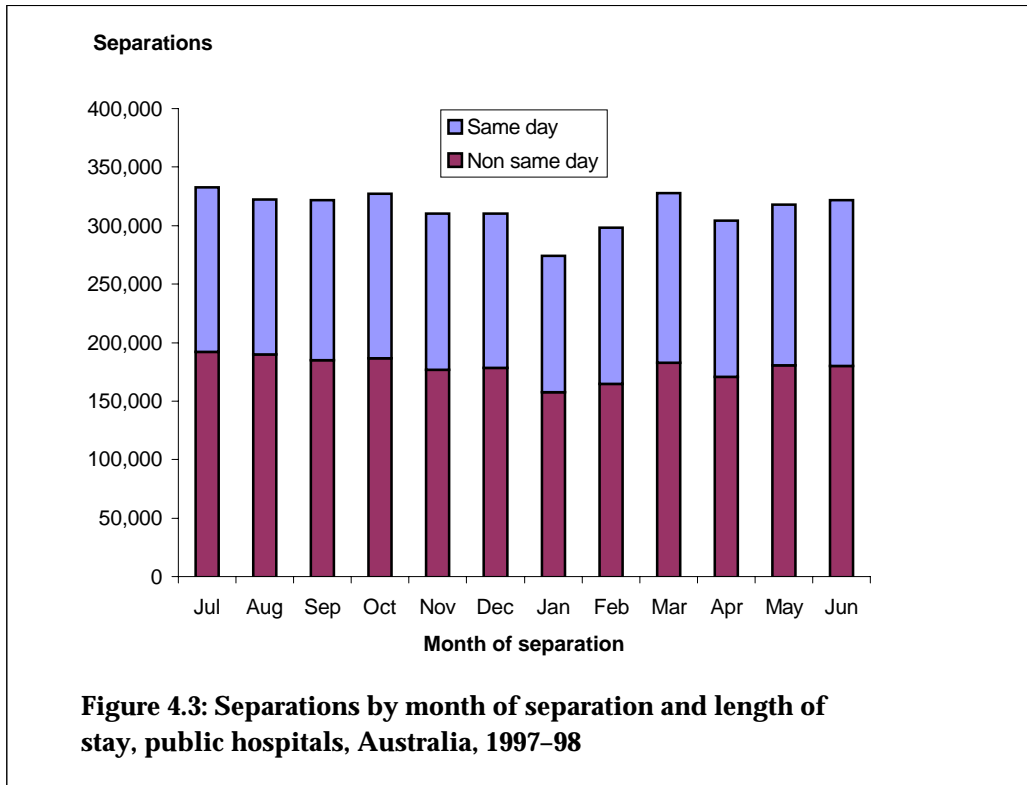
(d) Figures are crude rates per 1,000 population at 31 December 1997 or, if indicated as such, directly age-standardised to the Australian population at 30 June 1991. In the *Total* column, the rates for private hospitals were derived using populations of the reporting States and Territories only, without adjustment for incomplete reporting.

(e) Separations for which the type of episode of care was reported as acute, or was not reported. For further details, see Chapter 10. Public national cost weights were used for the *Public acute and private hospitals* and *Total* rows.

.. not applicable.

n.a. not available.





**Table 4.3: Separations by type of admitted patient episode, public acute and psychiatric hospitals, States and Territories, 1997–98**

Type of admitted patient episode	NSW	Vic	Qld	WA	SA	Tas	ACT	NT <sup>(a)</sup>	Total <sup>(a)</sup>
Mental health	44,193	29,484	24,127	15,780	13,001	3,791	1,315	770	132,461
Alcohol & drug	11,347	3,719	5,410	2,712	735	336	54	179	24,492
Nursing home type	5,354	1,841	2,096	125	771	253	70	38	10,548
Rehabilitation	23,953	17,974	8,910	3,005	3,128	891	279	198	58,338
Intellectual handicap	31	35	38	8	15	4	3	n.p.	134
Dental	6,787	7,622	5,871	2,848	2,929	890	540	439	27,926
Non-medical & social	6,235	2,060	2,775	1,128	928	334	38	140	13,638
Dialysis	110,242	105,310	57,870	38,823	26,667	9,356	10,849	17,412	376,529
Endoscopy	49,313	4,122	26,116	15,448	16,595	4,142	2,581	1,164	119,481
Perinatal	14,177	9,545	7,563	2,263	1,863	647	802	1,121	37,981
Medical/surgical/obstetrics	1,001,871	747,158	544,540	264,267	280,122	59,620	41,894	31,273	2,970,745
<b>Total separations</b>	<b>1,273,503</b>	<b>928,870</b>	<b>685,316</b>	<b>346,407</b>	<b>346,754</b>	<b>80,264</b>	<b>58,425</b>	<b>52,734</b>	<b>3,772,273</b>

(a) For the Northern Territory *Intellectual handicap* separations are included in *Rehabilitation* to preserve confidentiality. Hence totals for these rows are not correct.  
n.p. not published.

**Table 4.4: Patient days by type of admitted patient episode, public acute and psychiatric hospitals, States and Territories, 1997–98**

Type of admitted patient episode	NSW	Vic	Qld	WA	SA	Tas	ACT <sup>(a)</sup>	NT <sup>(b)</sup>	Total <sup>(a)</sup>
Mental health	624,620	392,101	603,686	250,623	155,470	44,702	17,219	7,558	2,095,979
Alcohol & drug	85,350	19,287	73,177	20,463	16,829	3,441	242	858	219,647
Nursing home type	712,639	74,147	168,848	24,055	132,119	31,694	2,081	1,559	1,147,142
Rehabilitation	217,892	328,226	66,868	76,348	72,595	16,419	7,818	4,088	790,254
Intellectual handicap	205	167	701	112	78	11	110	n.p.	1,384
Dental	8,518	8,380	7,046	3,380	4,498	982	665	627	34,096
Non-medical & social	53,780	25,022	27,383	8,684	7,256	7,783	23,793	1,489	155,190
Dialysis	110,623	105,526	58,022	38,882	26,709	9,896	10,849	17,433	377,940
Endoscopy	114,964	8,625	57,786	31,292	35,672	8,257	5,698	3,280	265,574
Perinatal	125,405	92,828	65,176	28,696	29,513	7,053	9,079	10,341	368,091
Medical/surgical/obstetrics	4,075,996	2,674,217	1,961,357	978,194	1,004,710	267,807	167,307	141,884	11,271,472
<b>Total patient days</b>	<b>6,129,992</b>	<b>3,728,526</b>	<b>3,090,050</b>	<b>1,460,729</b>	<b>1,485,449</b>	<b>398,045</b>	<b>244,861</b>	<b>189,117</b>	<b>16,726,769</b>

(a) The large increase in *Non-medical & social* patient days in the Australian Capital Territory between 1996–97 and 1997–98 was due a ward closure in one hospital.

(b) For the Northern Territory *Intellectual handicap* patient days are included in *Rehabilitation* to preserve confidentiality. Hence totals for these rows are not correct.  
n.p. not published.



**Table 4.5: Non-admitted patient occasions of service, by type of non-admitted patient care, public acute and psychiatric hospitals, States and Territories, 1997–98**

Type of non-admitted patient care	NSW	Vic	Qld	WA	SA	Tas <sup>(a)</sup>	ACT	NT	Total <sup>(b)</sup>
<b>Public acute hospitals</b>									
Accident & emergency	1,617,047	1,075,473	1,077,455	662,255	455,659	69,907	79,189	101,759	5,138,744
Dialysis	..	..	2,665	..	..	1,976	..	..	4,641
Pathology	1,773,495	618,517	879,737	..	..	88,314	31,690	48,818	3,440,571
Radiology & organ imaging	733,343	466,687	750,291	292,338	291,476	33,700	56,606	58,930	2,683,371
Endoscopy & related procedures	..	..	1,161	..	..	..	..	..	1,161
Other medical/surgical/obstetric	6,150,449	1,310,141	2,020,536	1,483,421	714,022	137,408	169,146	71,784	12,056,907
Mental health	117,025	745,298	129,679	..	20,481	..	3,389	..	1,015,872
Alcohol & drug	..	59,559	78,882	..	..	..	..	..	138,441
Dental	..	188,250	501,316	..	9,643	1,559	..	..	700,768
Pharmacy	432,073	367,128	736,570	..	..	38,668	474	13,693	1,588,606
Allied health	..	988,553	608,822	381,035	418,010	102,154	48,434	14,382	2,561,390
Community health	1,635,014	429,493	106,601	..	..	..	..	..	2,171,108
District nursing	..	454,947	49,112	..	..	..	..	..	504,059
Other outreach	..	52,817	85,802	..	450,918	1,470	8,602	..	599,609
<b>Total services</b>	<b>12,458,446</b>	<b>6,756,863</b>	<b>7,028,629</b>	<b>2,819,049</b>	<b>2,360,209</b>	<b>475,156</b>	<b>397,530</b>	<b>309,366</b>	<b>32,605,248</b>
Group sessions	188,475	41,022	41,597	10,742	179,128	n.a.	7,559	..	468,523
<b>Public psychiatric hospitals</b>									
Emergency & outpatient individual sessions	3,923	n.a.	14,128	n.a.	n.a.	n.a.	..	..	18,051
Emergency & outpatient group sessions	..	n.a.	2,348	n.a.	n.a.	n.a.	..	..	2,348
Outreach/community individual sessions	..	n.a.	136,447	n.a.	n.a.	n.a.	..	..	136,447
Outreach/community group sessions	..	n.a.	2,878	n.a.	n.a.	n.a.	..	..	2,878
<b>Total services</b>	<b>3,923</b>	<b>n.a.</b>	<b>155,801</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>	<b>..</b>	<b>..</b>	<b>159,724</b>

(a) For Tasmania data were only available for the 3 major hospitals.

(b) For public psychiatric hospitals, includes only those States and Territories for which data are available.

n.a. not available.

.. not applicable.

# 5 Administrative data for admitted patients

## Introduction

Data in this chapter are derived from the National Hospital Morbidity Database at the Institute, the compilation of patient-level data for all separations from public and private hospitals in Australia. For each separation in the database, a range of administrative and related data elements was reported including patient accommodation status, hospital insurance status, compensable status, State or Territory of usual residence, type of episode of care, source of referral and mode of separation. The tables in this chapter present separation, patient day, average cost weight and average length of stay statistics for these variables.

Data providers supplied information on each patient's accommodation status, which incorporates a distinction between patients who are and are not eligible for treatment in accordance with the Medicare agreements. 'Eligible' patients are further categorised as *Eligible public patients*, *Eligible private patients*, *Eligible Department of Veterans' Affairs patients* or *Eligible other patients*. These data are as supplied by the States and Territories and, in the case of Department of Veterans' Affairs (DVA) patients, their eligibility to receive hospital treatment as a DVA patient, may not necessarily have been confirmed by DVA. Additional definitional material regarding these categories can be found in the Glossary and in the *National Health Data Dictionary*.

Data on insurance status indicates whether a patient has hospital insurance; that is, insurance providing benefits related to charges for hospital accommodation and services. Insurance for benefits for ancillary services only is excluded.

Insurance status should not be confused with whether the patient is admitted as a public, private or other type of patient. Individuals can elect to be admitted in public hospitals as public or private patients irrespective of their insurance status.

It is apparent that the data reported on insurance status is of very poor quality. Consequently, it is not published but is available to interested users.

Data on the compensable status of each patient were also supplied, a compensable patient being defined as any person who is entitled to the payment of, or who has been paid, compensation, damages or other benefits (including a payment in settlement of a claim for compensation, damages or other benefits) in respect of the injury, illness or disease for which he or she is receiving care and treatment.

Compensable status reflects the status of the patient at the time of separation. The *National Health Data Dictionary* specifies that the compensable status of the patient should be reported as 'Compensable' or 'Not compensable'; however, some data providers also used a 'Not reported' category.

State or Territory of usual residence was provided for most separations (99.6%) and includes other Territories and overseas areas of usual residence. This information is stored on the National Hospital Morbidity Database at a finer geographical level and has been used to generate maps in this chapter (Figures 5.1 and 5.2) and Chapter 7 (Figures 7.3 to 7.6).

Type of episode of care was also reported for most separations. An episode of care is defined as a phase of treatment for an admitted patient. It may correspond to a patient's entire hospital stay, or the hospital stay may be divided into separate episodes of care of different types. In the latter case, a 'statistical separation' occurs between such episodes, and a new separation record is generated. Thus separations in the database for those States and Territories reporting episodes of care are actually for phases of treatment, not necessarily for entire hospital stays. Definitions of each type of care are contained in the *National Health Data Dictionary*. The classification for this data element is:

- acute care
- rehabilitation care—delivered in a designated unit
- rehabilitation care—according to a designated program
- rehabilitation care—principal clinical intent
- palliative care—delivered in a designated unit
- palliative care—according to a designated program
- palliative care—principal clinical intent
- non-acute care
- unqualified neonate
- other care.

As only two States supplied information to this level of detail (only one fully), additional categories have been added to cater for the different reporting methods used by the other jurisdictions. The Australian Capital Territory did not supply data for this item except to identify unqualified neonates.

Source of referral indicates the source from which a person was transferred or referred to the hospital. The *National Health Data Dictionary* specifies that for public acute, private acute and private psychiatric hospitals, source of referral should be reported as:

- admitted patient transferred from another hospital
- statistical admission—type change
- statistical admission from leave
- other
- not reported.

For public psychiatric hospitals the classification is broader, including:

- private psychiatric practice
- other private medical practice
- other public psychiatric hospital
- other health care establishment
- other private hospital
- law enforcement agency
- other agency
- outpatient department
- other
- not reported.

Future development of the *National Health Data Dictionary* may see the expansion of the classification used for public acute, private acute and private psychiatric hospitals.

The mode of separation records the status of the patient (discharged, transferred, episode type change, died) at the time of separation and for some categories the place to which the person was discharged or transferred.

## Patient accommodation status

Eligible public patients accounted for 86% of separations from public hospitals (3,241,015) compared with 9% for eligible private patients (355,281) (Table 5.1). Eligible Department of Veterans' Affairs patients made up the majority of the remainder. The two major categories were reversed in private hospitals with eligible public patients making up 2% of separations (43,563) and eligible private patients 84% (1,511,274). Overall 59% of separations were for eligible public patients (3,284,578) and 34% (1,866,555) for eligible private patients. There was a similar distribution in the number of patient days (Table 5.4) with 60% (13,580,582) of bed days recorded for eligible public patients and 29% (6,480,659) by eligible private patients.

For both sectors combined there were 173 separations per 1,000 population (age standardised) for eligible public patients compared with 97 for eligible private patients (Table 5.2). The latter figure is underestimated because separations were not available for the Northern Territory private hospital or from private free-standing day hospital facilities in the Australian Capital Territory and from two private free-standing day hospital facilities in Tasmania. The Northern Territory recorded the highest eligible public patient separation rate (327 per 1,000), consistent with its high public hospital rate. The separation rates for eligible public patients in private hospitals in Tasmania (7.9 per 1,000) and Western Australia (7.4 per 1,000) were markedly higher than those recorded for other States and Territories.

Table 5.3 presents the average cost weight of separations in each State and Territory by hospital sector and accommodation status. The table has been restricted to separations with an episode of care type of *acute* or *unspecified*. In all States and Territories, the average cost weights for eligible private patients in public hospitals was higher than that for eligible public patients. In both public acute and private hospitals, Department of Veterans' Affairs patients showed average cost weights markedly higher than these hospitals' main patient groups of eligible public and eligible private patients respectively. More detail about the AN-DRG classification and cost weights is included in Chapter 10 and, in reference to the effects of the integration of public psychiatric services into public hospital systems, in Chapter 4.

Since 1993–94 there has been a decline in the numbers of separations and patient days recorded by eligible private patients in public hospitals (Table 5.5). The proportion of public hospital patient days attributable to private patients fell from 16% to 10% over this period. On the other hand, private hospitals increased their proportion of patient days attributable to eligible public patients from 0.4% to almost 3% over the same time. Private hospitals also showed steady growth in eligible Department of Veterans' Affairs patients treated, increasing from 5% of patient days in 1993–94 to 12% in 1997–98.

During this period, Department of Veterans' Affairs either integrated its repatriation hospitals into State public systems or sold them to private companies. Many veterans continue to access former repatriation hospitals, including the two privatised hospitals in Western Australia and Queensland. In addition, as each repatriation hospital was integrated or sold, the Repatriation Private Patient Scheme was introduced in that State. The

Repatriation Private Patient Scheme allows veterans easier access to the private sector if public hospital services are not available. The rising numbers of people entitled to treatment at DVA expense, in conjunction with easier access to the private system, has also contributed to more veterans being treated in the private sector.

## Compensable status

Overall, around 2% of patients (114,253) were compensable in 1997–98 (Table 5.6). In the public sector, 1% of patients (40,367) fell into this category, while in the private sector 4% of patients (73,886) were compensable.

## Area of usual residence

Table 5.7 indicates how many patients in each State and Territory were interstate residents. Overall, 98% of patients (5,433,492) resided in the State or Territory where they were treated. However, in the Australian Capital Territory, only about three-quarters of the patients treated were Australian Capital Territory residents (54,541), with the majority of the remainder resident in New South Wales (Table 5.8). This is mainly because the Australian Capital Territory acts as a referral centre for the surrounding districts, which are part of New South Wales.

The average cost weight of separations in each State and Territory by each hospital sector and State or Territory of usual residence is presented in Table 5.9. As for Table 5.3, this table has been restricted to separations with an episode of care type of *acute* or *unspecified* (for more detail see Chapter 10, and page 35 in Chapter 4). Both South Australia and Victorian public hospitals had average cost weights that were higher for interstate patients than for their own. Separations for Northern Territory residents had higher average cost weights for the public sector in all States than in the Northern Territory, consistent with a tendency for movement of Territory residents with more complex treatment requirements to hospitals in other States. New South Wales residents had higher average cost weights for treatment provided by the private sector in other States and Territories than in New South Wales.

Separation rates per 1,000 population varied by Statistical Division of the usual residence of the patient for both public and private hospitals (Figures 5.1 and 5.2). In the public sector, highest rates were reported for residents of the Statistical Divisions of North West Queensland, Kimberley in Western Australia, and Northern South Australia. In the private sector, highest rates were reported for the Queensland Statistical Divisions of Moreton and Darling Downs. The data for these maps were derived from data provided on the area of usual residence of the patients, aggregated to Statistical Divisions as described in Appendix 3.

## Type of episode of care

For the hospitals for which this data element was reported, 92% of separations were classified as episodes of *Acute care*, 3% as *Unqualified neonates* and 2% as *Rehabilitation care*. There was some variation among the States and Territories for which data were supplied and between the public and private sectors (Table 5.10). For example, the proportion of public hospital separations that were for *Rehabilitation care* ranged from 0.3% (179) in the Northern Territory to 2.7% in Queensland (19,212).

Unqualified neonates (defined in the Glossary) are included in the National Hospital Morbidity Database for 1997–98, but have only been included in Tables 5.10 and 5.11 in this report. They account for an additional 195,403 separations, the majority (165,079, 84%) in the public sector, and as such will cause total separations in Table 5.10 to differ from those of other tables.

Average length of stay for episodes of acute care in private hospitals (3.1 days) was shorter than in public hospitals (3.7 days) (Table 5.11). In public hospitals the average length of stay for unqualified neonates was 3.2 days whilst in private hospitals it was 5.2 days.

## Source of referral

In both public acute and private hospitals (Table 5.12), most separations recorded a source of referral of *Other* (95%, 5,257,719), the term used to refer to all planned and unplanned admissions, except transfers from other hospitals and statistical admissions. Public acute hospitals recorded higher proportions of both transfers from other hospitals (3.8%, 141,221) and statistical admissions (0.8%, 31,175) than were reported for private hospitals (2.5%, 44,526) and (0.2%, 4,297) respectively.

For public psychiatric hospitals, about one-third of separations had a source of referral of *Other health care establishments* (33%, 7,365), however this varied widely among jurisdictions with South Australia recording only 2% (103) of separations with this source of referral and Western Australia 50% (1,615).

## Mode of separation

The majority of patients (5,158,340, over 93%) were included in the *Other* category, suggesting that most persons go home after separation from hospital. This was particularly the case in the private sector, where 96% of separations (1,730,036) were categorised as *Other*; in the public sector, this figure was 91% (3,428,304) (Table 5.13). The main difference between the sectors was that more patients were transferred to other hospitals in the public sector than in the private sector. There were also greater proportions of separations in the public sector for statistical discharges, deaths and the *Left against medical advice/discharge at own risk* category.

There is a discrepancy between the number of patients reporting a mode of separation of discharged/transferred to another hospital (205,788) and the number of patients who recorded a source of referral of transfer from another hospital (193,604) (Table 5.12). This may indicate that not all patients who are transferred from one hospital to another are having this recorded as their source of referral.

**Table 5.1: Separations by accommodation status and hospital sector, States and Territories, 1997–98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Accommodation status</b>									
<b>Public hospitals</b>									
Eligible public patient	1,045,634	805,669	612,703	304,258	302,139	68,985	51,522	50,105	3,241,015
Eligible private patient	151,547	76,068	63,608	26,829	27,114	5,642	3,433	1,040	355,281
Eligible Department of Veterans' Affairs patient	48,328	32,003	3,247	6,199	13,232	4,300	1,247	41	108,597
Eligible other patient	13,256	12,981	3,814	4,872	3,830	1,279	726	89	40,847
Ineligible patient	6,897	2,126	1,973	1,003	467	105	247	947	13,765
Not reported	7,135	0	0	3,202	0	78	0	178	10,593
<i>Total</i>	<i>1,272,797</i>	<i>928,847</i>	<i>685,345</i>	<i>346,363</i>	<i>346,782</i>	<i>80,389</i>	<i>57,175</i>	<i>52,400</i>	<i>3,770,098</i>
<b>Private hospitals</b>									
Eligible public patient	22,123	2,725	1,269	13,278	433	3,735	0	n.a.	43,563
Eligible private patient	439,395	432,931	329,534	123,960	135,920	34,542	14,992	n.a.	1,511,274
Eligible Department of Veterans' Affairs patient	42,894	26,102	43,466	14,489	2,131	4,132	1,408	n.a.	134,622
Eligible other patient	22,785	22,105	11,724	8,492	8,774	1,881	1,171	n.a.	76,932
Ineligible patient	2,193	338	2,085	139	162	4	0	n.a.	4,921
Not reported	14,961	0	0	0	0	6,703	0	n.a.	21,664
<i>Total</i>	<i>544,351</i>	<i>484,201</i>	<i>388,078</i>	<i>160,358</i>	<i>147,420</i>	<i>50,997</i>	<i>17,571</i>	<i>n.a.</i>	<i>1,792,976</i>
<b>All hospitals</b>									
Eligible public patient	1,067,757	808,394	613,972	317,536	302,572	72,720	51,522	50,105	3,284,578
Eligible private patient	590,942	508,999	393,142	150,789	163,034	40,184	18,425	1,040	1,866,555
Eligible Department of Veterans' Affairs patient	91,222	58,105	46,713	20,688	15,363	8,432	2,655	41	243,219
Eligible other patient	36,041	35,086	15,538	13,364	12,604	3,160	1,897	89	117,779
Ineligible patient	9,090	2,464	4,058	1,142	629	109	247	947	18,686
Not reported	22,096	0	0	3,202	0	6,781	0	178	32,257
<b>Total separations</b>	<b>1,817,148</b>	<b>1,413,048</b>	<b>1,073,423</b>	<b>506,721</b>	<b>494,202</b>	<b>131,386</b>	<b>74,746</b>	<b>52,400</b>	<b>5,563,074</b>

n.a. not available.

**Table 5.2: Separations rates<sup>(a)</sup> per 1,000 population by accommodation status, public and private hospitals, States and Territories, 1997–98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Accommodation status</b>	<b>Public hospitals</b>								
Eligible public patient	161.2	168.7	179.0	170.2	195.5	142.9	182.2	326.9	171.0
Eligible private patient	22.9	15.9	18.3	15.0	17.3	11.6	12.6	6.3	18.5
Eligible Department of Veterans' Affairs patient	6.5	5.9	0.9	3.6	6.7	7.6	5.7	0.7	5.2
Eligible other patient	2.1	2.8	1.1	2.7	2.6	2.8	2.3	0.4	2.2
Ineligible patient	1.1	0.5	0.6	0.6	0.3	0.2	0.8	5.2	0.7
Not reported	1.0	0.0	0.0	1.8	0.0	0.1	0.0	1.2	0.5
<i>Total</i>	<i>194.9</i>	<i>193.8</i>	<i>200.0</i>	<i>193.9</i>	<i>222.5</i>	<i>165.3</i>	<i>203.6</i>	<i>340.8</i>	<i>198.2</i>
	<b>Private hospitals</b>								
Eligible public patient	3.4	0.6	0.3	7.4	0.3	7.9	0.0	n.a.	2.3
Eligible private patient	66.6	88.8	94.9	68.7	83.3	69.6	52.4	n.a.	78.2
Eligible Department of Veterans' Affairs patient	5.8	4.9	12.1	8.2	1.1	7.3	6.4	n.a.	6.5
Eligible other patient	3.5	4.6	3.4	4.6	5.7	4.0	3.6	n.a.	4.0
Ineligible patient	0.3	0.1	0.6	0.1	0.1	0.0	0.0	n.a.	0.3
Not reported	2.4	0.0	0.0	0.0	0.0	14.1	0.0	n.a.	1.2
<i>Total</i>	<i>82.1</i>	<i>98.9</i>	<i>111.4</i>	<i>89.0</i>	<i>90.5</i>	<i>102.9</i>	<i>62.4</i>	<i>n.a.</i>	<i>92.4</i>
	<b>All hospitals</b>								
Eligible public patient	164.6	169.3	179.4	177.6	195.8	150.8	182.2	326.9	173.3
Eligible private patient	89.5	104.7	113.2	83.7	100.6	81.1	65.1	6.3	96.7
Eligible Department of Veterans' Affairs patient	12.4	10.8	13.1	11.8	7.8	14.9	12.0	0.7	11.7
Eligible other patient	5.7	7.4	4.5	7.3	8.3	6.9	5.9	0.4	6.2
Ineligible patient	1.4	0.5	1.2	0.6	0.4	0.2	0.8	5.2	1.0
Not reported	3.4	0.0	0.0	1.8	0.0	14.3	0.0	1.2	1.7
<b>Total separations</b>	<b>277.0</b>	<b>292.8</b>	<b>311.4</b>	<b>282.8</b>	<b>313.0</b>	<b>268.2</b>	<b>266.1</b>	<b>340.8</b>	<b>290.6</b>

(a) The rates were directly age-standardised to the Australian population at 30 June 1991. For details see Appendix 3.  
n.a. not available.



**Table 5.3: Average cost weight of separations<sup>(a)</sup> by accommodation status and hospital sector, States and Territories, 1997–98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Accommodation status</b>	<b>Public acute hospitals</b>								
Eligible public patient	0.99	0.98	0.97	0.93	0.97	0.92	0.93	0.74	0.97
Eligible private patient	1.08	1.11	1.02	1.03	1.00	1.22	1.32	0.91	1.07
Eligible Department of Veterans' Affairs patient	1.29	1.27	0.88	1.33	1.32	1.19	1.44	1.00	1.28
Eligible other patient	1.45	1.62	1.68	1.60	1.62	1.52	1.48	0.83	1.56
Ineligible patient	1.24	1.35	1.38	1.13	1.19	1.14	1.16	1.62	1.29
Not reported	1.34	..	..	0.83	..	1.34	..	0.43	1.31
<b>Total</b>	1.02	1.01	0.98	0.95	0.99	0.97	0.97	0.76	1.00
	<b>Private hospitals</b>								
Eligible public patient	1.06	0.42	1.62	0.84	0.68	0.96	..	n.a.	0.94
Eligible private patient	0.89	0.94	0.94	0.93	1.00	0.98	1.04	n.a.	0.93
Eligible Department of Veterans' Affairs patient	1.25	1.29	1.18	1.22	1.06	1.29	1.36	n.a.	1.23
Eligible other patient	0.96	1.03	1.15	0.91	0.96	0.97	1.08	n.a.	1.00
Ineligible patient	0.93	1.58	0.92	1.74	0.97	0.68	..	n.a.	0.99
Not reported	0.72	..	..	..	..	0.99	..	n.a.	0.80
<b>Total</b>	0.92	0.96	0.97	0.95	1.00	1.01	1.07	n.a.	0.96

(a) Separations for which the type of episode of care was reported as acute, or was not reported. For further details see Chapter 10.

n.a. not available.

.. not applicable.

**Table 5.4: Patient days by accommodation status and hospital sector, States and Territories, 1997–98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Accommodation status</b>									
<b>Public hospitals</b>									
Eligible public patient	4,275,827	3,169,493	2,819,018	1,142,564	1,272,269	335,774	212,914	177,460	13,405,319
Eligible private patient	887,928	294,996	227,726	103,627	116,314	22,725	17,213	2,479	1,673,008
Eligible Department of Veterans' Affairs patient	321,478	197,136	14,233	31,278	75,662	27,634	7,804	211	675,436
Eligible other patient	75,411	58,980	21,182	27,631	20,941	7,245	4,176	223	215,789
Ineligible patient	30,168	7,857	7,920	3,511	1,686	416	1,137	6,261	58,956
Not reported	376,271	0	0	152,066	0	3,202	0	382	531,921
<i>Total</i>	<i>5,967,083</i>	<i>3,728,462</i>	<i>3,090,079</i>	<i>1,460,677</i>	<i>1,486,872</i>	<i>396,996</i>	<i>243,244</i>	<i>187,016</i>	<i>16,560,429</i>
<b>Private hospitals</b>									
Eligible public patient	77,751	4,211	33,043	45,762	1,530	12,966	0	n.a.	175,263
Eligible private patient	1,274,964	1,417,204	1,063,981	373,220	502,954	121,042	54,286	n.a.	4,807,651
Eligible Department of Veterans' Affairs patient	203,151	142,260	246,687	84,410	9,790	20,929	7,138	n.a.	714,365
Eligible other patient	58,277	119,168	25,410	18,653	20,882	6,025	3,442	n.a.	251,857
Ineligible patient	4,305	1,342	5,240	591	1,603	8	0	n.a.	13,089
Not reported	22,688	0	0	0	0	20,014	0	n.a.	42,702
<i>Total</i>	<i>1,641,136</i>	<i>1,684,185</i>	<i>1,374,361</i>	<i>522,636</i>	<i>536,759</i>	<i>180,984</i>	<i>64,866</i>	<i>n.a.</i>	<i>6,004,927</i>
<b>All hospitals</b>									
Eligible public patient	4,353,578	3,173,704	2,852,061	1,188,326	1,273,799	348,740	212,914	177,460	13,580,582
Eligible private patient	2,162,892	1,712,200	1,291,707	476,847	619,268	143,767	71,499	2,479	6,480,659
Eligible Department of Veterans' Affairs patient	524,629	339,396	260,920	115,688	85,452	48,563	14,942	211	1,389,801
Eligible other patient	133,688	178,148	46,592	46,284	41,823	13,270	7,618	223	467,646
Ineligible patient	34,473	9,199	13,160	4,102	3,289	424	1,137	6,261	72,045
Not reported	398,959	0	0	152,066	0	23,216	0	382	574,623
<b>Total patient days</b>	<b>7,608,219</b>	<b>5,412,647</b>	<b>4,464,440</b>	<b>1,983,313</b>	<b>2,023,631</b>	<b>577,980</b>	<b>308,110</b>	<b>187,016</b>	<b>22,565,356</b>

n.a. not available.

**Table 5.5: Separations and patient days by accommodation status, hospital sector and year, Australia, 1993–94 to 1997–98**

	1993–94		1994–95		1995–96		1996–97		1997–98	
	Separations	Patient days	Separations	Patient days	Separations	Patient days	Separations	Patient days	Separations	Patient days
<b>Accommodation status</b>	<b>Public hospitals</b>									
Eligible public patient	2,557,063	12,028,517	2,720,378	12,086,092	2,983,446	13,301,071	3,075,874	13,542,776	3,241,015	13,405,319
Eligible private patient	545,211	2,528,766	488,620	2,172,939	437,746	1,924,078	392,773	1,725,621	355,281	1,673,008
Eligible DVA patient	143,535	1,072,239	115,027	785,727	110,061	776,588	114,428	765,996	108,597	675,436
Eligible other patient	21,359	117,963	32,989	255,855	46,001	348,219	44,258	318,535	40,847	215,789
Ineligible patient	4,350	19,362	10,595	47,924	11,406	46,856	12,046	54,662	13,765	58,956
Not reported	24,052	139,691	52,368	218,509	4,675	158,367	2,588	124,137	10,593	531,921
<i>Total</i>	<i>3,295,570</i>	<i>15,906,538</i>	<i>3,419,977</i>	<i>15,567,046</i>	<i>3,593,335</i>	<i>16,555,179</i>	<i>3,641,967</i>	<i>16,531,727</i>	<i>3,770,098</i>	<i>16,560,429</i>
	<b>Private hospitals</b>									
Eligible public patient	4,156	19,392	22,317	97,920	36,814	156,375	39,603	169,578	43,563	175,263
Eligible private patient	962,002	3,576,816	1,113,348	3,957,500	1,365,827	4,909,980	1,443,600	4,779,123	1,511,274	4,807,651
Eligible DVA patient	51,647	241,414	62,300	361,701	93,152	535,971	109,231	600,227	134,622	714,365
Eligible other patient	16,862	50,848	42,870	124,677	77,720	270,040	71,139	248,251	76,932	251,857
Ineligible patient	400	1,818	1,879	7,260	2,925	11,564	2,723	7,431	4,921	13,089
Not reported	278,257	1,227,075	217,575	857,574	1,036	8,580	18,652	29,488	21,664	42,702
<i>Total</i>	<i>1,313,324</i>	<i>5,117,363</i>	<i>1,460,289</i>	<i>5,406,632</i>	<i>1,577,474</i>	<i>5,892,510</i>	<i>1,684,948</i>	<i>5,834,098</i>	<i>1,792,976</i>	<i>6,004,927</i>
	<b>All hospitals</b>									
Eligible public patient	2,561,219	12,047,909	2,742,695	12,184,012	3,020,260	13,457,446	3,115,477	13,712,354	3,284,578	13,580,582
Eligible private patient	1,507,213	6,105,582	1,601,968	6,130,439	1,803,573	6,834,058	1,836,373	6,504,744	1,866,555	6,480,659
Eligible DVA patient	195,182	1,313,653	177,327	1,147,428	203,213	1,312,559	223,659	1,366,223	243,219	1,389,801
Eligible other patient	38,221	168,811	75,859	380,532	123,721	618,259	115,397	566,786	117,779	467,646
Ineligible patient	4,750	21,180	12,474	55,184	14,331	58,420	14,769	62,093	18,686	72,045
Not reported	302,309	1,366,766	269,943	1,076,083	5,711	166,947	21,240	153,625	32,257	574,623
<b>Total separations/patient day:</b>	<b>4,608,894</b>	<b>21,023,901</b>	<b>4,880,266</b>	<b>20,973,678</b>	<b>5,170,809</b>	<b>22,447,689</b>	<b>5,326,915</b>	<b>22,365,825</b>	<b>5,563,074</b>	<b>22,565,356</b>

Note: Abbreviation: DVA — Department of Veterans' Affairs.

**Table 5.6: Separations by compensable status and hospital sector, States and Territories, 1997–98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Compensable status</b>	<b>Public hospitals</b>								
Compensable	12,891	12,996	3,821	4,338	3,830	1,188	607	696	40,367
Non-compensable	1,255,755	915,459	681,524	338,826	342,952	79,123	56,568	51,531	3,721,738
Not reported	4,151	392	0	3,199	0	78	0	173	7,993
<i>Total</i>	<i>1,272,797</i>	<i>928,847</i>	<i>685,345</i>	<i>346,363</i>	<i>346,782</i>	<i>80,389</i>	<i>57,175</i>	<i>52,400</i>	<i>3,770,098</i>
	<b>Private hospitals</b>								
Compensable	21,311	22,105	11,759	7,566	8,774	1,867	504	n.a.	73,886
Non-compensable	508,079	462,096	376,319	152,792	138,646	42,427	17,067	n.a.	1,697,426
Not reported	14,961	0	0	0	0	6,703	0	n.a.	21,664
<i>Total</i>	<i>1,817,148</i>	<i>1,413,048</i>	<i>1,073,423</i>	<i>506,721</i>	<i>494,202</i>	<i>131,386</i>	<i>74,746</i>	<i>n.a.</i>	<i>1,792,976</i>
	<b>All hospitals</b>								
Compensable	34,202	35,101	15,580	11,904	12,604	3,055	1,111	696	114,253
Non-compensable	1,763,834	1,377,555	1,057,843	491,618	481,598	121,550	73,635	51,531	5,419,164
Not reported	19,112	392	0	3,199	0	6,781	0	173	29,657
<b>Total separations</b>	<b>3,089,945</b>	<b>2,341,895</b>	<b>1,758,768</b>	<b>853,084</b>	<b>840,984</b>	<b>211,775</b>	<b>131,921</b>	<b>52,400</b>	<b>5,563,074</b>

n.a. not available.

**Table 5.7: Separations by State or Territory of usual residence and hospital sector, States and Territories, 1997–98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>State or Territory of usual residence</b>	<b>Public hospitals</b>								
New South Wales	1,251,474	13,865	9,308	359	1,886	128	14,357	182	1,291,559
Victoria	6,153	908,242	1,767	389	2,209	180	133	188	919,261
Queensland	6,963	637	669,377	239	237	81	74	228	677,836
Western Australia	298	370	271	344,051	253	34	26	991	346,294
South Australia	672	1,084	380	149	339,951	42	30	1,522	343,830
Tasmania	233	1,122	172	66	93	79,868	5	16	81,575
Australian Capital Territory	2,434	124	161	18	44	10	42,460	14	45,265
Northern Territory	169	127	392	160	1,669	30	6	47,720	50,273
Other territories <sup>(a)</sup>	76	0	30	86	0	0	0	3	195
Not elsewhere classified <sup>(b)</sup>	4,325	771	2,737	839	440	0	0	1,536	10,648
Not reported	0	2,505	750	7	0	16	84	0	3,362
<b>Total</b>	<b>1,272,797</b>	<b>928,847</b>	<b>685,345</b>	<b>346,363</b>	<b>346,782</b>	<b>80,389</b>	<b>57,175</b>	<b>52,400</b>	<b>3,770,098</b>
	<b>Private hospitals</b>								
New South Wales	534,953	3,864	11,295	66	949	39	2,000	n.a.	553,166
Victoria	4,300	477,190	1,055	62	692	60	46	n.a.	483,405
Queensland	2,431	469	373,747	61	132	31	19	n.a.	376,890
Western Australia	165	118	97	159,868	71	10	6	n.a.	160,335
South Australia	151	281	186	23	144,891	13	2	n.a.	145,547
Tasmania	121	480	113	19	37	47,619	4	n.a.	48,393
Australian Capital Territory	1,422	149	84	10	15	4	12,081	n.a.	13,765
Northern Territory	99	82	374	36	544	1	1	n.a.	1,137
Other territories <sup>(a)</sup>	31	0	48	19	0	0	0	n.a.	98
Not elsewhere classified <sup>(b)</sup>	678	75	1,026	194	89	0	0	n.a.	2,062
Not reported	0	1,493	53	0	0	3,220	3,412	n.a.	8,178
<b>Total</b>	<b>544,351</b>	<b>484,201</b>	<b>388,078</b>	<b>160,358</b>	<b>147,420</b>	<b>50,997</b>	<b>17,571</b>	<b>n.a.</b>	<b>1,792,976</b>

(a) Includes Cocos (Keeling) Islands, Christmas Island, Jervis Bay Territory.

(b) Includes resident overseas, at sea, no fixed address.

n.a. not available.

**Table 5.8: Per cent of separations by State or Territory of usual residence and hospital sector, States and Territories, 1997–98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>State or Territory of usual residence</b>	<b>Public hospitals</b>								
New South Wales	98.3	1.5	1.4	0.1	0.5	0.2	25.1	0.3	34.3
Victoria	0.5	97.8	0.3	0.1	0.6	0.2	0.2	0.4	24.4
Queensland	0.5	0.1	97.7	0.1	0.1	0.1	0.1	0.4	18.0
Western Australia	<0.1	<0.1	<0.1	99.3	0.1	<0.1	<0.1	1.9	9.2
South Australia	0.1	0.1	0.1	<0.1	98.0	0.1	0.1	2.9	9.1
Tasmania	<0.1	0.1	<0.1	<0.1	<0.1	99.4	<0.1	<0.1	2.2
Australian Capital Territory	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	74.3	<0.1	1.2
Northern Territory	<0.1	<0.1	0.1	<0.1	0.5	<0.1	<0.1	91.1	1.3
Other territories <sup>(a)</sup>	<0.1	..	<0.1	<0.1	..	..	..	<0.1	<0.1
Not elsewhere classified <sup>(b)</sup>	0.3	0.1	0.4	0.2	0.1	..	..	2.9	0.3
Not reported	..	0.3	0.1	<0.1	..	<0.1	0.1	..	0.1
<b>Total</b>	<b>99.9</b>	<b>99.9</b>	<b>99.9</b>	<b>99.9</b>	<b>100.0</b>	<b>99.9</b>	<b>99.9</b>	<b>99.9</b>	<b>100.0</b>
	<b>Private hospitals</b>								
New South Wales	98.3	0.8	2.9	<0.1	0.6	0.1	11.4	n.a.	30.9
Victoria	0.8	98.6	0.3	<0.1	0.5	0.1	0.3	n.a.	27.0
Queensland	0.4	0.1	96.3	<0.1	0.1	0.1	0.1	n.a.	21.0
Western Australia	<0.1	<0.1	<0.1	99.7	<0.1	<0.1	<0.1	n.a.	8.9
South Australia	<0.1	0.1	<0.1	<0.1	98.3	<0.1	<0.1	n.a.	8.1
Tasmania	<0.1	0.1	<0.1	<0.1	<0.1	93.4	<0.1	n.a.	2.7
Australian Capital Territory	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	68.8	n.a.	0.8
Northern Territory	<0.1	<0.1	0.1	<0.1	0.4	<0.1	<0.1	n.a.	0.1
Other territories <sup>(a)</sup>	<0.1	..	<0.1	<0.1	..	..	..	n.a.	0.0
Not elsewhere classified <sup>(b)</sup>	0.1	<0.1	0.3	0.1	0.1	..	..	n.a.	0.1
Not reported	..	0.3	<0.1	..	..	6.3	19.4	n.a.	0.5
<b>Total</b>	<b>99.9</b>	<b>100.0</b>	<b>99.9</b>	<b>99.8</b>	<b>99.9</b>	<b>99.9</b>	<b>99.9</b>	<b>n.a.</b>	<b>100.0</b>

(a) Includes Cocos (Keeling) Islands, Christmas Island, Jervis Bay Territory.

(b) Includes resident overseas, at sea, no fixed address.

n.a. not available.

.. not applicable

**Table 5.9: Average cost weight of separations<sup>(a)</sup> by State or Territory of usual residence and hospital sector, States and Territories, 1997–98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>State or Territory of usual residence</b>	<b>Public hospitals</b>								
New South Wales	1.02	1.05	1.36	1.12	1.41	1.12	1.05	1.20	1.02
Victoria	1.01	1.01	1.04	1.13	1.26	1.02	1.31	1.11	1.01
Queensland	1.05	1.04	0.97	1.03	1.40	1.36	1.58	1.10	0.97
Western Australia	1.48	2.99	1.05	0.96	1.29	0.94	0.89	0.70	0.96
South Australia	1.39	1.88	1.09	1.03	0.99	1.41	1.81	0.70	0.99
Tasmania	1.67	2.29	1.11	1.07	1.23	0.97	1.43	1.17	0.99
Australian Capital Territory	1.85	1.62	0.97	0.80	1.09	0.72	0.94	0.69	0.99
Northern Territory	1.32	2.64	1.40	1.08	2.09	1.83	2.23	0.76	0.82
Other territories <sup>(b)</sup>	0.94	..	0.81	1.61	..	..	..	0.76	1.21
Not elsewhere classified <sup>(c)</sup>	1.28	1.69	1.53	1.30	1.54	..	..	0.67	1.30
Not reported	..	1.60	1.27	1.22	..	1.15	1.90	..	1.53
<b>Total</b>	1.02	1.02	0.98	0.96	1.00	0.97	0.97	0.76	1.00
	<b>Private hospitals</b>								
New South Wales	0.92	1.19	1.19	1.05	1.23	1.08	1.21	n.a.	0.93
Victoria	0.84	0.95	1.02	0.88	1.20	1.27	0.93	n.a.	0.95
Queensland	0.77	1.20	0.97	0.90	0.96	0.96	1.40	n.a.	0.97
Western Australia	1.05	1.04	1.10	0.95	0.97	0.72	1.23	n.a.	0.95
South Australia	1.02	1.19	1.10	0.91	1.00	1.25	0.44	n.a.	1.00
Tasmania	1.20	1.53	1.39	1.15	1.04	1.01	0.85	n.a.	1.01
Australian Capital Territory	1.44	1.41	1.12	1.00	1.18	0.69	1.05	n.a.	1.09
Northern Territory	1.04	1.28	1.19	1.62	1.33	0.75	1.17	n.a.	1.26
Other territories <sup>(b)</sup>	0.83	..	1.11	0.91	..	..	..	n.a.	0.98
Not elsewhere classified <sup>(c)</sup>	1.21	1.05	1.11	1.16	1.34	..	..	n.a.	1.15
Not reported	..	0.98	0.93	..	..	0.98	1.09	n.a.	1.03
<b>Total</b>	0.92	0.96	0.97	0.95	1.00	1.01	1.07	n.a.	0.96

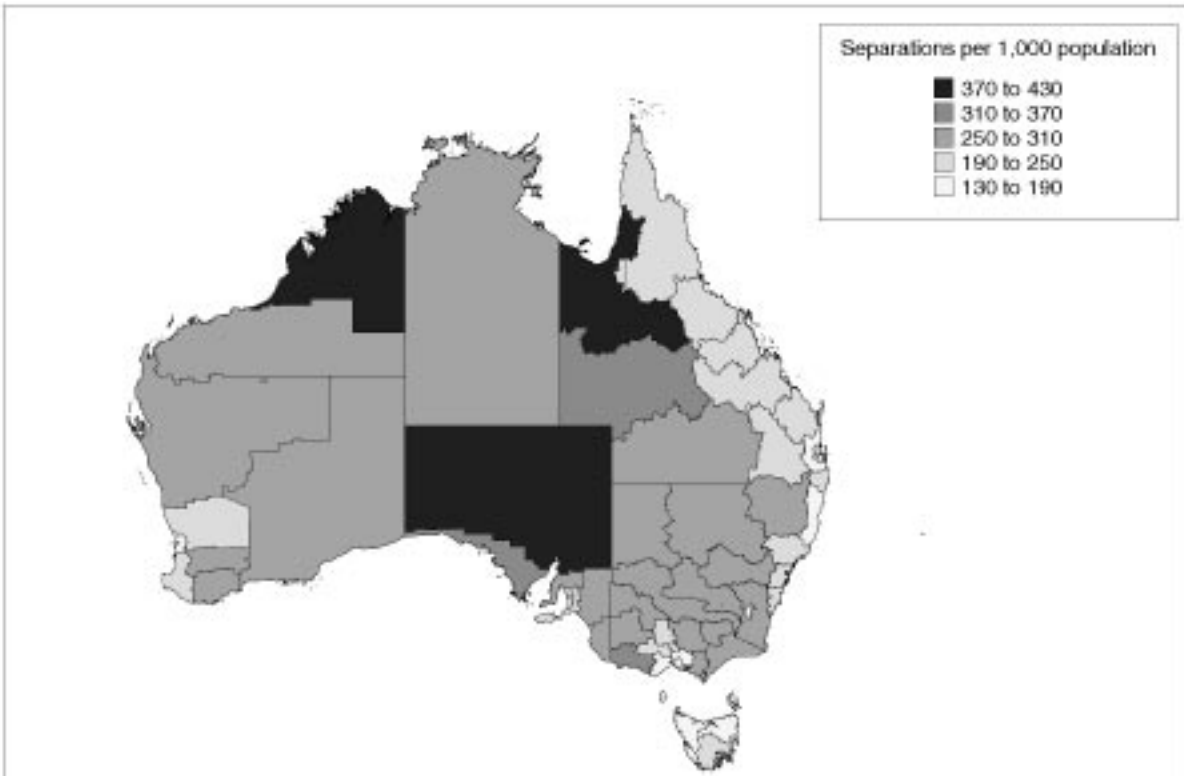
(a) Separations for which the type of episode of care was reported as acute, or was not reported. For further details see Chapter 10.

(b) Includes Cocos (Keeling) Islands, Christmas Island, Jervis Bay Territory.

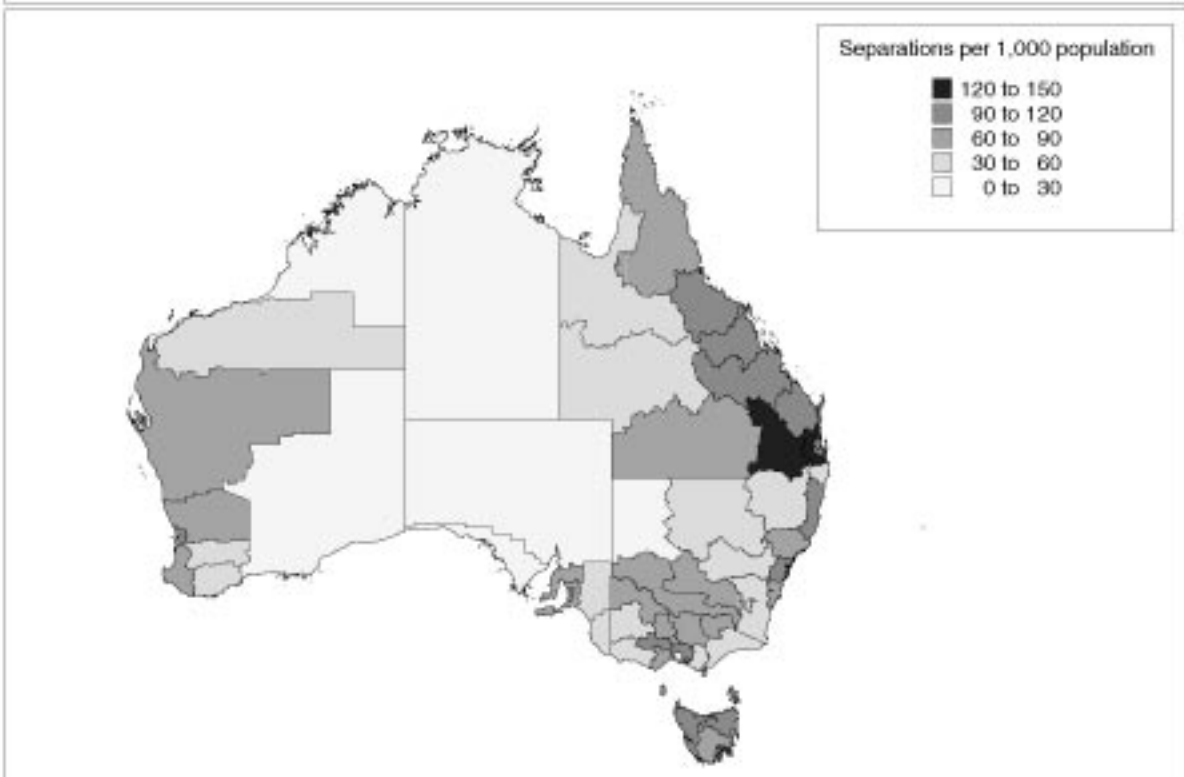
(c) Includes resident overseas, at sea, no fixed address.

n.a. not available.

.. not applicable.



**Figure 5.1: Separations per 1,000 population by Statistical Division of usual residence, public hospitals, Australia, 1997-98**



**Figure 5.2: Separations per 1,000 population by Statistical Division of usual residence, private hospitals, Australia, 1997-98**



**Table 5.10: Separations by type of episode of care and hospital sector, States and Territories, 1997–98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT <sup>(a)</sup>	Total
<b>Type of episode of care</b>	<b>Public hospitals</b>								
Acute care	1,223,555	902,306	659,290	338,500	342,226	78,140	n. a.	51,782	3,595,799
Rehabilitation care—not further specified	28,626	17,993	0	0	2,681	0	n. a.	179	49,479
Rehabilitation care—delivered in a designated unit	n. a.	n. a.	8,910	1,199	n. a.	0	n. a.	n. a.	10,109
Rehabilitation care—according to a designed program	n. a.	n. a.	8,530	1,826	n. a.	766	n. a.	n. a.	11,122
Rehabilitation care—principal clinical intent	n. a.	n. a.	1,772	0	n. a.	0	n. a.	n. a.	1,772
<i>Rehabilitation total</i>	<i>28,626</i>	<i>17,993</i>	<i>19,212</i>	<i>3,025</i>	<i>2,681</i>	<i>766</i>	<i>n. a.</i>	<i>179</i>	<i>72,482</i>
Palliative care—not further specified	8,581	2,644	0	369	957	601	n. a.	24	13,176
Palliative care—delivered in a designated unit	n. a.	n. a.	1,234	n. a.	n. a.	n. a.	n. a.	n. a.	1,234
Palliative care—according to a designated program	n. a.	n. a.	220	n. a.	n. a.	n. a.	n. a.	n. a.	220
Palliative care—principal clinical intent	n. a.	n. a.	398	n. a.	n. a.	n. a.	n. a.	n. a.	398
<i>Palliative care total</i>	<i>8,581</i>	<i>2,644</i>	<i>1,852</i>	<i>369</i>	<i>957</i>	<i>601</i>	<i>n. a.</i>	<i>24</i>	<i>15,028</i>
Non-acute care	7,630	5,904	4,317	1,188	918	640	n. a.	400	20,997
Unqualified neonates	56,986	37,345	32,679	16,046	13,424	3,662	2,917	2,020	165,079
Other care	4,145	0	674	82	0	230	n. a.	13	5,144
Not reported	260	0	0	3,199	0	12	57,175	2	60,648
<b>Total</b>	<b>1,329,783</b>	<b>966,192</b>	<b>718,024</b>	<b>362,409</b>	<b>360,206</b>	<b>84,051</b>	<b>60,092</b>	<b>54,420</b>	<b>3,935,177</b>
	<b>Private hospitals</b>								
Acute care	520,157	477,194	379,431	158,934	146,147	1,136	n. a.	n. a.	1,682,999
Rehabilitation care—not further specified	11,446	6,867	0	0	812	n. a.	n. a.	n. a.	19,125
Rehabilitation care—delivered in a designated unit	n. a.	n. a.	2,247	0	n. a.	n. a.	n. a.	n. a.	2,247
Rehabilitation care—according to a designed program	n. a.	n. a.	1,127	220	n. a.	n. a.	n. a.	n. a.	1,347
Rehabilitation care—principal clinical intent	n. a.	n. a.	2,331	0	n. a.	n. a.	n. a.	n. a.	2,331
<i>Rehabilitation total</i>	<i>11,446</i>	<i>6,867</i>	<i>5,705</i>	<i>220</i>	<i>812</i>	<i>n. a.</i>	<i>n. a.</i>	<i>n. a.</i>	<i>25,050</i>
Palliative care—not further specified	503	n. a.	0	1,172	312	n. a.	n. a.	n. a.	1,987
Palliative care—delivered in a designated unit	n. a.	n. a.	433	n. a.	n. a.	n. a.	n. a.	n. a.	433
Palliative care—according to a designated program	n. a.	n. a.	4	n. a.	n. a.	n. a.	n. a.	n. a.	4
Palliative care—principal clinical intent	n. a.	n. a.	493	n. a.	n. a.	n. a.	n. a.	n. a.	493
<i>Palliative care total</i>	<i>503</i>	<i>n. a.</i>	<i>930</i>	<i>1,172</i>	<i>312</i>	<i>n. a.</i>	<i>n. a.</i>	<i>n. a.</i>	<i>2,917</i>
Non-acute care	1,794	140	771	21	149	n. a.	n. a.	n. a.	2,875
Unqualified neonates	13,040	31	9,986	5,967	321	979	n. a.	n. a.	30,324
Other care	10,237	0	1,241	11	0	1	n. a.	n. a.	11,490
Not reported	214	0	0	0	0	49,860	17,571	n. a.	67,645
<b>Total</b>	<b>557,894</b>	<b>484,232</b>	<b>398,994</b>	<b>167,497</b>	<b>148,053</b>	<b>51,976</b>	<b>17,571</b>	<b>n. a.</b>	<b>1,823,300</b>

(a) For the Northern Territory, psychiatric care has been included in *Acute care*.

n.a. not available.

**Table 5.11: Average length of stay (days) by type of episode of care and hospital sector, States and Territories, 1997–98**

Type of episode of care	NSW	Vic	Qld	WA	SA	Tas	ACT	NT <sup>(a)</sup>	Total
	Public hospitals								
Acute care	4.0	3.5	3.5	3.5	3.6	3.7	n.a.	3.4	3.7
Rehabilitation care—not further specified	14.4	18.3	n.a.	n.a.	29.8	n.a.	n.a.	20.5	16.6
Rehabilitation care—delivered in a designated unit	n.a.	n.a.	7.5	27.8	n.a.	n.a.	n.a.	n.a.	9.9
Rehabilitation care—according to a designed program	n.a.	n.a.	2.1	23.9	n.a.	40.1	n.a.	n.a.	8.3
Rehabilitation care—principal clinical intent	n.a.	n.a.	18.1	..	n.a.	..	n.a.	n.a.	18.1
<i>Rehabilitation total</i>	<i>14.4</i>	<i>18.3</i>	<i>6.1</i>	<i>25.4</i>	<i>29.8</i>	<i>40.1</i>	<i>n.a.</i>	<i>20.5</i>	<i>16.6</i>
Palliative care—not further specified	12.1	18.9	..	12.4	10.8	48.0	n.a.	17.0	15.0
Palliative care—delivered in a designated unit	n.a.	n.a.	10.4	n.a.	n.a.	n.a.	n.a.	n.a.	10.4
Palliative care—according to a designated program	n.a.	n.a.	12.7	n.a.	n.a.	n.a.	n.a.	n.a.	12.7
Palliative care—principal clinical intent	n.a.	n.a.	13.6	n.a.	n.a.	n.a.	n.a.	n.a.	13.6
<i>Palliative care total</i>	<i>12.1</i>	<i>18.9</i>	<i>11.3</i>	<i>12.4</i>	<i>10.8</i>	<i>48.0</i>	<i>n.a.</i>	<i>17.0</i>	<i>14.5</i>
Non-acute care	63.9	34.4	129.6	27.6	186.5	49.2	n.a.	12.4	70.5
Unqualified neonates	3.2	3.5	2.8	3.5	3.0	3.5	3.2	3.6	3.2
Other care	4.4	n.a.	173.1	5.4	n.a.	77.1	n.a.	3.6	29.8
Not reported	10.9	n.a.	n.a.	47.5	n.a.	12.6	4.3	3.5	6.6
<b>Total</b>	<b>4.6</b>	<b>4.0</b>	<b>4.4</b>	<b>4.2</b>	<b>4.2</b>	<b>4.9</b>	<b>3.6</b>	<b>4.2</b>	<b>4.3</b>
Private hospitals									
Acute care	2.8	3.1	3.3	3.2	3.4	1.0	n.a.	n.a.	3.1
Rehabilitation care—not further specified	10.6	22.2	..	n.a.	16.9	n.a.	n.a.	n.a.	15.0
Rehabilitation care—delivered in a designated unit	n.a.	n.a.	12.0	n.a.	n.a.	n.a.	n.a.	n.a.	12.0
Rehabilitation care—according to a designed program	n.a.	n.a.	4.6	19.0	n.a.	n.a.	n.a.	n.a.	6.9
Rehabilitation care—principal clinical intent	n.a.	n.a.	5.5	n.a.	n.a.	n.a.	n.a.	n.a.	5.5
<i>Rehabilitation total</i>	<i>10.6</i>	<i>22.2</i>	<i>7.9</i>	<i>19.0</i>	<i>16.9</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>15.0</i>
Palliative care—not further specified	14.7	n.a.	n.a.	13.3	16.9	n.a.	n.a.	n.a.	14.2
Palliative care—delivered in a designated unit	n.a.	n.a.	5.5	n.a.	n.a.	n.a.	n.a.	n.a.	5.5
Palliative care—according to a designated program	n.a.	n.a.	19.3	n.a.	n.a.	n.a.	n.a.	n.a.	19.3
Palliative care—principal clinical intent	n.a.	n.a.	22.7	n.a.	n.a.	n.a.	n.a.	n.a.	22.7
<i>Palliative care total</i>	<i>14.7</i>	<i>n.a.</i>	<i>14.7</i>	<i>13.3</i>	<i>16.9</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>14.2</i>
Non-acute care	4.7	269.6	88.6	11.0	94.9	n.a.	n.a.	n.a.	44.8
Unqualified neonates	5.1	5.1	5.2	5.2	4.9	4.9	n.a.	n.a.	5.2
Other care	5.7	n.a.	1.8	5.1	n.a.	1.0	n.a.	n.a.	5.3
Not reported	1.3	n.a.	n.a.	n.a.	n.a.	3.6	3.7	n.a.	3.6
<b>Total</b>	<b>3.1</b>	<b>3.5</b>	<b>3.6</b>	<b>3.6</b>	<b>3.3</b>	<b>3.6</b>	<b>3.7</b>	<b>n.a.</b>	<b>3.4</b>

(a) For the Northern Territory psychiatric care has been included in *Acute care*.

n.a. not available.

.. not applicable.

**Table 5.12: Separations by source of referral and hospital sector, States and Territories, 1997–98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Source of referral</b>									
<b>Public acute hospitals</b>									
Admitted patient transferred from another hospital	56,615	31,605	20,922	8,685	11,301	1,957	9,429	707	141,221
Statistical admission: type change	12,660	6,477	7,888	0	2,703	1,073	211	163	31,175
Statistical admission from leave	0	0	0	0	235	0	0	0	235
Other <sup>(a)</sup>	1,189,954	889,245	655,057	334,479	312,358	76,796	24,789	51,530	3,534,208
Not reported	2,085	0	0	0	15,862	0	22,746	0	40,693
<b>Total</b>	<b>1,261,314</b>	<b>927,327</b>	<b>683,867</b>	<b>343,164</b>	<b>342,459</b>	<b>79,826</b>	<b>57,175</b>	<b>52,400</b>	<b>3,747,532</b>
<b>Public psychiatric hospitals</b>									
Private psychiatric practice	271	0	36	18	3,969	1	..	..	4,295
Other private medical practice	856	120	58	0	4	43	..	..	1,081
Other public psychiatric hospital	0	112	49	155	0	91	..	..	407
Other health care establishment	4,599	433	565	1,615	103	50	..	..	7,365
Other private hospital	0	6	0	73	2	4	..	..	85
Law enforcement agency	935	259	56	211	0	3	..	..	1,464
Other agency	884	23	68	194	86	4	..	..	1,259
Outpatient department	320	0	193	0	11	361	..	..	885
Other	3,458	496	453	825	148	2	..	..	5,382
Not reported	160	71	0	108	0	4	..	..	343
<b>Total</b>	<b>11,483</b>	<b>1,520</b>	<b>1,478</b>	<b>3,199</b>	<b>4,323</b>	<b>563</b>	<b>..</b>	<b>..</b>	<b>22,566</b>
<b>Private hospitals</b>									
Admitted patient transferred from another hospital	13,650	15,410	7,200	1,739	6,053	94	380	n.a.	44,526
Statistical admission: type change	2,087	581	1,180	0	109	340	0	n.a.	4,297
Statistical admission from leave	0	0	0	0	49	0	0	n.a.	49
Other <sup>(a)</sup>	525,229	468,210	379,698	158,619	141,192	50,563	0	n.a.	1,723,511
Not reported	3,385	0	0	0	17	0	17,191	n.a.	20,593
<b>Total</b>	<b>544,351</b>	<b>484,201</b>	<b>388,078</b>	<b>160,358</b>	<b>147,420</b>	<b>50,997</b>	<b>17,571</b>	<b>n.a.</b>	<b>1,792,976</b>

(a) Other refers to all planned and unplanned admissions except transfers from other hospitals and statistical admissions.

n.a. not available.

.. not applicable.

**Table 5.13: Separations by mode of separation and hospital sector, States and Territories, 1997–98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Mode of separation</b>	<b>Public hospitals</b>								
Discharge/transfer to an(other) acute hospital	65,600	42,426	27,378	13,060	14,758	1,941	1,467	1,455	168,085
Discharge/transfer to a nursing home	14,182	7,584	5,017	2,168	6,346	921	791	162	37,171
Discharge/transfer to an(other) psychiatric hospital	2,091	190	706	849	952	0	3	6	4,797
Discharge/transfer to other health care accommodation <sup>(a)</sup>	2,502	122	1,803	1,026	1,202	1,089	204	0	7,948
Statistical discharge: type change	12,994	6,799	10,171	590	3,071	1,692	12	341	35,670
Left against medical advice/discharge at own risk	9,537	3,392	4,984	3,208	2,098	356	119	1,214	24,908
Statistical discharge from leave	4,025	25	453	1,472	377	0	176	0	6,528
Died	22,011	13,188	8,807	3,795	4,786	1,232	707	311	54,837
Other <sup>(b)</sup>	1,139,855	855,121	626,026	320,195	313,000	73,158	53,696	47,253	3,428,304
Not reported	0	0	0	0	192	0	0	1,658	1,850
<b>Total</b>	<b>1,272,797</b>	<b>928,847</b>	<b>685,345</b>	<b>346,363</b>	<b>346,782</b>	<b>80,389</b>	<b>57,175</b>	<b>52,400</b>	<b>3,770,098</b>
	<b>Private hospitals</b>								
Discharge/transfer to an(other) acute hospital	8,872	11,202	5,906	1,784	4,330	346	273	n.a.	32,713
Discharge/transfer to a nursing home	1,347	1,724	1,513	320	2,126	9	87	n.a.	7,126
Discharge/transfer to an(other) psychiatric hospital	107	0	7	27	52	0	0	n.a.	193
Discharge/transfer to other health care accommodation <sup>(a)</sup>	276	4	907	86	67	17	22	n.a.	1,379
Statistical discharge: type change	1,870	500	1,368	159	91	99	0	n.a.	4,087
Left against medical advice/discharge at own risk	1,049	177	203	128	95	195	8	n.a.	1,855
Statistical discharge from leave	161	0	442	65	2,034	0	0	n.a.	2,702
Died	2,542	3,743	3,458	1,437	1,227	307	89	n.a.	12,803
Other <sup>(b)</sup>	528,127	466,845	374,274	156,352	137,322	50,024	17,092	n.a.	1,730,036
Not reported	0	6	0	0	76	0	0	n.a.	82
<b>Total</b>	<b>544,351</b>	<b>484,201</b>	<b>388,078</b>	<b>160,358</b>	<b>147,420</b>	<b>50,997</b>	<b>17,571</b>	<b>n.a.</b>	<b>1,792,976</b>

(a) Includes mothercraft hospitals and hostels recognised by the Commonwealth Department of Health and Aged Care, unless this is the usual place of residence.

(b) Includes discharge to usual residence/own accommodation/welfare institution (including prisons, hostels and group homes providing primarily welfare services).

n.a. not available.

# 6 Demographic profile for admitted patients

## Introduction

This chapter presents a demographic profile of admitted patients who separated from hospital during 1997–98.

Data on the sex of each patient was reported to the National Hospital Morbidity Database as male, female, indeterminate or not stated/inadequately described. The 92 separations for patients who were not reported as male or female are included in person totals in the tables in this chapter.

Most States and Territories supplied the date of birth of the patient for the database, in which case the Institute calculated the age of the patient by subtracting the date of birth from the date of admission. The exceptions were Victoria, Queensland and Tasmania which supplied the age in years or days for each patient.

The data on Indigenous status were supplied by most data providers categorised as:

- Indigenous—Aboriginal but not Torres Strait Islander origin
- Indigenous—Torres Strait Islander but not Aboriginal origin
- Indigenous—Aboriginal and Torres Strait Islander origin
- Not Indigenous—not Aboriginal or Torres Strait Islander origin
- Not stated.

Differing interpretations among data providers required that an additional category, *Aboriginal or Torres Strait Islander origin, not further specified* be created to cater for definitional variations between jurisdictions including the use of the superseded version of this data element.

Country of birth details were supplied by all States and Territories. Providers supplied this information coded to the Australian Bureau of Statistics's Australian Standard Classification of Countries for Social Statistics.

Age-standardised rates calculated for separations for Indigenous persons (Table 6.7) and by country of birth (Table 6.8) used population estimates for 30 June 1997, because 31 December (mid-year) estimates are not available for the Indigenous and overseas-born populations. Thus while standardised rates within this chapter can be directly compared, there will be small discrepancies between them and standardised rates reported in Chapter 4 and

Chapter 5, which are based on 31 December 1997 estimates (see Appendix 3 for details).

## Sex

There were more separations for females than males in the child-bearing age groups (15 to 44 years), but also in the 45 to 54 years and the 75 years and over age groups (Table 6.1).

Females accounted for higher proportions of separations than males, 53% of total separations in public hospitals (2,002,914) (Table 6.2) and 56% in private hospitals (1,002,958) (Table 6.3). Separations per 1,000 population were higher for females than males in age groups from 15 to 54 years for both hospital sectors; however, this was reversed in the age groups over 55 years and those under 15 years (Figures 6.1 and 6.2).

Females also accounted for more patient days (12,282,437) than males (10,282,728) (Table 6.4). In public hospitals, they accounted for 52% of patient days, and for more patient days in age groups from 15 to 44 years and in the 75 years and over age groups. In private hospitals, they accounted for 60% (3,588,289) of all patient days. Similar patterns were evident in the number of patient days reported per 1,000 population in the child-bearing age groups (15 to 44 years) in both public and private hospitals (Figures 6.3 and 6.4).

## Age

Separations peaked in two age groups in public hospitals. The first was in the 25 to 34 years age group, the age group most commonly reported for female patients. The second was the 65 to 74 years age group, which was most commonly reported for males. The pattern of separations per 1,000 population also had two peaks, for the under 1 year age group and the over 75 years age group. The highest numbers of patient days were reported for females aged 25 to 34 years and in the age groups over 65 years, and for males in age groups over 55 years. Average length of stay was highest for the under 1 year and the 75 years and over age groups (Figure 6.5).

In private hospitals, the main peak for separations was in the 65 to 74 years age group, reflecting the most commonly reported age group for male patients. The separation rates were highest for the older age group. Patients in the 75 years and over age group accounted for the most patient days, and had the highest number of separations per 1,000 population. As for public hospitals, average length of stay was longest for the very young and for older patients (Figure 6.6).

In both sectors combined, the population in age groups over 65 years accounted for a high proportion of admitted patient activity. This population, which comprised 12% of the total Australian population (2,260,170), accounted for 1.7 million separations (31% of the total) and 10.4 million patient days (46%). There were 763 separations per 1,000 population for this age group compared with an overall rate of 299 per 1,000 for the total population. The average length of stay for these patients was 6.0 days, compared with 4.1 days for all patients.

## Indigenous status

Table 6.7 presents the data reported on Indigenous status by hospital sector and State and Territory. It also includes the age-standardised separation rates for Indigenous patients per 1,000 Indigenous population, calculated using the Australian Bureau of Statistics experimental projections of the Aboriginal and Torres Strait Islander population for June 1997 (Appendix Table A4.2).

There were 151,462 separations for patients reported as Aboriginal or Torres Strait Islander, mainly in New South Wales, Queensland, Western Australia and the Northern Territory. Overall, on an age-standardised basis, there were 540 separations for Indigenous patients reported per 1,000 Indigenous population for Australia. This was markedly higher than the corresponding figure for the overall population of 291 per 1,000.

The Northern Territory reported the highest number of Indigenous separations per 1,000 Indigenous population (904 per 1,000), even though its private hospital was not included. Western Australia and South Australia reported the next highest rates (785 and 703 per 1,000 respectively), ahead of Queensland and New South Wales (543 and 398 per 1,000 population, respectively). Tasmania reported a very low Indigenous separation rate, likely to reflect low levels of identification.

Figure 6.7 presents separation rates per 1,000 population by reported Indigenous status and age group and sex. Indigenous status categories included as 'Indigenous' are *Aboriginal but not Torres Strait Islander origin, Torres Strait Islander but not Aboriginal origin, Aboriginal and Torres Strait Islander origin* and *Aboriginal or Torres Strait Islander origin, not further specified*.

The rates for both Indigenous males and females were markedly higher than those for the whole population in all age groups above 34 years. Indigenous females in the 55 to 64 age group recorded the highest rate overall.

This variation in the number of Indigenous separations per 1,000 Indigenous population could indicate either that, among the States and Territories, there is variation in the proportion of Indigenous persons who are identified as such in the morbidity data collections and/or in the total population, and/or there is variation in the hospitalisation rates for Indigenous persons. Victoria was unable to supply Indigenous status data for private hospitals and the Victorian Department of Human Services has flagged the potential for under-identification of Indigenous separations in the data provided for public hospitals.

A study was recently undertaken collaboratively between the Australian Bureau of Statistics and the Institute to identify methods of assessing the quality of Indigenous identification in hospitals (Aboriginal and Torres Strait Islander Health and Welfare Information Unit, in press). This study indicated that the quality of Indigenous identification in Australian hospitals may vary widely, with results from the 12 hospitals involved in the project ranging from 55% to 100% completeness of identification for Indigenous persons. Data on Indigenous status contained in this chapter should therefore be interpreted cautiously.

The National Health Information Management Group has endorsed a program under which each jurisdiction will act to improve Indigenous identification, with national resource backing, and quality will again be assessed in 2001.

## Country of birth

Australian-born patients accounted for 75% (4,168,492) of total separations with little variation between the public (74%) and private sectors (76%) (Table 6.8). The proportion of total separations from public hospitals was higher for patients born overseas (69%, 966,295) than for patients born in Australia (67%, 2,803,803).

The age-standardised separation rate for Australian-born patients was higher (301 per 1,000) than that for the overseas-born population (231 per 1,000).

**Table 6.1: Separations by age group and sex, all hospitals, States and Territories, 1997–98**

Sex	Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT <sup>(a)</sup>	Total
Females	Under 1	20,370	13,230	11,356	4,902	4,767	1,206	1,384	1,377	58,592
	1–4	24,439	14,915	15,316	7,581	6,937	1,541	1,139	1,182	73,050
	5–14	31,593	21,360	19,660	9,850	8,972	2,345	1,328	959	96,067
	15–24	93,783	69,047	59,670	29,826	26,527	7,295	3,891	4,146	294,185
	25–34	169,062	138,444	98,819	50,717	44,634	12,609	7,549	6,224	528,058
	35–44	125,454	102,060	74,913	39,380	33,240	9,522	5,864	4,920	395,353
	45–54	112,554	96,109	71,246	33,931	32,141	9,510	4,827	4,234	364,552
	55–64	107,522	87,380	62,347	29,311	28,472	7,282	4,664	3,758	330,736
	65–74	138,194	105,342	74,399	32,534	36,593	9,453	4,757	1,465	402,737
	75 and over	162,129	123,351	80,568	35,985	45,824	10,309	3,680	672	462,518
Not reported	17	4	0	0	0	0	0	3	24	
	<i>Total</i>	<i>985,117</i>	<i>771,242</i>	<i>568,294</i>	<i>274,017</i>	<i>268,107</i>	<i>71,072</i>	<i>39,083</i>	<i>28,940</i>	<i>3,005,872</i>
Males	Under 1	28,918	19,513	14,969	7,190	7,006	1,590	1,657	1,619	82,462
	1–4	37,955	23,563	22,017	10,744	10,237	2,081	1,518	1,586	109,701
	5–14	46,864	28,891	26,996	12,988	11,587	2,947	1,889	1,340	133,502
	15–24	56,099	41,283	38,507	16,345	14,861	3,766	3,107	1,652	175,620
	25–34	69,365	53,451	44,427	24,281	19,904	5,427	2,994	2,731	222,580
	35–44	83,631	65,783	54,470	26,502	24,085	6,462	4,635	4,625	270,193
	45–54	106,149	82,600	68,432	31,030	29,557	8,195	5,328	3,838	335,129
	55–64	115,939	99,264	74,391	31,543	30,548	8,822	5,532	3,221	369,260
	65–74	156,048	128,586	87,774	39,339	40,898	11,488	5,771	2,191	472,095
	75 and over	131,007	98,867	73,146	32,736	37,412	9,528	3,231	636	386,563
Not reported	1	2	0	0	0	0	0	2	5	
	<i>Total</i>	<i>831,976</i>	<i>641,803</i>	<i>505,129</i>	<i>232,698</i>	<i>226,095</i>	<i>60,306</i>	<i>35,662</i>	<i>23,441</i>	<i>2,557,110</i>
Persons <sup>(b)</sup>	Under 1	49,289	32,746	26,325	12,094	11,773	2,796	3,042	2,998	141,063
	1–4	62,394	38,478	37,333	18,325	17,174	3,622	2,657	2,771	182,754
	5–14	78,458	50,251	46,656	22,838	20,559	5,292	3,217	2,300	229,571
	15–24	149,892	110,330	98,177	46,171	41,388	11,061	6,998	5,799	469,816
	25–34	238,435	191,895	143,246	75,000	64,538	18,037	10,543	8,965	750,659
	35–44	209,087	167,843	129,383	65,883	57,325	15,984	10,499	9,546	665,550
	45–54	218,716	178,709	139,678	64,961	61,698	17,710	10,155	8,073	699,700
	55–64	223,466	186,644	136,738	60,855	59,020	16,106	10,196	6,979	700,004
	65–74	294,251	233,928	162,173	71,873	77,491	20,941	10,528	3,656	874,841
	75 and over	293,142	222,218	153,714	68,721	83,236	19,837	6,911	1,308	849,087
Not reported	18	6	0	0	0	0	0	5	29	
	<b>Total separations</b>	<b>1,817,148</b>	<b>1,413,048</b>	<b>1,073,423</b>	<b>506,721</b>	<b>494,202</b>	<b>131,386</b>	<b>74,746</b>	<b>52,400</b>	<b>5,563,074</b>

(a) Public hospitals only in the Northern Territory

(b) Includes separations for which sex was not reported as male or female.



**Table 6.2: Separations by age group and sex, public hospitals, States and Territories, 1997–98**

Sex	Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Females	Under 1	18,213	11,221	9,797	4,006	4,380	711	724	1,377	50,429
	1–4	21,387	12,569	12,529	6,213	5,937	1,151	1,009	1,182	61,977
	5–14	25,636	16,128	15,136	7,590	7,287	1,537	1,093	959	75,366
	15–24	69,650	51,273	46,758	21,280	21,431	4,892	3,147	4,146	222,577
	25–34	118,654	96,493	66,422	34,182	34,059	7,506	5,670	6,224	369,210
	35–44	79,017	62,602	44,954	25,112	22,272	5,196	4,121	4,920	248,194
	45–54	66,257	53,800	39,136	20,109	18,854	5,015	3,328	4,234	210,733
	55–64	69,614	52,939	35,537	18,793	17,960	4,038	3,566	3,758	206,205
	65–74	94,701	64,557	40,894	22,535	23,865	5,620	3,718	1,465	257,355
	75 and over	117,988	75,691	44,306	24,955	28,739	5,737	2,772	672	300,860
	Not reported	1	4	0	0	0	0	0	3	8
<i>Total</i>		<i>681,118</i>	<i>497,277</i>	<i>355,469</i>	<i>184,775</i>	<i>184,784</i>	<i>41,403</i>	<i>29,148</i>	<i>28,940</i>	<i>2,002,914</i>
Males	Under 1	25,586	16,362	12,609	5,916	6,380	964	919	1,619	70,355
	1–4	32,779	19,718	17,849	8,768	8,758	1,453	1,303	1,586	92,214
	5–14	39,815	22,865	21,397	10,276	9,687	1,915	1,548	1,340	108,843
	15–24	41,599	27,943	29,459	11,190	10,458	2,569	2,436	1,652	127,306
	25–34	50,372	37,465	33,919	18,172	14,884	3,946	2,457	2,731	163,946
	35–44	56,557	43,170	38,479	18,871	17,101	4,221	3,871	4,625	186,895
	45–54	66,933	50,877	41,854	19,821	19,037	4,687	4,245	3,838	211,292
	55–64	77,202	65,174	46,375	21,060	20,839	5,814	4,445	3,221	244,130
	65–74	108,680	85,736	51,233	27,299	28,261	7,444	4,530	2,191	315,374
	75 and over	92,155	62,257	36,702	20,212	26,593	5,965	2,273	636	246,793
	Not reported	1	2	0	0	0	0	0	2	5
<i>Total</i>		<i>591,679</i>	<i>431,569</i>	<i>329,876</i>	<i>161,585</i>	<i>161,998</i>	<i>38,978</i>	<i>28,027</i>	<i>23,441</i>	<i>1,767,153</i>
Persons <sup>(a)</sup>	Under 1	43,799	27,584	22,406	9,922	10,760	1,675	1,643	2,998	120,787
	1–4	54,166	32,287	30,378	14,981	14,695	2,604	2,312	2,771	154,194
	5–14	65,451	38,993	36,533	17,866	16,974	3,452	2,641	2,300	184,210
	15–24	111,249	79,216	76,217	32,470	31,889	7,461	5,583	5,799	349,884
	25–34	169,026	133,958	100,341	52,356	48,943	11,453	8,127	8,965	533,169
	35–44	135,574	105,772	83,433	43,984	39,373	9,417	7,992	9,546	435,091
	45–54	133,190	104,677	80,990	39,930	37,891	9,707	7,573	8,073	422,031
	55–64	146,816	118,113	81,912	39,853	38,799	9,854	8,011	6,979	450,337
	65–74	203,381	150,293	92,127	49,834	52,126	13,064	8,248	3,656	572,729
	75 and over	210,143	137,948	81,008	45,167	55,332	11,702	5,045	1,308	547,653
	Not reported	2	6	0	0	0	0	0	5	13
<b>Total separations</b>		<b>1,272,797</b>	<b>928,847</b>	<b>685,345</b>	<b>346,363</b>	<b>346,782</b>	<b>80,389</b>	<b>57,175</b>	<b>52,400</b>	<b>3,770,098</b>

(a) Includes separations for which sex was not reported as male or female.

**Table 6.3: Separations by age group and sex, private hospitals, States and Territories, 1997–98**

Sex	Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Females	Under 1	2,157	2,009	1,559	896	387	495	660	n.a.	8,163
	1–4	3,052	2,346	2,787	1,368	1,000	390	130	n.a.	11,073
	5–14	5,957	5,232	4,524	2,260	1,685	808	235	n.a.	20,701
	15–24	24,133	17,774	12,912	8,546	5,096	2,403	744	n.a.	71,608
	25–34	50,408	41,951	32,397	16,535	10,575	5,103	1,879	n.a.	158,848
	35–44	46,437	39,458	29,959	14,268	10,968	4,326	1,743	n.a.	147,159
	45–54	46,297	42,309	32,110	13,822	13,287	4,495	1,499	n.a.	153,819
	55–64	37,908	34,441	26,810	10,518	10,512	3,244	1,098	n.a.	124,531
	65–74	43,493	40,785	33,505	9,999	12,728	3,833	1,039	n.a.	145,382
	75 and over	44,141	47,660	36,262	11,030	17,085	4,572	908	n.a.	161,658
	<i>Total</i>	<i>303,999</i>	<i>273,965</i>	<i>212,825</i>	<i>89,242</i>	<i>83,323</i>	<i>29,669</i>	<i>9,935</i>	<i>n.a.</i>	<i>1,002,958</i>
Males	Under 1	3,332	3,151	2,360	1,274	626	626	738	n.a.	12,107
	1–4	5,176	3,845	4,168	1,976	1,479	628	215	n.a.	17,487
	5–14	7,049	6,026	5,599	2,712	1,900	1,032	341	n.a.	24,659
	15–24	14,500	13,340	9,048	5,155	4,403	1,197	671	n.a.	48,314
	25–34	18,993	15,986	10,508	6,109	5,020	1,481	537	n.a.	58,634
	35–44	27,074	22,613	15,991	7,631	6,984	2,241	764	n.a.	83,298
	45–54	39,216	31,723	26,578	11,209	10,520	3,508	1,083	n.a.	123,837
	55–64	38,737	34,090	28,016	10,483	9,709	3,008	1,087	n.a.	125,130
	65–74	47,368	42,850	36,541	12,040	12,637	4,044	1,241	n.a.	156,721
	75 and over	38,852	36,610	36,444	12,524	10,819	3,563	958	n.a.	139,770
	<i>Total</i>	<i>240,297</i>	<i>210,234</i>	<i>175,253</i>	<i>71,113</i>	<i>64,097</i>	<i>21,328</i>	<i>7,635</i>	<i>n.a.</i>	<i>789,957</i>
Persons <sup>(a)</sup>	Under 1	5,490	5,162	3,919	2,172	1,013	1,121	1,399	n.a.	20,276
	1–4	8,228	6,191	6,955	3,344	2,479	1,018	345	n.a.	28,560
	5–14	13,007	11,258	10,123	4,972	3,585	1,840	576	n.a.	45,361
	15–24	38,643	31,114	21,960	13,701	9,499	3,600	1,415	n.a.	119,932
	25–34	69,409	57,937	42,905	22,644	15,595	6,584	2,416	n.a.	217,490
	35–44	73,513	62,071	45,950	21,899	17,952	6,567	2,507	n.a.	230,459
	45–54	85,526	74,032	58,688	25,031	23,807	8,003	2,582	n.a.	277,669
	55–64	76,650	68,531	54,826	21,002	20,221	6,252	2,185	n.a.	249,667
	65–74	90,870	83,635	70,046	22,039	25,365	7,877	2,280	n.a.	302,112
	75 and over	82,999	84,270	72,706	23,554	27,904	8,135	1,866	n.a.	301,434
	<b>Total separations</b>	<b>544,351</b>	<b>484,201</b>	<b>388,078</b>	<b>160,358</b>	<b>147,420</b>	<b>50,997</b>	<b>17,571</b>	<b>n.a.</b>	<b>1,792,976</b>

(a) Includes separations for which sex was not reported as male or female.

n.a. not available.

**Table 6.4: Patient days by age group and sex, all hospitals, States and Territories, 1997–98**

Sex	Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT <sup>(a)</sup>	Total
Females	Under 1	121,333	79,032	61,881	28,742	27,491	6,458	9,074	10,171	344,182
	1–4	48,189	25,683	27,772	15,131	12,525	2,562	2,149	5,994	140,005
	5–14	70,033	44,240	39,843	22,352	17,774	4,692	2,926	4,023	205,883
	15–24	253,320	174,468	155,039	83,379	65,084	20,559	11,010	14,111	776,970
	25–34	543,734	413,816	304,091	165,671	134,200	39,248	25,737	18,653	1,645,150
	35–44	381,548	286,151	236,696	119,840	101,650	28,866	18,696	13,056	1,186,503
	45–54	345,909	267,789	224,551	106,324	97,555	28,585	16,261	10,496	1,097,470
	55–64	369,881	281,571	244,113	96,274	95,697	30,353	22,186	8,339	1,148,414
	65–74	642,307	470,895	345,882	152,957	175,348	57,020	24,016	5,432	1,873,857
	75 and over	1,332,574	1,009,901	668,533	305,773	413,223	92,063	36,222	5,350	3,863,639
Not reported	37	309	0	0	0	0	0	18	364	
	<b>Total</b>	<b>4,108,865</b>	<b>3,053,855</b>	<b>2,308,401</b>	<b>1,096,443</b>	<b>1,140,547</b>	<b>310,406</b>	<b>168,277</b>	<b>95,643</b>	<b>12,282,437</b>
Males	Under 1	144,469	103,496	73,618	37,800	32,620	6,895	11,283	11,240	421,421
	1–4	71,513	40,101	38,919	20,684	17,159	3,522	3,156	7,097	202,151
	5–14	92,008	57,128	80,868	28,261	22,431	5,879	4,063	5,057	295,695
	15–24	200,247	119,203	191,420	54,036	46,589	10,831	11,069	7,160	640,555
	25–34	287,948	160,938	193,777	76,838	59,312	21,081	8,835	10,214	818,943
	35–44	265,084	185,545	197,173	77,190	69,381	38,227	15,538	13,731	861,869
	45–54	359,388	237,943	238,930	100,547	90,520	25,238	15,121	11,253	1,078,940
	55–64	471,976	303,041	269,512	110,003	104,360	29,805	19,022	10,874	1,318,593
	65–74	735,254	509,770	388,066	161,572	180,765	57,459	27,809	9,877	2,070,572
	75 and over	871,334	641,601	483,756	219,923	259,947	68,629	23,932	4,814	2,573,936
Not reported	18	15	0	0	0	0	0	20	53	
	<b>Total</b>	<b>3,499,239</b>	<b>2,358,781</b>	<b>2,156,039</b>	<b>886,854</b>	<b>883,084</b>	<b>267,566</b>	<b>139,828</b>	<b>91,337</b>	<b>10,282,728</b>
Persons <sup>(b)</sup>	Under 1	265,807	182,539	135,499	66,545	60,111	13,353	20,362	21,419	765,635
	1–4	119,702	65,784	66,691	35,815	29,684	6,084	5,305	13,095	342,160
	5–14	162,062	101,368	120,711	50,613	40,205	10,571	6,989	9,081	501,600
	15–24	453,577	293,671	346,459	137,415	111,673	31,390	22,079	21,272	1,417,536
	25–34	831,690	574,754	497,868	242,520	193,512	60,330	34,572	28,887	2,464,133
	35–44	646,634	471,696	433,869	197,031	171,031	67,093	34,234	26,788	2,048,376
	45–54	705,310	505,732	463,481	206,871	188,075	53,828	31,382	21,750	2,176,429
	55–64	841,878	584,612	513,625	206,278	200,057	60,160	41,208	19,213	2,467,031
	65–74	1,377,570	980,665	733,948	314,529	356,113	114,479	51,825	15,309	3,944,438
	75 and over	2,203,934	1,651,502	1,152,289	525,696	673,170	160,692	60,154	10,164	6,437,601
Not reported	55	324	0	0	0	0	0	38	417	
	<b>Total patient days</b>	<b>7,608,219</b>	<b>5,412,647</b>	<b>4,464,440</b>	<b>1,983,313</b>	<b>2,023,631</b>	<b>577,980</b>	<b>308,110</b>	<b>187,016</b>	<b>22,565,356</b>

(a) Public hospitals only in the Northern Territory.

(b) Includes patient days for which sex was not reported as male or female.

**Table 6.5: Patient days by age group and sex, public hospitals, States and Territories, 1997–98**

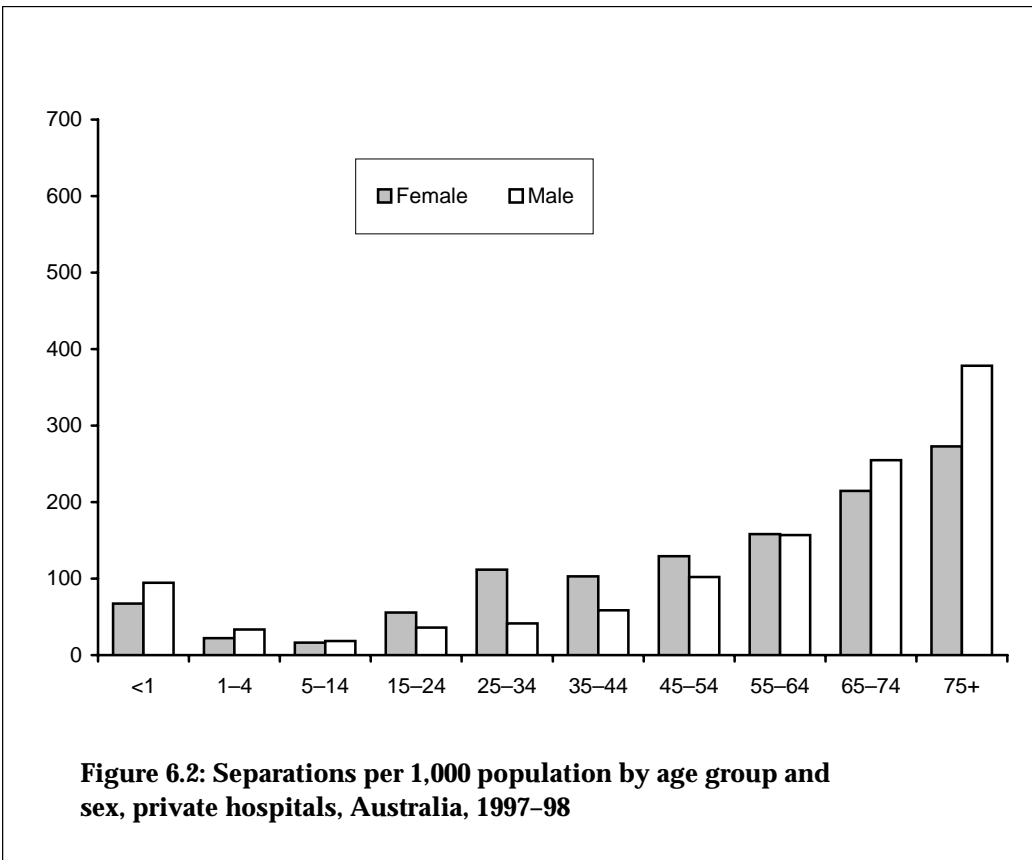
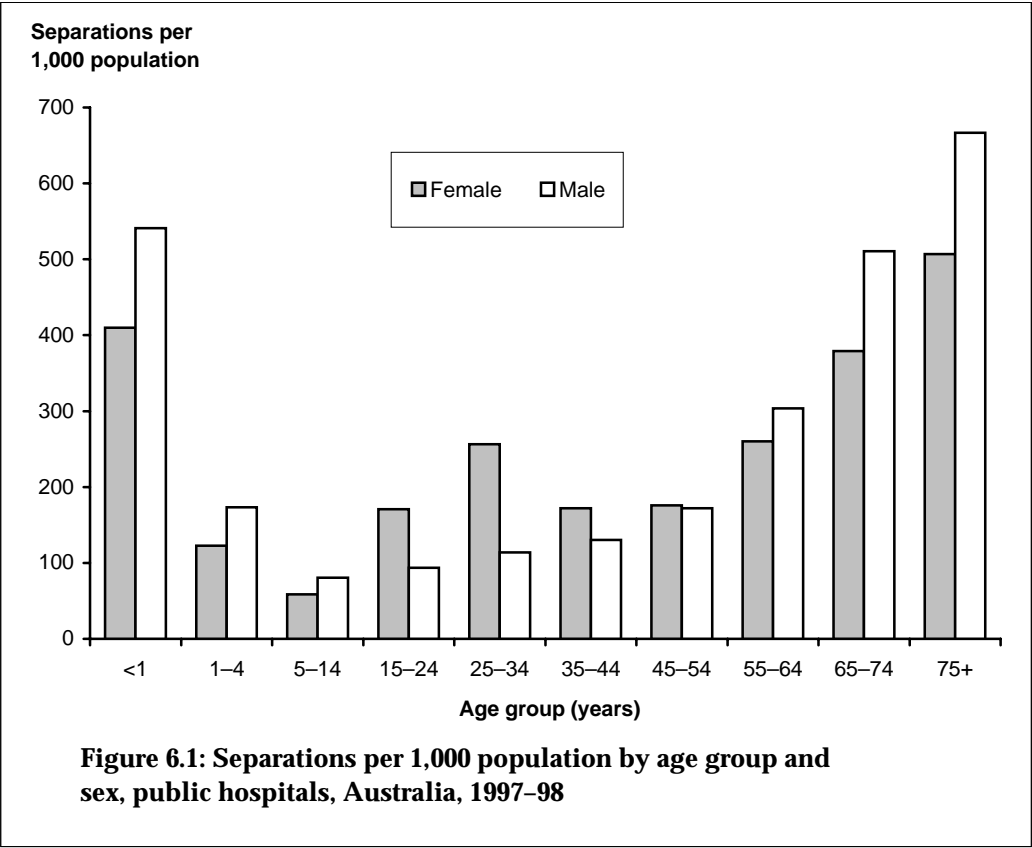
<b>Sex</b>	<b>Age group</b>	<b>NSW</b>	<b>Vic</b>	<b>Qld</b>	<b>WA</b>	<b>SA</b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total</b>
Females	Under 1	99,416	69,205	51,977	23,621	25,612	4,164	5,291	10,171	289,457
	1–4	43,970	22,893	23,877	13,426	11,410	2,004	2,018	5,994	125,592
	5–14	57,807	34,959	33,126	19,369	15,502	3,327	2,636	4,023	170,749
	15–24	208,225	134,380	125,873	67,323	53,860	14,922	9,487	14,111	628,181
	25–34	399,124	276,274	201,875	111,361	97,726	23,042	18,105	18,653	1,146,160
	35–44	268,074	177,174	156,034	80,009	67,457	16,120	12,751	13,056	790,675
	45–54	234,674	157,255	143,471	69,931	58,613	15,499	11,619	10,496	701,558
	55–64	267,807	180,426	170,199	65,272	61,007	19,139	18,341	8,339	790,530
	65–74	489,553	311,301	216,353	111,184	118,870	38,967	18,987	5,432	1,310,647
	75 and over	1,066,911	662,837	398,002	229,838	286,489	61,347	29,496	5,350	2,740,270
Not reported	2	309	0	0	0	0	0	0	18	329
	<i>Total</i>	<i>3,135,563</i>	<i>2,027,013</i>	<i>1,520,787</i>	<i>791,334</i>	<i>796,546</i>	<i>198,531</i>	<i>128,731</i>	<i>95,643</i>	<i>8,694,148</i>
Males	Under 1	128,242	90,747	61,662	31,832	30,319	4,343	7,198	11,240	365,583
	1–4	64,392	35,548	33,394	18,188	15,540	2,732	2,933	7,097	179,824
	5–14	79,855	45,036	72,626	24,774	19,951	4,205	3,673	5,057	255,177
	15–24	175,560	91,404	174,291	45,563	38,061	8,416	10,034	7,160	550,489
	25–34	252,224	120,330	173,207	65,306	49,661	17,982	7,904	10,214	696,828
	35–44	213,862	138,006	163,151	62,007	53,917	32,993	13,974	13,731	691,641
	45–54	274,117	165,420	173,645	75,563	65,338	16,116	12,425	11,253	793,877
	55–64	374,446	216,218	196,317	81,876	76,905	20,912	15,430	10,874	992,978
	65–74	580,883	360,979	250,083	115,074	137,215	41,719	23,002	9,877	1,518,832
	75 and over	687,921	437,745	270,916	149,148	203,419	49,039	17,940	4,814	1,820,942
Not reported	18	15	0	0	0	0	0	0	20	53
	<i>Total</i>	<i>2,831,520</i>	<i>1,701,448</i>	<i>1,569,292</i>	<i>669,331</i>	<i>690,326</i>	<i>198,457</i>	<i>114,513</i>	<i>91,337</i>	<i>7,866,224</i>
Persons <sup>(a)</sup>	Under 1	227,658	159,953	113,639	55,453	55,931	8,507	12,489	21,419	655,049
	1–4	108,362	58,441	57,271	31,614	26,950	4,736	4,951	13,095	305,420
	5–14	137,662	79,995	105,752	44,143	35,453	7,532	6,309	9,081	425,927
	15–24	383,785	225,784	300,164	112,886	91,921	23,338	19,521	21,272	1,178,671
	25–34	651,348	396,604	375,082	176,678	147,387	41,025	26,009	28,887	1,843,020
	35–44	481,936	315,180	319,185	142,017	121,374	49,113	26,725	26,788	1,482,318
	45–54	508,791	322,675	317,116	145,494	123,951	31,620	24,044	21,750	1,495,441
	55–64	642,253	396,644	366,516	147,148	137,912	40,053	33,771	19,213	1,783,510
	65–74	1,070,436	672,280	466,436	226,258	256,085	80,686	41,989	15,309	2,829,479
	75 and over	1,754,832	1,100,582	668,918	378,986	489,908	110,386	47,436	10,164	4,561,212
Not reported	20	324	0	0	0	0	0	0	38	382
<b>Total patient days</b>		<b>5,967,083</b>	<b>3,728,462</b>	<b>3,090,079</b>	<b>1,460,677</b>	<b>1,486,872</b>	<b>396,996</b>	<b>243,244</b>	<b>187,016</b>	<b>16,560,429</b>

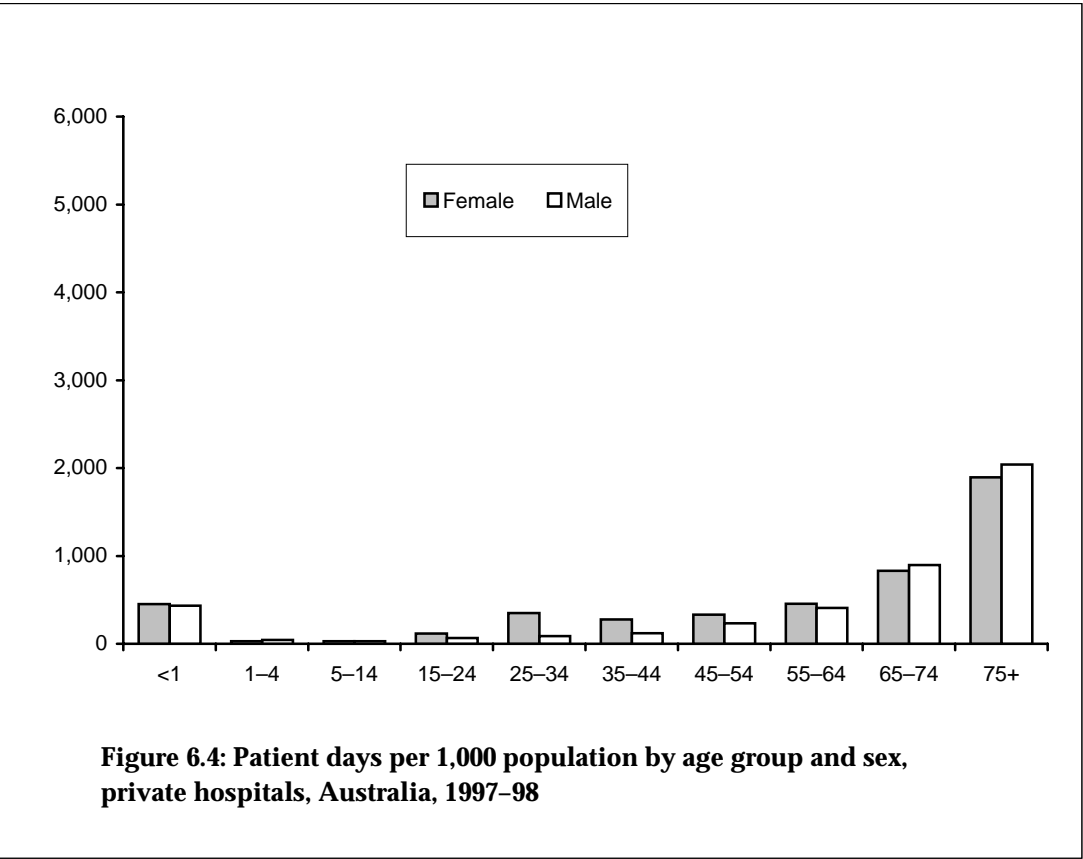
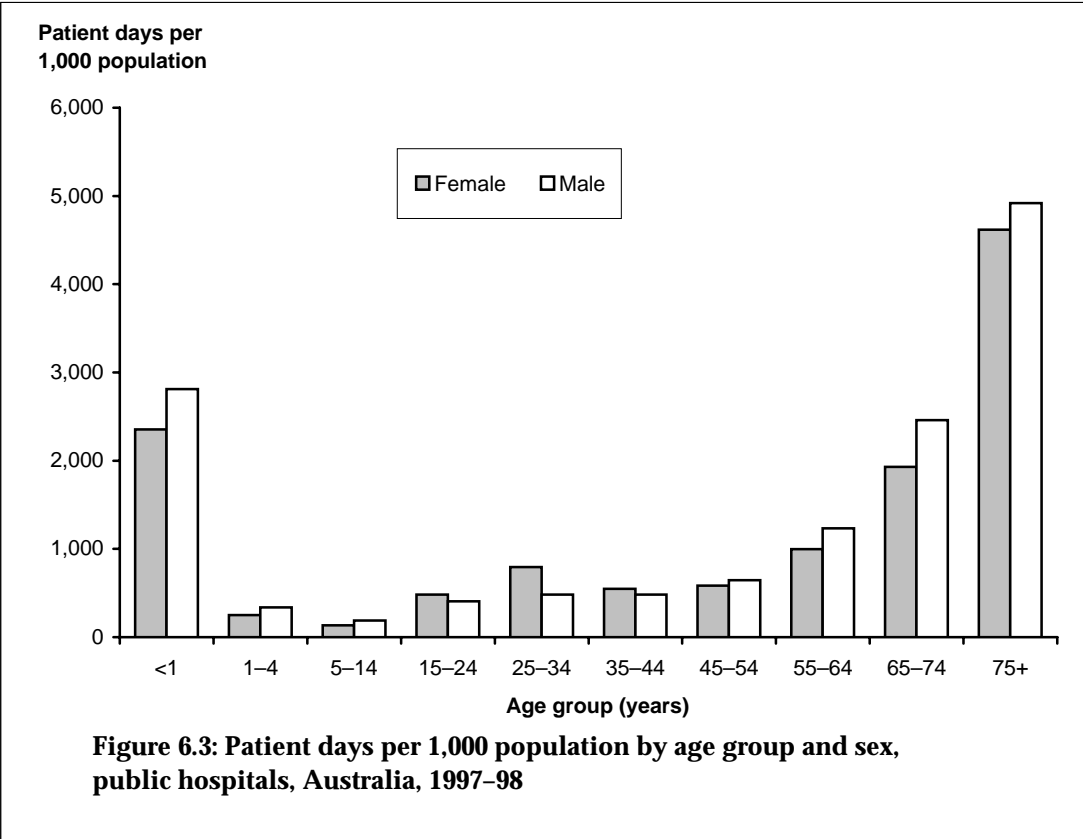
(a) Includes patient days for which sex was not reported as male or female.

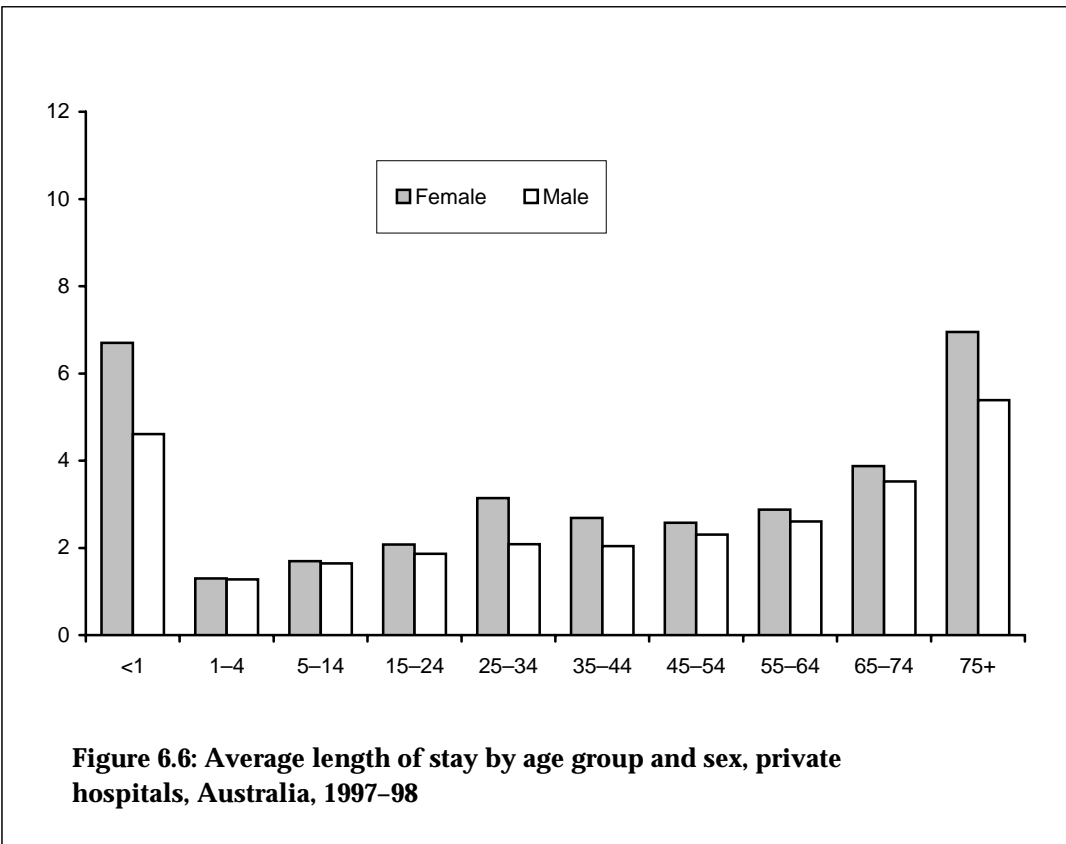
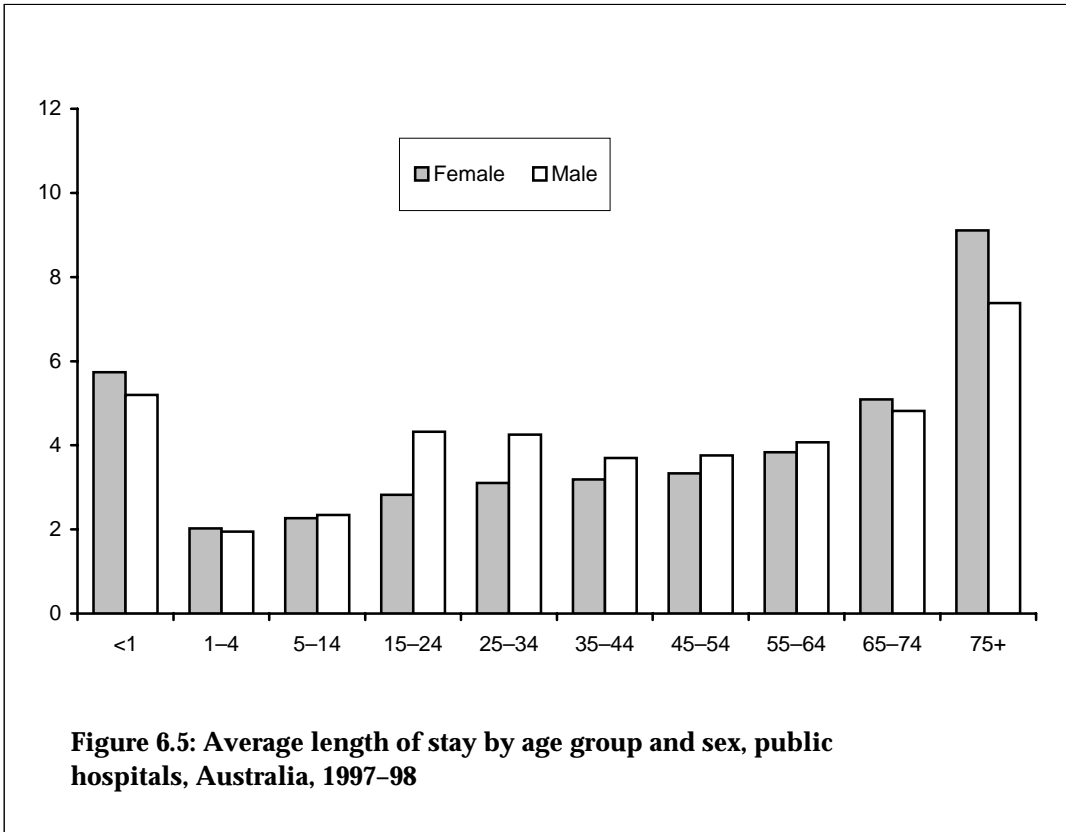
**Table 6.6: Patient days by age group and sex, private hospitals, States and Territories, 1997–98**

Sex	Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Females	Under 1	21,917	9,827	9,904	5,121	1,879	2,294	3,783	n.a.	54,725
	1–4	4,219	2,790	3,895	1,705	1,115	558	131	n.a.	14,413
	5–14	12,226	9,281	6,717	2,983	2,272	1,365	290	n.a.	35,134
	15–24	45,095	40,088	29,166	16,056	11,224	5,637	1,523	n.a.	148,789
	25–34	144,610	137,542	102,216	54,310	36,474	16,206	7,632	n.a.	498,990
	35–44	113,474	108,977	80,662	39,831	34,193	12,746	5,945	n.a.	395,828
	45–54	111,235	110,534	81,080	36,393	38,942	13,086	4,642	n.a.	395,912
	55–64	102,074	101,145	73,914	31,002	34,690	11,214	3,845	n.a.	357,884
	65–74	152,754	159,594	129,529	41,773	56,478	18,053	5,029	n.a.	563,210
	75 and over	265,663	347,064	270,531	75,935	126,734	30,716	6,726	n.a.	1,123,369
Not reported	35	0	0	0	0	0	0	0	n.a.	35
	<i>Total</i>	<i>973,302</i>	<i>1,026,842</i>	<i>787,614</i>	<i>305,109</i>	<i>344,001</i>	<i>111,875</i>	<i>39,546</i>	<i>n.a.</i>	<i>3,588,289</i>
Males	Under 1	16,227	12,749	11,956	5,968	2,301	2,552	4,085	n.a.	55,838
	1–4	7,121	4,553	5,525	2,496	1,619	790	223	n.a.	22,327
	5–14	12,153	12,092	8,242	3,487	2,480	1,674	390	n.a.	40,518
	15–24	24,687	27,799	17,129	8,473	8,528	2,415	1,035	n.a.	90,066
	25–34	35,724	40,608	20,570	11,532	9,651	3,099	931	n.a.	122,115
	35–44	51,222	47,539	34,022	15,183	15,464	5,234	1,564	n.a.	170,228
	45–54	85,271	72,523	65,285	24,984	25,182	9,122	2,696	n.a.	285,063
	55–64	97,530	86,823	73,195	28,127	27,455	8,893	3,592	n.a.	325,615
	65–74	154,371	148,791	137,983	46,498	43,550	15,740	4,807	n.a.	551,740
	75 and over	183,413	203,856	212,840	70,775	56,528	19,590	5,992	n.a.	752,994
	<i>Total</i>	<i>667,719</i>	<i>657,333</i>	<i>586,747</i>	<i>217,523</i>	<i>192,758</i>	<i>69,109</i>	<i>25,315</i>	<i>n.a.</i>	<i>2,416,504</i>
Persons <sup>(a)</sup>	Under 1	38,149	22,586	21,860	11,092	4,180	4,846	7,873	n.a.	110,586
	1–4	11,340	7,343	9,420	4,201	2,734	1,348	354	n.a.	36,740
	5–14	24,400	21,373	14,959	6,470	4,752	3,039	680	n.a.	75,673
	15–24	69,792	67,887	46,295	24,529	19,752	8,052	2,558	n.a.	238,865
	25–34	180,342	178,150	122,786	65,842	46,125	19,305	8,563	n.a.	621,113
	35–44	164,698	156,516	114,684	55,014	49,657	17,980	7,509	n.a.	566,058
	45–54	196,519	183,057	146,365	61,377	64,124	22,208	7,338	n.a.	680,988
	55–64	199,625	187,968	147,109	59,130	62,145	20,107	7,437	n.a.	683,521
	65–74	307,134	308,385	267,512	88,271	100,028	33,793	9,836	n.a.	1,114,959
	75 and over	449,102	550,920	483,371	146,710	183,262	50,306	12,718	n.a.	1,876,389
Not reported	35	0	0	0	0	0	0	0	n.a.	35
<b>Total patient days</b>		<b>1,641,101</b>	<b>1,684,185</b>	<b>1,374,361</b>	<b>522,636</b>	<b>536,759</b>	<b>180,984</b>	<b>64,866</b>	<b>n.a.</b>	<b>6,004,927</b>

(a) Includes patient days for which sex was not reported as male or female.





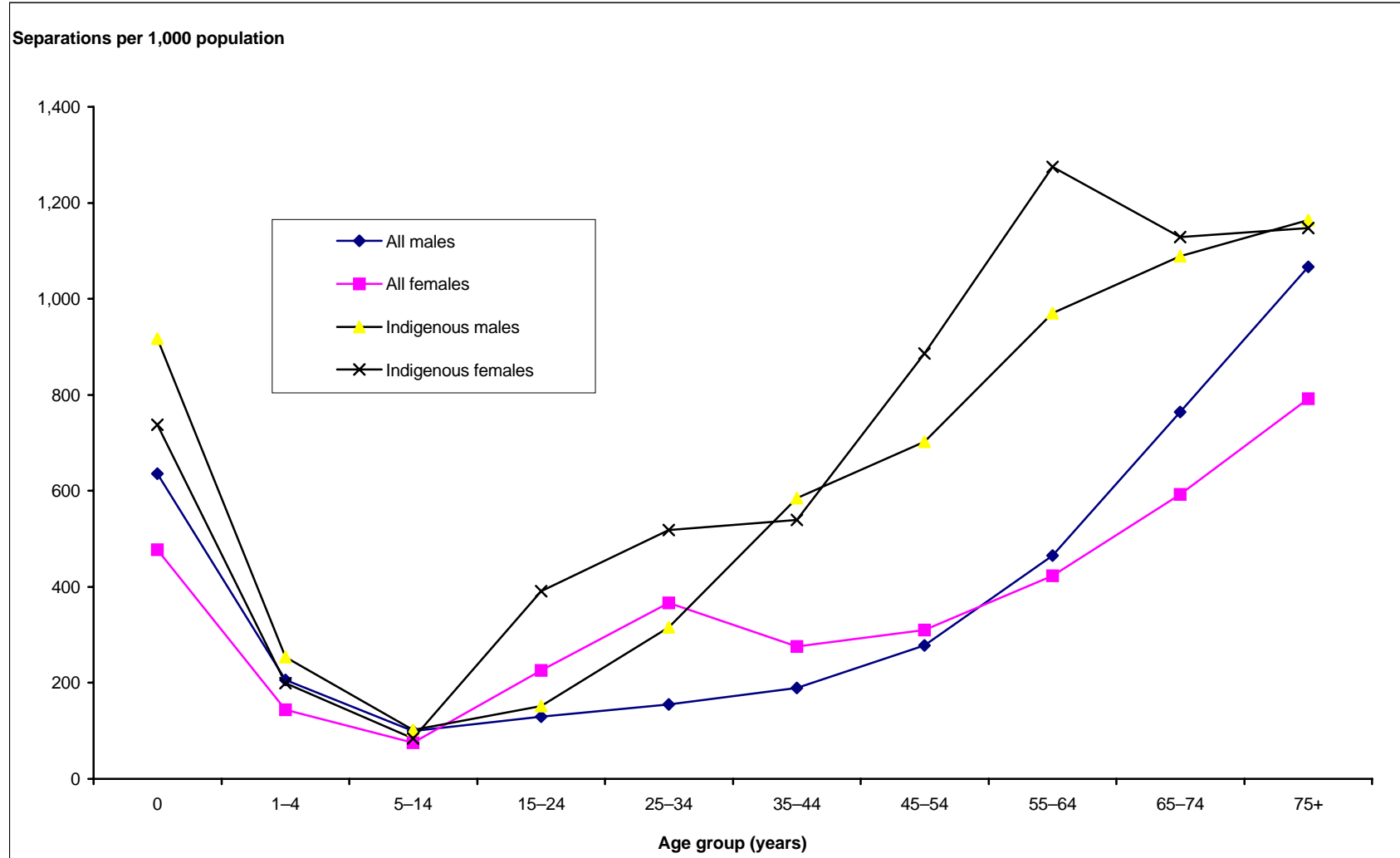




**Table 6.7: Separations by reported Indigenous status and hospital sector, States and Territories, 1997–98**

	NSW	Vic <sup>(a)</sup>	Qld	WA <sup>(b)</sup>	SA	Tas	ACT <sup>(b)</sup>	NT	Total
<b>Public hospitals</b>									
Aboriginal but not Torres Strait Islander origin	26,861	38	32,512	1,447	10,661	659	38	30,209	102,425
Torres Strait Islander but not Aboriginal origin	325	0	6,369	5	19	257	0	119	7,094
Aboriginal and Torres Strait Islander origin	439	0	432	0	25	27	0	343	1,266
Aboriginal or Torres Strait Islander origin, not further specified	0	6,489	0	30,047	0	0	574	0	37,110
Not Aboriginal or Torres Strait Islander origin	1,245,172	922,320	603,460	314,840	328,266	72,441	56,522	21,665	3,564,686
Not reported	0	0	42,572	24	7,811	7,005	41	64	57,517
<i>Total</i>	<i>1,272,797</i>	<i>928,847</i>	<i>685,345</i>	<i>346,363</i>	<i>346,782</i>	<i>80,389</i>	<i>57,175</i>	<i>52,400</i>	<i>3,770,098</i>
<b>Private hospitals</b>									
Aboriginal but not Torres Strait Islander origin	1,593	n.a.	221	0	212	4	7	n.a.	2,037
Torres Strait Islander but not Aboriginal origin	245	n.a.	97	1	6	6	0	n.a.	355
Aboriginal and Torres Strait Islander origin	743	n.a.	89	0	3	0	0	n.a.	835
Aboriginal or Torres Strait Islander origin, not further specified	0	n.a.	0	335	0	0	5	n.a.	340
Not Aboriginal or Torres Strait Islander origin	541,770	n.a.	274,122	160,022	138,408	29,934	17,494	n.a.	1,161,750
Not reported	0	484,201	113,549	0	8,791	21,053	65	n.a.	627,659
<i>Total</i>	<i>544,351</i>	<i>484,201</i>	<i>388,078</i>	<i>160,358</i>	<i>147,420</i>	<i>50,997</i>	<i>17,571</i>	<i>n.a.</i>	<i>1,792,976</i>
<b>All hospitals<sup>(c)</sup></b>									
Aboriginal but not Torres Strait Islander origin	28,454	38	32,733	1,447	10,873	663	45	30,209	104,462
Torres Strait Islander but not Aboriginal origin	570	0	6,466	6	25	263	0	119	7,449
Aboriginal and Torres Strait Islander origin	1,182	0	521	0	28	27	0	343	2,101
Aboriginal or Torres Strait Islander origin, not further specified	0	6,489	0	30,382	0	0	579	0	37,450
Not Aboriginal or Torres Strait Islander origin	1,786,942	922,320	877,582	474,862	466,674	102,375	74,016	21,665	4,726,436
Not reported	0	484,201	156,121	24	16,602	28,058	106	64	685,176
<b>Total</b>	<b>1,817,148</b>	<b>1,413,048</b>	<b>1,073,423</b>	<b>506,721</b>	<b>494,202</b>	<b>131,386</b>	<b>74,746</b>	<b>52,400</b>	<b>5,563,074</b>
Separations for Aboriginal or Torres Strait Islanders per 1,000 Aboriginal or Torres Strait Islander population <sup>(d)</sup>	398	367	543	785	703	139	392	904	540

- (a) Victorian public hospitals reported Indigenous status using only the *Aboriginal or Torres Strait Islander origin, not further specified* and the *Not Aboriginal or Torres Strait Islander origin* categories. Indigenous status data were not available for the private hospitals in Victoria.
- (b) Western Australia and Australian Capital Territory reported Indigenous status using a mixture of the detailed Indigenous status categories (*Aboriginal but not Torres Strait Islander origin, Torres Strait Islander and not Aboriginal origin* and *Aboriginal and Torres Strait Islander origin*) and the category *Aboriginal or Torres Strait Islander origin, not further specified*.
- (c) Public hospitals only in the Northern Territory.
- (d) The rates were directly age-standardised to the Australian population at 30 June 1991. For details, see Appendix 3. Indigenous population data are included in Appendix 4.



**Figure 6.7: Separations per 1,000 population, by sex, age group and reported Indigenous status, all hospitals, Australia, 1997-98**

**Table 6.8: Separations by selected country/region of birth and hospital sector, Australia, 1997–98**

Country/Region	Separations			Separations per 1,000 population <sup>(a)</sup>		
	Public hospitals	Private hospitals	All sectors	Public hospitals	Private hospitals	All sectors
Australia	2,803,803	1,364,689	4,168,492	201.3	100.1	301.4
New Zealand	54,875	20,575	75,450	175.3	66.1	241.4
Papua New Guinea	4,554	2,093	6,647	215.3	101.8	317.1
Fiji	9,208	2,411	11,619	265.6	67.7	333.3
Oceania (other)	9,101	3,567	12,668	393.4	161.3	554.7
<i>Oceania (total)</i>	<i>2,881,541</i>	<i>1,393,335</i>	<i>4,274,876</i>	<i>201.3</i>	<i>99.3</i>	<i>300.6</i>
United Kingdom and Ireland	259,862	123,943	383,805	153.3	68.3	221.6
Greece	46,662	11,739	58,401	199.4	58.2	257.7
Italy	79,128	36,072	115,200	168.2	78.8	246.9
Malta	14,874	5,143	20,017	179.1	63.4	242.4
Former Yugoslavia	43,445	11,032	54,477	171.0	41.6	212.6
Former USSR and Baltic States	19,465	5,891	25,356	177.2	63.2	240.3
Hungary	7,968	4,698	12,666	169.7	77.8	247.4
Poland	18,390	8,542	26,932	146.3	63.5	209.8
Romania	2,943	1,102	4,045	173.8	60.3	234.1
Austria	5,179	2,731	7,910	167.8	76.2	244.0
France	3,443	1,713	5,156	157.8	74.8	232.5
Germany	26,097	13,742	39,839	149.5	73.5	223.0
Netherlands	23,271	9,468	32,739	157.4	62.5	219.9
Europe and the former USSR (other)	30,561	11,869	42,430	199.7	72.6	272.2
<i>Europe and the former USSR (total)</i>	<i>581,288</i>	<i>247,685</i>	<i>828,973</i>	<i>164.3</i>	<i>66.6</i>	<i>230.9</i>
Lebanon	21,600	4,593	26,193	277.5	51.1	328.7
Turkey	8,937	1,290	10,227	283.0	40.6	323.7
Iran	2,689	964	3,653	156.4	49.0	205.4
Egypt	10,159	4,726	14,885	190.9	75.1	266.0
Middle East and North Africa (other)	11,465	3,003	14,468	245.6	60.4	306.0
<i>Middle East and North Africa (total)</i>	<i>54,850</i>	<i>14,576</i>	<i>69,426</i>	<i>239.4</i>	<i>59.1</i>	<i>298.5</i>

*(continued)*

**Table 6.8 (continued): Separations by selected country/region of birth and hospital sector, Australia, 1997–98**

Country/Region	Separations			Separations per 1,000 population <sup>(a)</sup>		
	Public hospitals	Private hospitals	All sectors	Public hospitals	Private hospitals	All sectors
Myanmar	1,823	915	2,738	123.0	57.0	180.0
Indonesia	5,561	3,137	8,698	141.8	76.3	218.1
Cambodia	3,572	742	4,314	157.7	34.5	192.1
Malaysia	8,836	5,056	13,892	143.4	71.4	214.8
Philippines	17,326	3,489	20,815	175.8	32.9	208.7
Singapore	3,150	2,159	5,309	144.5	90.6	235.1
Vietnam	24,068	4,567	28,635	145.0	27.5	172.5
Thailand	2,080	656	2,736	120.4	41.4	161.7
China	20,917	6,560	27,477	131.5	38.6	170.0
Hong Kong and Macau	5,829	3,530	9,359	151.3	89.8	241.1
Japan	2,040	1,890	3,930	124.9	96.2	221.1
Korea	3,317	1,091	4,408	111.8	33.8	145.6
India	15,341	6,681	22,022	150.9	59.8	210.6
Sri Lanka	9,134	3,602	12,736	164.5	59.1	223.7
Asia (other)	7,521	2,471	9,992	170.6	60.6	231.2
<i>Asia (total)</i>	<i>130,515</i>	<i>46,546</i>	<i>177,061</i>	<i>144.6</i>	<i>50.2</i>	<i>194.8</i>
Canada	3,730	2,564	6,294	135.3	88.2	223.4
United States of America	6,351	5,765	12,116	118.6	105.6	224.2
North America (other)	241	46	287	4,145.5	742.3	4,887.7
<i>North America (total)</i>	<i>10,322</i>	<i>8,375</i>	<i>18,697</i>	<i>127.9</i>	<i>99.2</i>	<i>227.1</i>
Argentina	1,569	936	2,505	130.3	70.6	200.9
Chile	4,391	1,341	5,732	179.9	48.3	228.3
The Caribbean	1,454	500	1,954	399.5	131.1	530.6
South America, Central America and The Caribbean	7,352	2,202	9,554	179.1	50.2	229.3
<i>South America, Central America and The Caribbean (total)</i>	<i>14,766</i>	<i>4,979</i>	<i>19,745</i>	<i>183.7</i>	<i>56.8</i>	<i>240.5</i>
Mauritius	3,513	1,579	5,092	165.3	71.5	236.8
South Africa	7,529	5,790	13,319	119.2	86.5	205.7
Africa excluding North Africa (other)	7,031	2,824	9,855	200.1	81.0	281.2
<i>Africa excluding North Africa (total)</i>	<i>18,073</i>	<i>10,193</i>	<i>28,266</i>	<i>151.8</i>	<i>80.2</i>	<i>232.0</i>
<i>Overseas (total)</i>	<i>887,552</i>	<i>361,000</i>	<i>1,248,552</i>	<i>168.1</i>	<i>63.0</i>	<i>231.1</i>
Not stated or inadequately described	78,743	67,287	146,030	..	..	..
<b>Total</b>	<b>3,770,098</b>	<b>1,792,976</b>	<b>5,563,074</b>	<b>199.4</b>	<b>93.1</b>	<b>292.5</b>

(a) The rates were directly age-standardised to the Australian population at 30 June 1991. For details, see Appendix 3. Population data by country of birth are included in Appendix 4. .. not applicable.

# 7 Principal diagnoses for admitted patients

## Introduction

The principal diagnosis is defined as the diagnosis established, after study, to be chiefly responsible for occasioning the admitted patient's episode of care in hospital. Data on principal diagnoses provide information on the diseases and conditions for which hospitalisations occur and can provide an indirect measure of community morbidity.

The principal diagnosis is usually a disease, injury or poisoning, but can also be a specific treatment of an already diagnosed condition (for example, dialysis for renal disease), or other reasons for hospitalisation.

Principal diagnoses are classified, coded and reported to the National Hospital Morbidity Database using the *Australian Version of the International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM) (National Coding Centre 1996). This classification is hierarchical, with a small number of summary disease chapters which are divided into a large number of more specific disease groupings (represented by 3-character codes) which, in turn, can mostly be divided into an even larger number of very specific disease categories represented by 4- and 5-character codes. The tables and figures in this chapter use the codes and abbreviated descriptions of the ICD-9-CM disease classification. Full descriptions of the categories are available in the ICD-9-CM publication.

Most of the information is presented using three methods of grouping records based on the ICD-9-CM principal diagnosis classification:

- ICD-9-CM disease chapters—these 18 groups provide information aggregated at the ICD-9-CM chapter level (Figures 7.1 and 7.2);
- ICD-9-CM disease groupings—these 65 groups were chosen to provide more detailed information than ICD-9-CM chapters, but still cover the entire disease classification at a manageable level (Tables 7.3 to 7.10); and
- 3-digit ICD-9-CM groupings—about 1,000 categories describe diseases at a quite specific level. Detailed information is presented for the 30 of these groups with the highest number of separations (Tables 7.12 to 7.19) and summary information is provided for all of the groups (for which separations were reported) on the Internet at <http://www.aihw.gov.au/publications/health/ahs97-8.html> (Tables S7.1 and S7.2).

In addition:

- Tables 7.1 and 7.2 present information aggregating 3-, 4- and 5-character ICD-9-CM categories corresponding to the National Health Priority Areas.
- Table 7.11 presents information on the number of diagnoses reported (principal and additional diagnoses).
- Table 7.20 uses a mixture of ICD-9-CM chapters, 3- and 4-character categories and other groupings to present information on diagnoses reported for public psychiatric hospitals.

Tables are presented with summary separation, patient day and length of stay statistics for public and private hospitals, nationally and by State and Territory. National information on age group and sex distributions is also presented. The data on relative rankings of the various disease groups (by numbers of separations or patient days) depend to some extent on the chosen groups of diagnosis codes.

Although a principal diagnosis is expected to be reported for every separation, in practice it is missing for a small number of records (indicated as *Not reported* in the tables). The majority of records without a principal diagnosis was reported by Victoria and Tasmania (mainly for public acute hospitals).

Some data for private hospitals in Tasmania and the Australian Capital Territory have not been included in Tables 7.6, 7.8, 7.15 and 7.17. These data were supplied but are not published, for confidentiality reasons.

## ICD-9-CM chapters

Figures 7.1 and 7.2 provide a summary of the proportions of separations and patient days reported for each of the ICD-9-CM disease chapters.

Ignoring the diverse categories that make up the *Other reasons for contact* group, the chapter with the highest numbers of separations in the public sector was *Diseases of the digestive system*, followed by the obstetric group and *Injury and poisoning*. In the private sector, *Diseases of the digestive system* had the largest number of separations, followed by *Diseases of the musculoskeletal system and connective tissue* and *Neoplasms*.

The highest numbers of patient days for the public sector were reported for the *Mental disorders* and *Diseases of the circulatory system* chapters. The *Diseases of the musculoskeletal system and connective tissue* and *Diseases of the circulatory system* chapters accounted for the highest numbers of patient days in the private sector.

For the public and private sectors combined, the two chapters with the most separations mirrored those in the public system (*Diseases of the digestive system* and the obstetric group). The largest numbers of patient days were reported for the *Mental disorders* and *Diseases of the circulatory system* chapters.

## National Health Priority Areas

The National Health Priority Areas is a policy initiative, run jointly by the Commonwealth and the State and Territory Governments, focusing on the diseases and other conditions that contribute most significantly to Australia's burden of illness (Australian Institute of Health and Welfare and Department of Health and Family Services 1997) and for which there is potential for the burden to be significantly reduced. The priority areas are cancer control, cardiovascular health, mental health, diabetes, and injury prevention and control.

Tables 7.1 and 7.2 and Figures 7.3 to 7.6 provide information on hospital separations relevant to these priority areas. The priority areas are not defined by standard groupings of ICD-9-CM codes, so diagnoses encompassing broad definitions of cancer, cardiovascular disease, mental disorders, diabetes and injury and poisoning are included in the tables. Detail is also provided to enable more specifically defined diagnoses to be distinguished. In addition to principal diagnoses of diseases, injuries and poisonings, also included are relevant principal diagnoses of other reasons for hospitalisation ('V codes', for example, chemotherapy for malignancy).

A number of the priority area diseases are contributory factors for hospitalisation for many other conditions. However, only separations for which the principal diagnosis corresponded with one of the priority areas have been included in the tables. Separations for patients with these conditions reported only as additional diagnoses are not included in these tables. This will have understated the total number of separations for which priority area diseases or conditions contributed. This is particularly the case for diabetes, which was reported as a principal diagnosis for 23,857 separations but rises to 300,660 separations involving 2,176,368 patient days when additional diagnoses are added. This effect is also marked for cardiovascular disease, which appears as a principal diagnosis in 434,748 separations but has 1,282,242 separations and 8,895,086 patient days when additional diagnoses related to cardiovascular disease are included.

Given the focus on prevention, the information for the injury prevention and control area is presented by the cause of the injury or poisoning (external cause). Individual records were selected for inclusion in this group if the principal diagnosis fell into the injury and poisoning category (ICD-9-CM codes 799.5, 800–999 and relevant V codes, as indicated on the tables). These records were then grouped together based on the reported external cause. There is some overlap between these tables and the injury and poisoning information presented in Chapter 9.

Principal diagnoses in the National Health Priority Areas accounted for 28% of total separations (1,577,397) and 41% of total patient days (9,293,831) for Australia for 1997–98. *Cancer* accounted for the majority of the separations, followed closely by *Cardiovascular disease*. *Mental disorders* and *Cardiovascular disease* each accounted for over 2,400,000 patient days. *Cardiovascular disease* accounted for the largest number of separations in New South Wales, with *Cancer* ranking first in Victoria, Queensland, Western Australia, South Australia, Tasmania and the Australian Capital Territory. In the Northern Territory, *Injury and poisoning* accounted for the most separations.

Figures 7.3 to 7.6 provide crude separation rates per 1,000 population for the National Health Priority Areas by Statistical Division with the exception of diabetes which has not been included due to low numbers of separations. Data supplied for area of usual residence were used to produce these maps, see Appendix 3 for further information.

## Broad disease groupings

Tables 7.3 and 7.4 summarise the principal diagnosis data. In the public sector (Table 7.3), the highest number of separations was reported for *Contact related to a condition, specific procedures or aftercare* (V40–V59), which includes the three top diagnoses (in 3-digit groupings) of encounters for dialysis, other unspecified procedures and aftercare (including chemotherapy) and rehabilitation (Table 7.14). *Mental disorders* (290–319) stands out as a high volume group (8.6 separations per 1,000 population), for its high use of beds (142 patient days per 1,000 population) and for the longest average length of stay of these groups (16.5 days). Other high utilisation diagnosis groups included *Ischaemic heart disease* (410–414), *Other indications relating to pregnancy, labour and delivery* (650–669) and *Diseases of the musculoskeletal system and connective tissue* (710–739).

In the private sector (Table 7.4), *Contact related to a condition, specific procedures or aftercare* (V40–V59) recorded the highest number of separations. High numbers of separations were also reported for *Diseases of the musculoskeletal system and connective tissue* (710–739) which recorded the highest number of patient days.

The groups with the highest proportions of separations in the public sector (rather than in the private sector) were *Poisonings and toxic effects* (960–989) (96% in the public sector, 36,275) and *Human immunodeficiency virus infection* (042) (95%, 204) (derived from Tables 7.3 and 7.4). The groups with the highest proportions of separations in the private sector (rather than in the public sector) were *Disorders of the oral cavity, salivary glands and jaws* (520–529) (63% in the private sector, 57,428) and *Disorders of the eye and adnexa* (360–379) (62%, 94,004).

## States and Territories

Tables 7.5 to 7.8 contain detail on the pattern of hospital use in the States and Territories for the diagnosis groups, in both the public and private sectors. These tables enable State by State comparisons of overall hospital use for the different diagnosis groups, and the share of separations between the private and public sectors. For example, the proportions of separations for *Intestinal infectious diseases* (001–009) in public hospitals (rather than private hospitals) was higher in New South Wales (95%, 10,314) than in Queensland (80%, 4,827). The proportion of total patient days for *Pneumonia and influenza* (480–487) that were in private hospitals (rather than public hospitals) varied markedly by State, from 31% in Queensland (25,582) to 11% in New South Wales (17,172).

## Age group and sex

In Tables 7.9 and 7.10, information on the number of separations by age group and diagnosis groups is presented for males and females. These tables show a number of different patterns in the age distributions of separations for the various disease groups. For example, patients admitted for *Intestinal infectious diseases* (001–009) were mostly in the younger age groups, while the opposite was the case for cancers. Other groups of diseases had a peak in the middle age groups, for example *Poisonings and toxic effects* (960–989), the obstetric cases

(630–677) and *Fractures, dislocations, sprains and strains* (800–848), particularly for males.

These tables also indicate the relative importance of the disease groups as causes of hospitalisation for each sex and age group. For example, males in the over 75 years age group commonly had diagnoses in the *Disorders of eye and adnexa* (360–379) and *Ischaemic heart disease* (410–414) groups. For females in the 1–4 years age group, *Diseases of ear and mastoid processes* (380–389) and *Acute respiratory infectious* (460–466) were commonly reported.

## Number of diagnosis codes

The National Hospital Morbidity Database contains data on principal diagnosis and additional diagnoses. Additional diagnoses include comorbidities (co-existing conditions) and/or complications which may contribute to longer lengths of stay, more intensive treatment or the use of greater resources. Ideally, the number of additional diagnoses recorded for a patient should be related to the person's clinical condition, and not be restricted by administrative or technical limitations.

Table 7.11 presents information on the number of diagnosis codes (principal and additional) reported to the National Hospital Morbidity Database. There were marked differences between the States and Territories in the maximum number of diagnoses reported (for example, in the public sector, 10 diagnoses for the Northern Territory and 31 for Tasmania and Queensland; however, the average number of diagnosis codes per separation varied



little among the jurisdictions, for both the public and private sectors. The Institute requested a maximum of 31 diagnosis codes so this may have restricted the number of codes reported by Tasmania and Queensland.

Overall, the average number of codes reported for the public sector was slightly higher than for the private sector. In the public sector over 19% of records had five or more diagnosis codes (726,791), but in the private sector only 11% of records fell into this category (190,967). This may have been due to more complicated cases being treated in public hospitals.

## High volume diagnoses

Tables 7.12 to 7.19 present information on the most common principal diagnoses (at the 3-character level of the ICD-9-CM classification).

Tables 7.12 and 7.13 contain summary separation, patient day and average length of stay statistics for the 30 diagnoses with the most separations in public and private hospitals. In the public sector, the most common principal diagnosis groups were *Encounter for dialysis and dialysis catheter care* (V56) and *Encounter for other and unspecified procedures and aftercare* (V58, 86% of which, 133,224, were for chemotherapy, V58.1). For both of these, the proportion of separations that were same-day separations was over 90% (99.8% and 94.9%, respectively) and the average length of stay was relatively short. The highest numbers of patient days were reported for *Care involving use of rehabilitation procedures* (V57) and for *Schizophrenic disorders* (295), for which the average length of stay was 33 days.

In the private sector, the most frequently reported principal diagnosis was *Cataract* (366), with the second most frequent again being *Encounter for other and unspecified procedures and aftercare* (V58, 87% of which, 60,633, were for chemotherapy). The principal diagnosis with the highest number of patient days, *Care involving use of rehabilitation procedures* (V57), also had the longest average length of stay (17 days).

There was some variation between the States and Territories in the relative number of separations for the most common diagnoses (Tables 7.14 and 7.15). For example, in the public sector Western Australia, South Australia and the Northern Territory had relatively low numbers of separations for *Other acute and sub-acute forms of ischaemic heart disease* (411). Tasmania, the Australian Capital Territory and the Northern Territory had relatively low numbers of separations for *Cataract* (366). Information on the average lengths of stay by State and Territory is presented in Tables 7.16 and 7.17.

The age and sex distributions of these separations are presented in Tables 7.18 and 7.19.

## Additional data

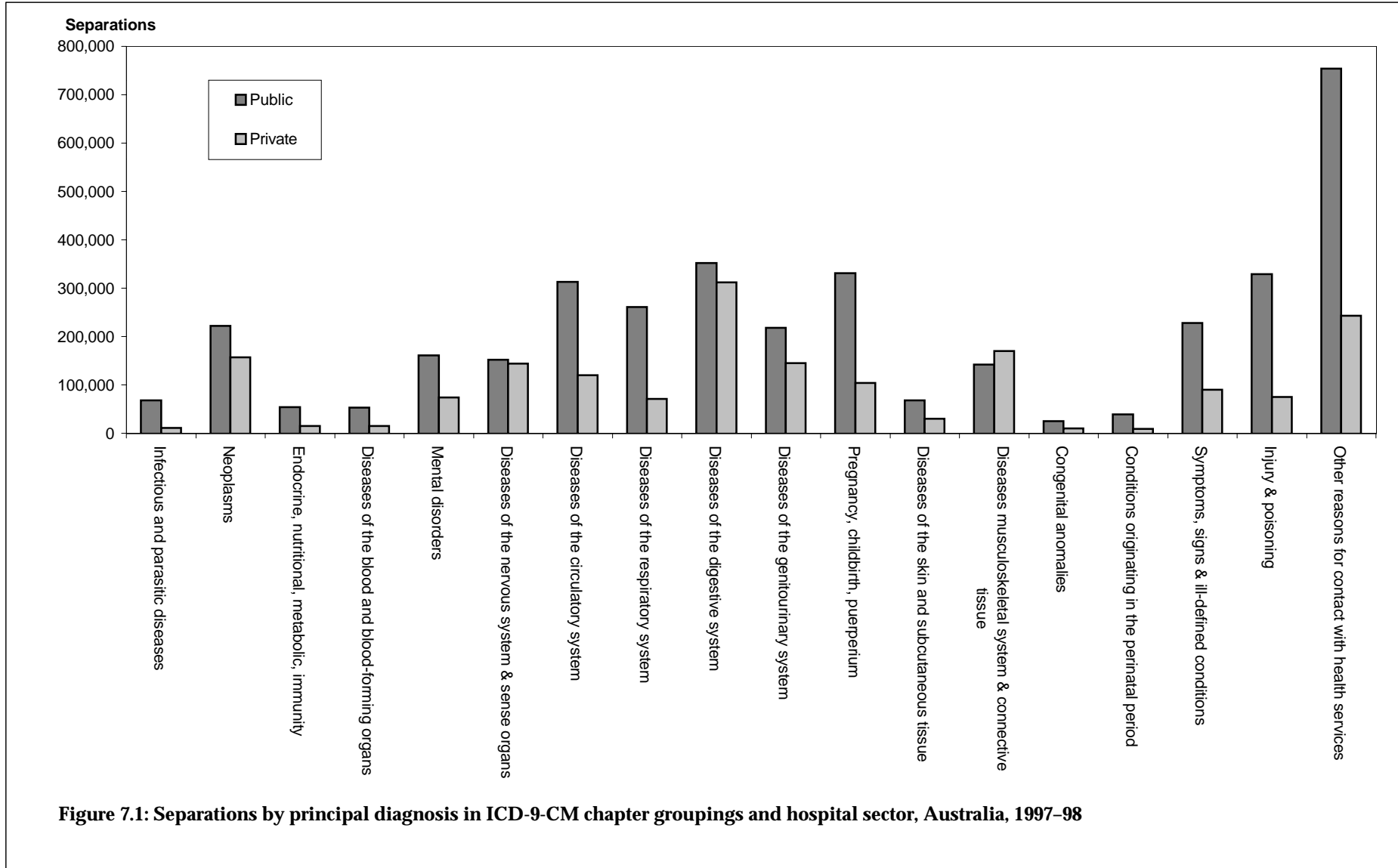
The accompanying tables on the Internet at <http://www.aihw.gov.au/publications/health/ahs97-8.html> provide national summary statistics for public and private hospitals for each 3-character ICD-9-CM disease code (as presented for the top 30 principal diagnosis codes in Tables 7.12 and 7.13). For confidentiality, the statistics for some codes in the private sector have been suppressed. The information was suppressed if there were fewer than 50 private hospital separations reported for the code and there were fewer than three reporting units (hospitals, or States where the hospitals were not individually identified), or there were three reporting units and one contributed more than 85% of the total separations, or two contributed more than 90% of the separations for the code.

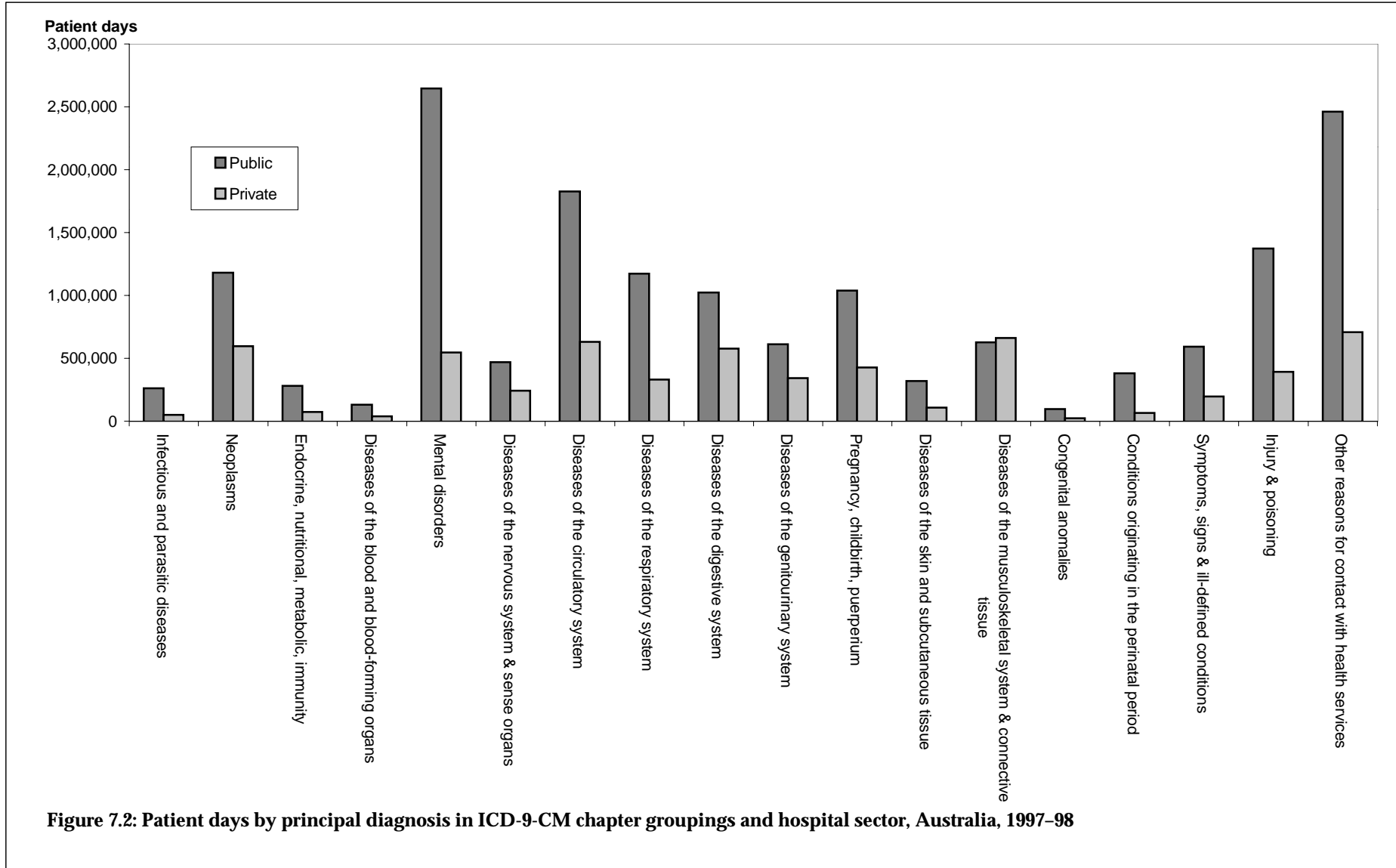
## Public psychiatric hospitals

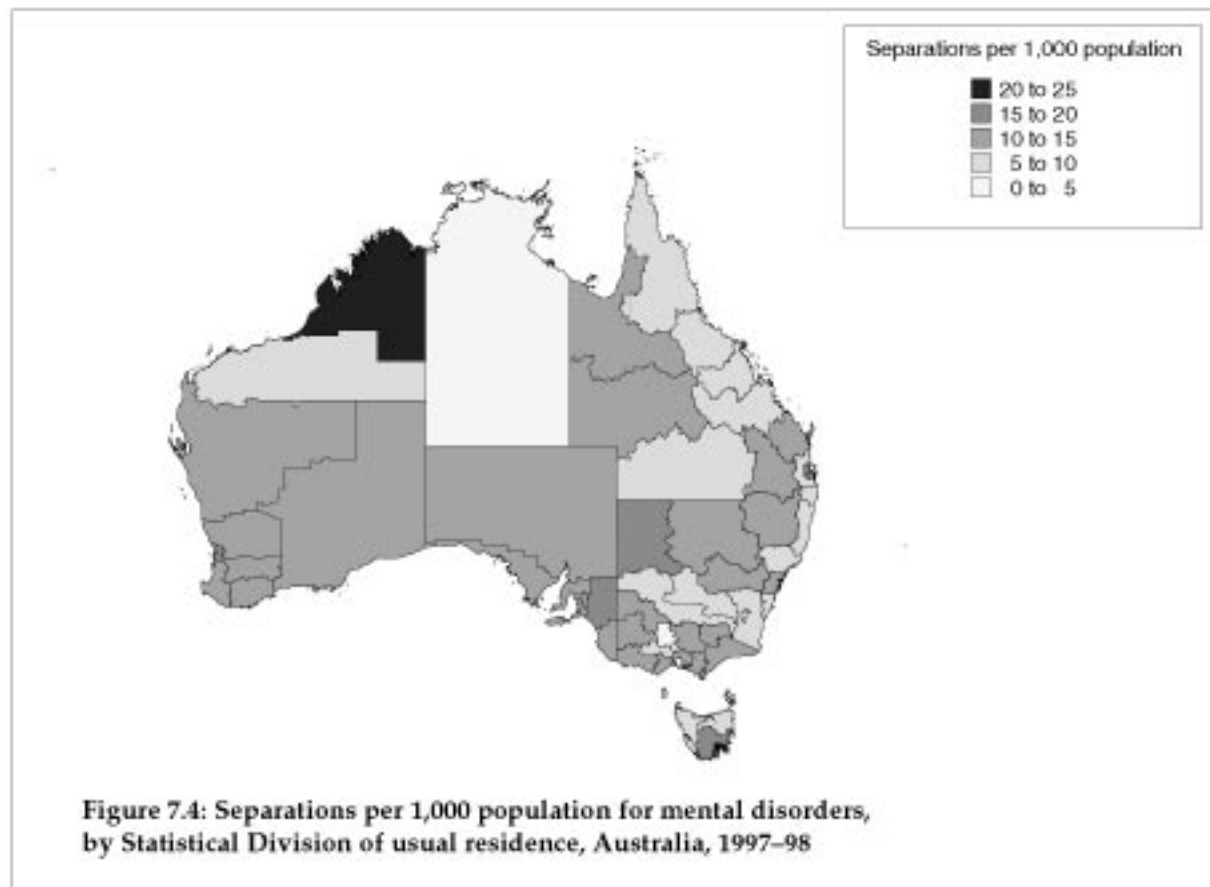
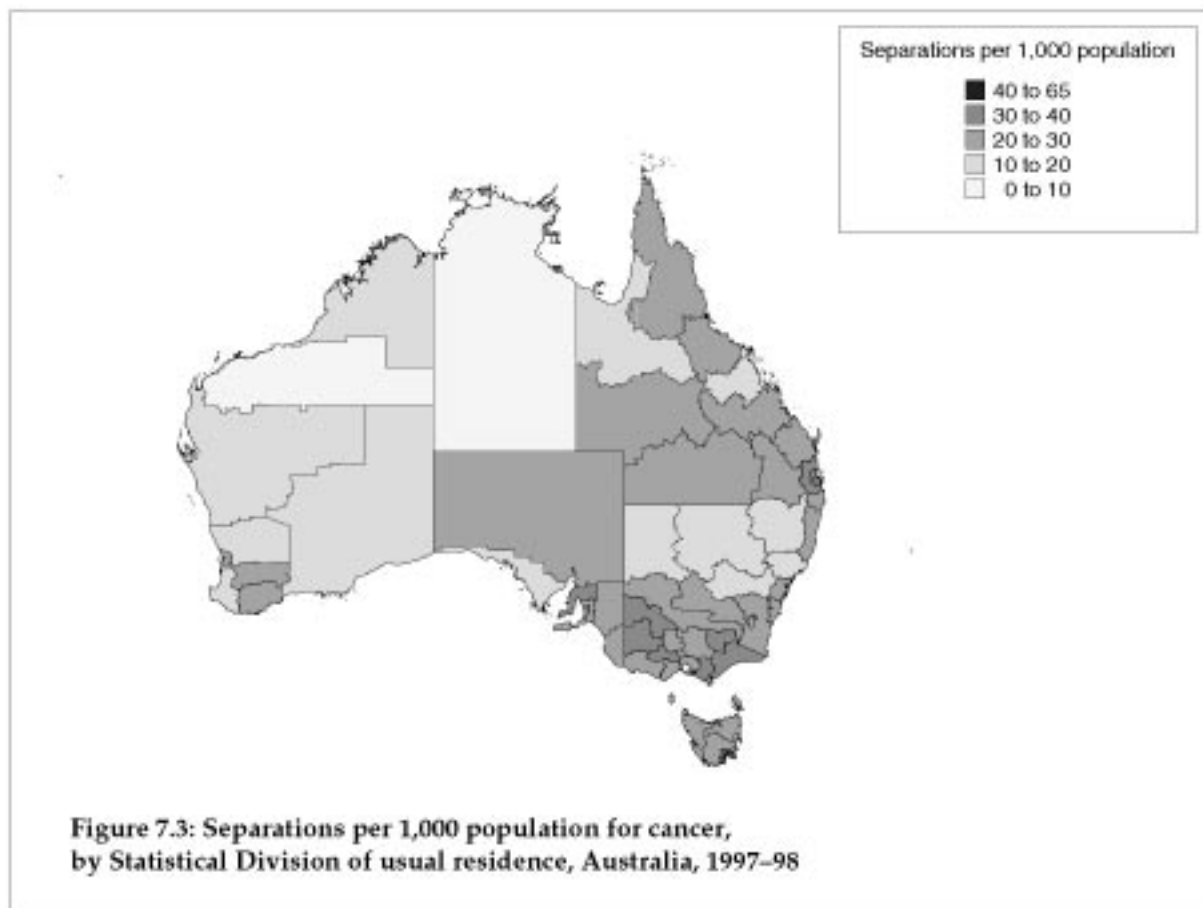
Overall, a diagnosis was included for 96.9% of public psychiatric hospital separations (Table 7.20). Most diagnoses were in the *Mental disorders* chapter (290–319). *Schizophrenic disorders* (295) and *Other non-psychotic mental disorders* (306–310, 312–316) were the most common diagnoses reported and *Schizophrenic disorders* also accounted for the most patient days.

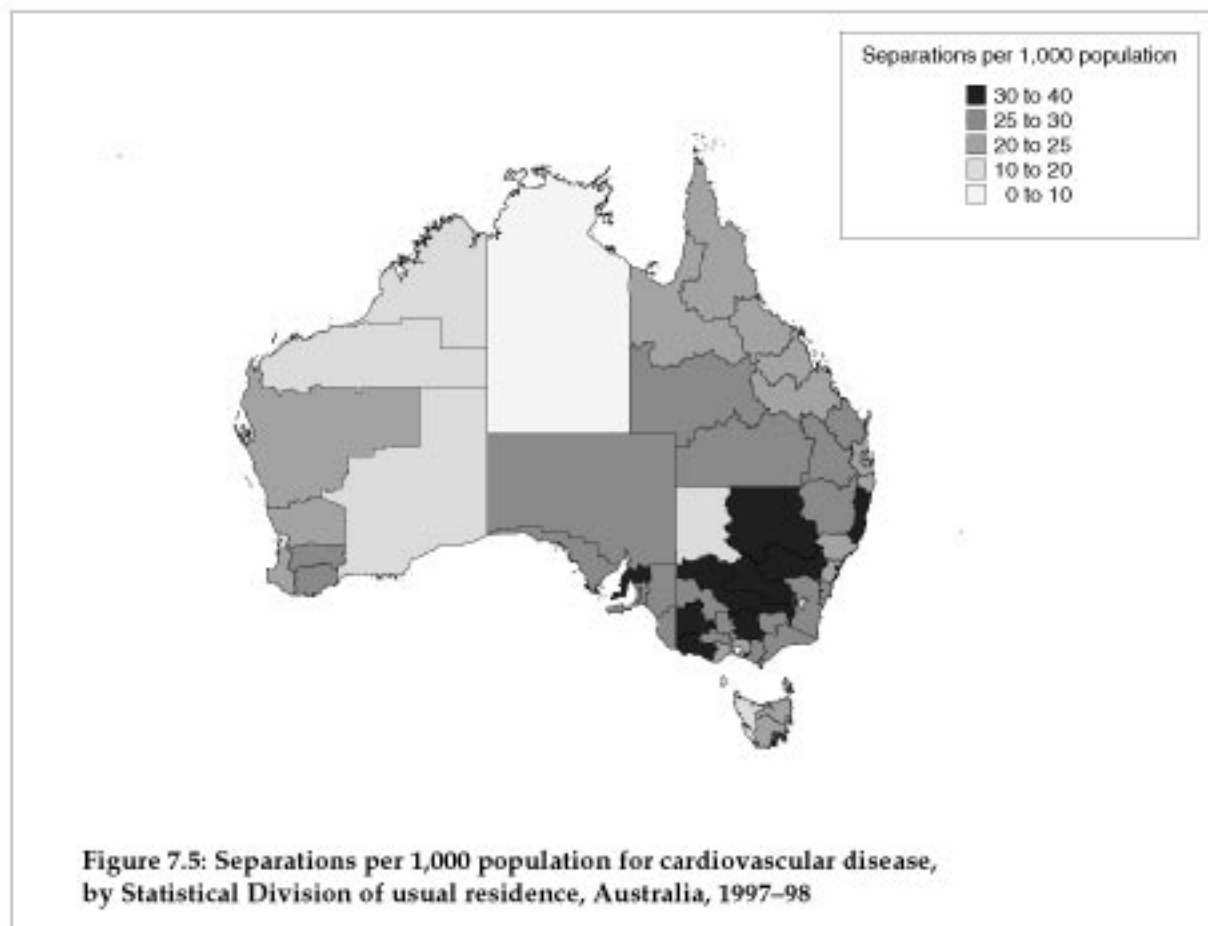
The average length of stay was high for most of the disease groups and only 11% of separations (2,390) were same-day separations, compared with 43% in public acute hospitals. The average length of stay for *Schizophrenic disorders* in public psychiatric hospitals (99 days) was markedly higher than that in public hospitals overall (Table 7.12: 33 days). Similarly, the average length of stay for *Dementia* (290, 294.1, 331.0) (114 days) was longer than in hospitals overall (Table 7.1, 42 days).

Separations in public psychiatric hospitals include some with very long lengths of stay, up to several years. Hence the average lengths of stay should be interpreted taking into consideration the inclusion of some very long stay and non-acute separations.

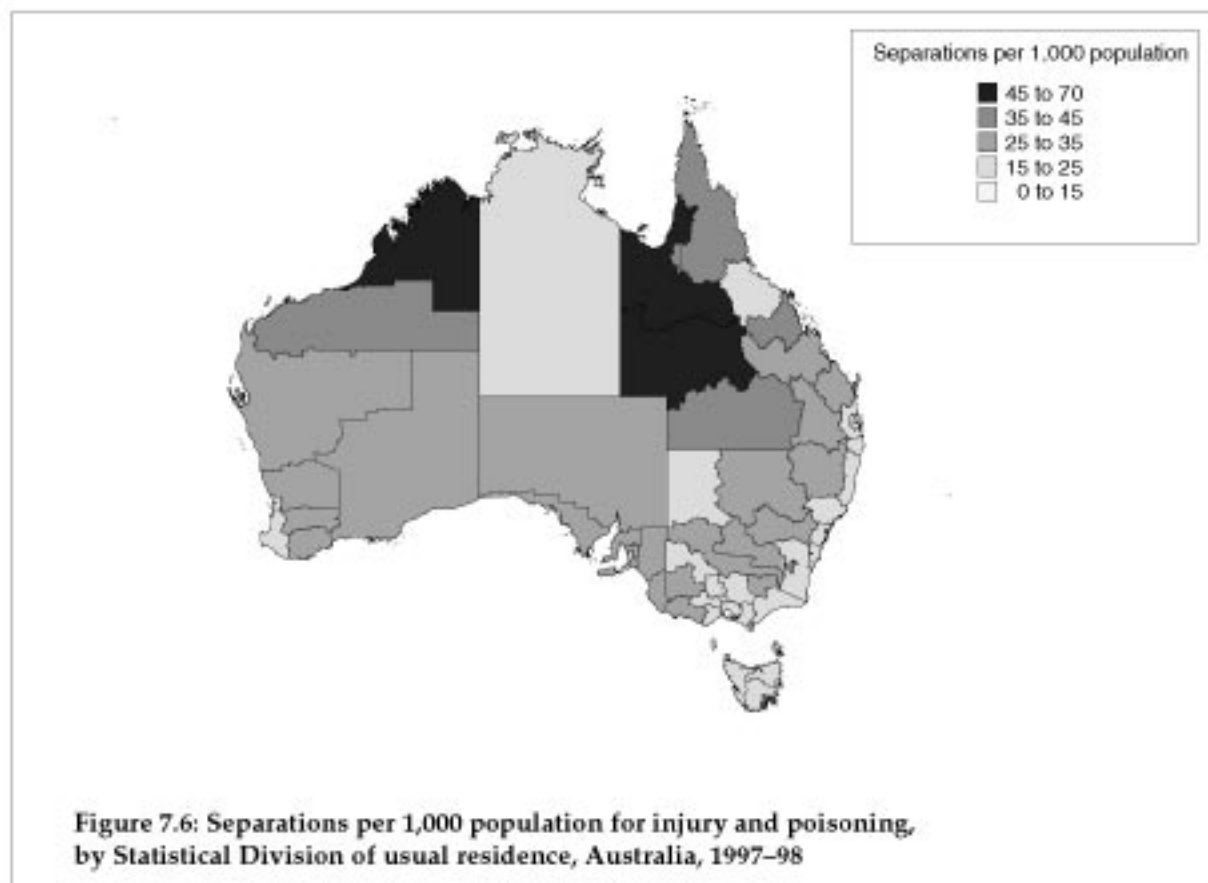








**Figure 7.5: Separations per 1,000 population for cardiovascular disease, by Statistical Division of usual residence, Australia, 1997-98**



**Figure 7.6: Separations per 1,000 population for injury and poisoning, by Statistical Division of usual residence, Australia, 1997-98**

**Table 7.1: Separation, same day separation, patient day and average length of stay statistics for National Health Priority Areas, all hospitals, Australia, 1997-98**

Principal diagnosis or external cause		Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)	ALOS (days) excluding same day
		Cancer							
140	Cancer of the lip	888	576	64.9	<0.1	1,740	0.1	2.0	3.7
141-149	Cancer of the oral cavity and pharynx	4,344	658	15.1	0.2	36,910	2.0	8.5	9.8
150	Cancer of the oesophagus	3,963	1,242	31.3	0.2	29,730	1.6	7.5	10.5
151	Cancer of the stomach	5,041	1,442	28.6	0.3	39,796	2.1	7.9	10.7
152	Cancer of the small intestine	379	66	17.4	<0.1	3,863	0.2	10.2	12.1
153	Cancer of colon	12,464	3,271	26.2	0.7	115,714	6.2	9.3	12.2
154	Cancer of rectum	8,725	2,498	28.6	0.5	78,779	4.2	9.0	12.3
155	Cancer of the liver	1,684	319	18.9	0.1	12,214	0.7	7.3	8.7
156-159	Other cancer of digestive organs and peritoneum	5,224	747	14.3	0.3	49,914	2.7	9.6	11.0
160	Cancer of the nasal cavity	409	126	30.8	<0.1	2,715	0.1	6.6	9.1
161	Cancer of the larynx	1,423	400	28.1	0.1	11,729	0.6	8.2	11.1
162	Cancer of trachea, bronchus and lung	16,890	3,124	18.5	0.9	129,826	7.0	7.7	9.2
163-165	Other cancer of respiratory and intrathoracic organs	1,333	214	16.1	0.1	9,402	0.5	7.1	8.2
170-171, 175	Cancer of bone, connective tissue, male breast	2,804	574	20.5	0.2	16,851	0.9	6.0	7.3
172	Malignant melanoma of skin	6,943	4,228	60.9	0.4	18,871	1.0	2.7	5.4
173	Other cancer of skin	53,225	38,916	73.1	2.9	101,496	5.5	1.9	4.4
174	Cancer of female breast	17,732	3,566	20.1	1.0	88,637	4.8	5.0	6.0
176	Kaposi's sarcoma	124	41	33.1	<0.1	1,322	0.1	10.7	15.4
180	Cancer of cervix uteri	1,994	425	21.3	0.1	11,856	0.6	5.9	7.3
179, 182	Cancer of the uterus	2,811	709	25.2	0.2	16,866	0.9	6.0	7.7
181, 183-184	Other cancer of female genital organs	4,131	458	11.1	0.2	27,441	1.5	6.6	7.3
185	Cancer of prostate	11,682	1,954	16.7	0.6	79,816	4.3	6.8	8.0
186	Cancer of the testis	1,080	153	14.2	0.1	2,850	0.2	2.6	2.9
187	Cancer of the penis, other male genital organs	198	59	29.8	<0.1	941	0.1	4.8	6.3
188	Cancer of the bladder	14,578	6,403	43.9	0.8	47,673	2.6	3.3	5.0
189	Cancer of the kidney, other urinary organs	3,435	384	11.2	0.2	29,520	1.6	8.6	9.5
190	Cancer of the eye	628	300	47.8	<0.1	1,802	0.1	2.9	4.6
191-192	Cancer of the brain, nervous system	4,160	627	15.1	0.2	45,586	2.4	11.0	12.7
193	Cancer of the thyroid	1,917	55	2.9	0.1	7,502	0.4	3.9	4.0
194	Cancer of other endocrine glands	365	75	20.5	<0.1	2,251	0.1	6.2	7.5
195-199	Other unspecified and secondary cancers	38,631	7,087	18.3	2.1	306,004	16.4	7.9	9.5
200-202	Cancer of lymphoid and histiolytic tissue	15,279	5,469	35.8	0.8	83,914	4.5	5.5	8.0
203	Multiple myeloma	7,780	4,923	63.3	0.4	31,525	1.7	4.1	9.3
204-208	Leukaemia	12,108	6,447	53.2	0.7	70,438	3.8	5.8	11.3
V10,V15.3,V16	Personal or family history of malignant neoplasm, radiation	16,112	15,890	98.6	0.9	16,281	0.9	1.0	1.8

(continued)

**Table 7.1 (continued): Separation, same day separation, patient day and average length of stay statistics for National Health Priority Areas, all hospitals, Australia, 1997-98**

Principal diagnosis or external cause		Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)	ALOS (days) excluding same day
		<b>Cancer (continued)</b>							
V580	Radiotherapy	519	416	80.2	<0.1	837	<0.1	1.6	4.1
V581	Chemotherapy	193,857	193,247	99.7	10.4	194,589	10.4	1.0	2.2
V66, V67, V71, V76	Convalescence, follow-up examination etc.	3,067	2,517	82.1	0.2	4,943	0.3	1.6	4.4
<i>Cancer total</i>		<i>477,927</i>	<i>309,606</i>	<i>64.8</i>	<i>25.7</i>	<i>1,732,144</i>	<i>93.0</i>	<i>3.6</i>	<i>8.5</i>
		<b>Diabetes</b>							
250.x1 or 3	Diabetes mellitus type I	11,603	1,651	14.2	0.6	69,780	3.7	6.0	6.8
250.x0 or 2	Diabetes mellitus type II	12,243	2,155	17.6	0.7	96,699	5.2	7.9	9.4
V18.0, V77.1	Family history of or screening for diabetes	11	8	72.7	<0.1	16	<0.1	1.5	2.7
<i>Diabetes total</i>		<i>23,857</i>	<i>3,814</i>	<i>16.0</i>	<i>1.3</i>	<i>166,495</i>	<i>8.9</i>	<i>7.0</i>	<i>8.1</i>
		<b>Mental disorders</b>							
290, 294.1, 331.0	Dementia	7,836	438	5.6	0.4	327,490	17.6	41.8	44.2
291-294	Other organic psychotic conditions	16,572	1,764	10.6	0.9	370,164	19.9	22.3	24.9
295	Schizophrenic disorders	34,552	8,475	24.5	1.9	994,416	53.4	28.8	37.8
296.2-296.3	Major depressive disorder	43,869	23,203	52.9	2.4	387,926	20.8	8.8	17.6
296	Other affective psychoses	16,229	4,658	28.7	0.9	294,553	15.8	18.1	25.1
297	Paranoid states	2,164	687	31.7	0.1	45,231	2.4	20.9	30.2
298-299	Other psychoses	4,555	1,253	27.5	0.2	47,224	2.5	10.4	13.9
300	Neurotic disorders	22,660	11,082	48.9	1.2	113,051	6.1	5.0	8.8
301	Personality disorders	8,247	2,731	33.1	0.4	53,067	2.8	6.4	9.1
302	Sexual deviations and disorders	284	92	32.4	<0.1	1,412	0.1	5.0	6.9
303	Alcohol dependence syndrome	14,211	4,343	30.6	0.8	91,174	4.9	6.4	8.8
304	Drug dependence	6,826	808	11.8	0.4	40,277	2.2	5.9	6.6
305	Non-dependent drug use disorder	6,399	2,709	42.3	0.3	20,482	1.1	3.2	4.8
311	Depressive disorder, nec.	8,987	3,017	33.6	0.5	69,492	3.7	7.7	11.1
306-310, 312-316	Other non-psychotic mental disorders	41,729	20,001	47.9	2.2	291,162	15.6	7.0	12.5
V71.0	Observation for suspected mental condition	253	86	34.0	<0.1	1,023	0.1	4.0	5.6
Other V codes	Other factors influencing health status, services contact	104	36	34.6	<0.1	577	<0.1	5.5	8.0
<i>Mental disorders total</i>		<i>235,477</i>	<i>85,383</i>	<i>36.3</i>	<i>12.6</i>	<i>3,148,721</i>	<i>169.1</i>	<i>13.4</i>	<i>20.4</i>

(continued)



**Table 7.1 (continued): Separation, same day separation, patient day and average length of stay statistics for National Health Priority Areas, all hospitals, Australia, 1997-98**

Principal diagnosis or external cause		Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)	ALOS (days) excluding same day	
										Cardiovascular disease
390-398	Rheumatic heart disease	2,073	421	20.3	0.1	15,637	0.8	7.5	9.2	
401-405	Hypertensive disease	7,725	853	11.0	0.4	39,760	2.1	5.1	5.7	
410	Acute myocardial infarction	33,261	2,985	9.0	1.8	222,415	11.9	6.7	7.2	
414	Chronic ischaemic heart disease	31,318	10,854	34.7	1.7	125,646	6.7	4.0	5.6	
411-413	Other ischaemic heart disease	95,261	13,527	14.2	5.1	400,043	21.5	4.2	4.7	
415-417	Diseases of pulmonary circulation	6,874	399	5.8	0.4	55,601	3.0	8.1	8.5	
420-427	Forms of heart disease, nec.	58,907	13,222	22.4	3.2	254,867	13.7	4.3	5.3	
428	Heart failure	41,754	2,429	5.8	2.2	349,815	18.8	8.4	8.8	
429	Ill-defined heart disease	669	219	32.7	<0.1	5,781	0.3	8.6	12.4	
430-432	Intracranial haemorrhage	7,527	1,112	14.8	0.4	88,463	4.8	11.8	13.6	
435	Transient cerebral ischaemia	11,458	1,168	10.2	0.6	58,549	3.1	5.1	5.6	
436	Acute, ill-defined cerebrovascular disease	9,885	717	7.3	0.5	127,162	6.8	12.9	13.8	
433-434, 437-438	Other cerebrovascular disease	23,141	1,226	5.3	1.2	257,501	13.8	11.1	11.7	
440-448	Diseases of arteries, arterioles and capillaries	31,073	5,348	17.2	1.7	242,619	13.0	7.8	9.2	
454	Varicose veins of lower extremities	21,654	3,279	15.1	1.2	58,478	3.1	2.7	3.0	
455	Haemorrhoids	32,405	21,535	66.5	1.7	53,180	2.9	1.6	2.9	
451-453, 456-459	Other dis. of veins, lymphatics, circulatory system	18,640	3,493	18.7	1.0	104,962	5.6	5.6	6.7	
V codes <sup>1</sup>	Personal/family history, post-surgical states, aftercare	887	226	25.5	<0.1	2,153	0.1	2.4	2.9	
V71.7, V81.0-V81.2	Observation, screening	236	196	83.1	<0.1	266	<0.1	1.1	1.8	
<i>Cardiovascular disease total</i>		<i>434,748</i>	<i>83,209</i>	<i>19.1</i>	<i>23.3</i>	<i>2,462,898</i>	<i>132.3</i>	<i>5.7</i>	<i>6.8</i>	
		Injury or poisoning <sup>(h)</sup>								
E810-E819	Motor vehicle traffic accidents	29,612	7,467	25.2	1.6	162,137	8.7	5.5	7.0	
E826-E829	Other road vehicle accidents	10,363	2,730	26.3	0.6	26,438	1.4	2.6	3.1	
E800-E807, E820-E825, E830-E848	Other transport & vehicle accidents	8,164	1,861	22.8	0.4	30,338	1.6	3.7	4.5	
E850-E858	Accidental poisoning by drugs, medicines, biologicals	11,625	4,123	35.5	0.6	22,259	1.2	1.9	2.4	
E860-E869	Other accidental poisoning	3,144	1,180	37.5	0.2	5,144	0.3	1.6	2.0	
E870-E876	Misadventure during surgical or medical care	498	107	21.5	<0.1	4,387	0.2	8.8	10.9	
E878-E879	Abnormal reaction following surgical or medical care	65,730	11,410	17.4	3.5	418,958	22.5	6.4	7.5	
E880-E884	Accidental fall from one level to another	34,199	8,009	23.4	1.8	146,724	7.9	4.3	5.3	
E885-E886	Accidental fall on same level	39,321	8,336	21.2	2.1	229,954	12.3	5.8	7.2	
E887	Fracture, cause unspecified	8,568	3,665	42.8	0.5	30,094	1.6	3.5	5.4	
E888	Other and unspecified fall	30,842	5,783	18.8	1.7	233,581	12.5	7.6	9.1	
E890-E899, E924.0	Accidents caused by fire and flames, scalds	3,724	805	21.6	0.2	24,885	1.3	6.7	8.2	
E900-E909	Accidents due to natural, environmental factors	10,407	4,169	40.1	0.6	21,028	1.1	2.0	2.7	

(continued)

**Table 7.1 (continued): Separation, same day separation, patient day and average length of stay statistics for National Health Priority Areas, all hospitals, Australia, 1997–98**

		Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)		
								ALOS (days)	excluding same day	
<b>Principal diagnosis or external cause</b>		<b>Injury or poisoning (continued)<sup>(h)</sup></b>								
E910	Accidental drowning and submersion	636	173	27.2	<0.1	1,758	0.1	2.8	3.4	
E911–E915	Other submersion, suffocation, foreign bodies	6,460	3,348	51.8	0.3	9,467	0.5	1.5	2.0	
E916–E928	Other accidents (excluding scalds E924.0)	77,081	27,919	36.2	4.1	178,662	9.6	2.3	3.1	
E929	Late effects of accidental injury	643	202	31.4	<0.1	2,487	0.1	3.9	5.2	
E930–E949	Adverse effects of therapeutic drugs, medicines, biologicals	3,616	699	19.3	0.2	13,831	0.7	3.8	4.5	
E950	Suicide, self-inflicted poisoning by solids, liquids	16,994	4,611	27.1	0.9	40,316	2.2	2.4	2.9	
E951–E959	Suicide, self-inflicted injury by other means	3,137	1,006	32.1	0.2	14,234	0.8	4.5	6.2	
E960–E978	Homicide and injury purposely inflicted by others	18,386	6,859	37.3	1.0	45,249	2.4	2.5	3.3	
E980–E999	Injuries from operations of war and other	729	258	35.4	<0.1	2,053	0.1	2.8	3.8	
	External cause not reported	21,509	5,162	24.0	1.2	119,589	6.4	5.6	7.0	
<i>Injury and poisoning total</i>		<i>405,388</i>	<i>109,882</i>	<i>27.1</i>	<i>21.8</i>	<i>1,783,573</i>	<i>95.8</i>	<i>4.4</i>	<i>5.7</i>	
<b>Total separations for National Health Priority Areas</b>		<b>1,577,397</b>	<b>591,894</b>	<b>37.5</b>	<b>84.7</b>	<b>9,293,831</b>	<b>499.1</b>	<b>5.9</b>	<b>8.8</b>	

(a) V66.1–V66.2, V67.1–V67.2, V71.1 and V76 only.

(b) V12.5, V15.1, V17.1, V17.3, V17.4, V42.1, V42.2, V43.2–V43.4, V45.0, V45.81, V45.82, V53.3 only.

(c) Excludes Dementia in conditions classified elsewhere (294.1).

(d) Excludes Major depressive disorder 296.2–296.3.

(e) V11, V15.4, V17.0, V40, V65.2, V66.3, V67.3, V79.0, V79.1, V79.3, V79.8 and V79.9 only.

(f) Insulin dependent type. Includes diagnoses where the fifth digit is 1 or 3.

(g) Non-insulin dependent type. Includes diagnoses where the fifth digit is 0 or 2.

(h) Separations with principal diagnoses of 800–999, V14, V15.0, V15.5, V15.6, V66.4, V67.4, V82.5 and 799.5 only.

Note: Abbreviations: dis.—diseases, nec.—not elsewhere classified.

**Table 7.2: Separations for National Health Priority Areas, all hospitals, States and Territories, 1997–98**

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT <sup>(a)</sup>	Total
Principal diagnosis or external cause		Cancer								
140	Cancer of the lip	257	246	222	56	61	32	11	3	888
141–149	Cancer of the oral cavity & pharynx	1,371	1,074	974	351	404	91	43	36	4,344
150	Cancer of the oesophagus	1,052	1,329	789	314	327	100	41	11	3,963
151	Cancer of the stomach	1,865	1,431	761	330	468	128	53	5	5,041
152	Cancer of the small intestine	104	100	80	35	36	18	6	0	379
153	Cancer of the colon	4,074	3,553	2,320	925	1,125	274	157	36	12,464
154	Cancer of the rectum	2,985	2,435	1,574	671	721	216	114	9	8,725
155	Cancer of the liver	557	462	320	155	141	27	15	7	1,684
156–159	Other cancer of digestive organs & peritoneum	1,862	1,254	900	437	574	113	78	6	5,224
160	Cancer of the nasal cavity	126	109	106	21	30	6	11	0	409
161	Cancer of the larynx	474	340	323	110	119	26	22	9	1,423
162	Cancer of trachea, bronchus & lung	4,990	4,424	3,571	1,375	1,889	393	171	77	16,890
163–165	Other cancer of respiratory & intrathoracic organs	327	406	242	208	120	12	14	4	1,333
170–171, 175	Cancer of bone, connective tissue, male breast	864	745	559	294	269	26	39	8	2,804
172	Malignant melanoma of the skin	2,405	1,535	1,711	416	609	132	120	15	6,943
173	Other cancer of skin	17,047	10,315	14,805	3,573	5,762	880	785	58	53,225
174	Cancer of the female breast	5,700	4,917	3,230	1,375	1,598	482	376	54	17,732
176	Kaposi's sarcoma	87	20	6	1	3	1	4	2	124
180	Cancer of the cervix uteri	659	519	408	190	139	51	14	14	1,994
179, 182	Cancer of the uterus	887	883	464	205	275	52	26	19	2,811
181, 183–184	Other cancer of female genital organs	1,328	1,261	637	268	460	115	44	18	4,131
185	Cancer of the prostate	3,649	3,565	2,120	753	913	414	260	8	11,682
186	Cancer of the testis	352	267	212	70	114	25	37	3	1,080
187	Cancer of the penis, other male genital organs	76	47	40	12	17		4	2	198
188	Cancer of the bladder	4,919	3,711	2,598	1,279	1,537	345	162	27	14,578
189	Cancer of the kidney, other urinary organs	1,204	834	710	267	292	79	43	6	3,435
190	Cancer of the eye	244	171	104	57	45	4	3	0	628
191–192	Cancer of the brain, nervous system	1,381	1,182	772	325	335	109	56	0	4,160
193	Cancer of the thyroid	879	341	354	141	123	48	20	11	1,917
194	Cancer of other endocrine glands	124	81	100	12	32	14	2	0	365
195–199	Other unspecified & secondary cancers	11,124	12,056	7,744	2,993	3,096	1,122	408	88	38,631
200–202	Cancer of lymphoid & histiocytic tissue	3,782	4,513	3,572	1,183	1,474	454	289	12	15,279
203	Multiple myeloma	1,767	2,043	1,627	700	1,158	213	271	1	7,780
204–208	Leukaemia	3,454	2,927	3,545	804	919	221	230	8	12,108

(continued)

**Table 7.2 (continued): Separations for National Health Priority Areas, all hospitals, States and Territories, 1997–98**

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT <sup>(a)</sup>	Total
<b>Principal diagnosis or external cause</b>		<b>Cancer (continued)</b>								
V10,V15.3,V16	Personal or family history of malignant neoplasm,	6,138	4,732	2,875	1,546	269	320	171	61	16,112
V580	Radiotherapy	171	282	16	16	1	21	12	0	519
V581	Chemotherapy	49,831	59,116	38,071	19,997	17,616	4,817	4,274	135	193,857
V66,V67,V71,V76 <sup>(o)</sup>	Convalescence, follow-up examination etc.	585	1,057	747	102	413	92	59	12	3,067
<i>Cancer total</i>		<i>138,701</i>	<i>134,283</i>	<i>99,209</i>	<i>41,567</i>	<i>43,484</i>	<i>11,473</i>	<i>8,445</i>	<i>765</i>	<i>477,927</i>
		<b>Diabetes</b>								
250.x1 or 3	Diabetes mellitus type I <sup>(g)</sup>	3,422	2,779	2,428	907	1,390	409	157	111	11,603
250.x0 or 2	Diabetes mellitus type II <sup>(h)</sup>	2,963	3,194	2,183	1,411	1,774	368	98	252	12,243
V18.0, V77.1	Family history of or screening for diabetes	1	1	3	0	0	5	1	0	11
<i>Diabetes total</i>		<i>6,386</i>	<i>5,974</i>	<i>4,614</i>	<i>2,318</i>	<i>3,164</i>	<i>782</i>	<i>256</i>	<i>363</i>	<i>23,857</i>
		<b>Mental disorders</b>								
290, 294.1, 331.0	Dementia	2,570	1,898	1,296	968	948	102	41	13	7,836
291–294	Other organic psychotic conditions <sup>(c)</sup>	5,673	4,124	2,994	1,808	1,366	331	115	161	16,572
295	Schizophrenic disorders	11,685	8,622	7,424	2,278	3,161	769	391	222	34,552
296.2–296.3	Major depressive disorder	12,085	12,355	8,139	5,845	3,771	1,336	277	61	43,869
296	Other affective psychoses <sup>(c)</sup>	4,485	4,093	2,710	1,908	2,106	646	223	58	16,229
297	Paranoid states	605	486	374	439	140	93	17	10	2,164
298–299	Other psychoses	1,452	973	878	624	391	130	50	57	4,555
300	Neurotic disorders	7,762	3,989	4,067	4,504	1,423	705	156	54	22,660
301	Personality disorders	2,379	1,997	1,496	1,278	726	239	91	41	8,247
302	Sexual deviations & disorders	142	54	58	19	5	3	1	2	284
303	Alcohol dependence syndrome	5,940	3,111	3,591	690	616	226	15	22	14,211
304	Drug dependence	3,655	1,125	1,224	616	141	48	10	7	6,826
305	Non-dependent drug use disorder	2,404	1,363	1,053	984	396	160	20	19	6,399
311	Depressive disorder, nec.	2,033	2,638	987	1,961	607	701	33	27	8,987
306–310, 312–316	Other non-psychotic mental disorders	16,930	9,013	6,556	4,542	3,107	1,173	208	200	41,729
V71.0	Observation for suspected mental condition	117	26	54	45	2	5	0	4	253
Other V codes <sup>(j)</sup>	Other factors influencing health status, services contact	34	12	32	5	11	8	0	2	104
<i>Mental disorders total</i>		<i>79,951</i>	<i>55,879</i>	<i>42,933</i>	<i>28,514</i>	<i>18,917</i>	<i>6,675</i>	<i>1,648</i>	<i>960</i>	<i>235,477</i>

(continued)

**Table 7.2 (continued): Separations for National Health Priority Areas, all hospitals, States and Territories, 1997–98**

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT <sup>(a)</sup>	Total
<b>Principal diagnosis or external cause</b>		<b>Cardiovascular disease</b>								
390–398	Rheumatic heart disease	596	446	542	178	133	40	32	106	2,073
401–405	Hypertensive disease	2,636	1,686	1,757	730	658	143	64	51	7,725
410	Acute myocardial infarction	11,483	8,213	6,435	2,766	2,968	781	415	200	33,261
414	Chronic ischaemic heart disease	14,261	5,405	4,341	1,724	4,619	624	328	16	31,318
411–413	Other ischaemic heart disease	32,135	25,917	19,260	7,768	6,371	2,333	1141	336	95,261
415–417	Diseases of pulmonary circulation	2,898	1,398	1,218	492	527	158	148	35	6,874
420–427	Forms of heart disease, nec.	21,120	13,774	11,776	4,617	5,077	1,541	741	261	58,907
428	Heart failure	13,801	11,403	7,165	3,710	4,167	915	346	247	41,754
429	Ill-defined heart disease	199	180	160	54	40	18	13	5	669
430–432	Intracranial haemorrhage	2,577	2,007	1,336	610	635	205	98	59	7,527
435	Transient cerebral ischaemia	4,049	2,735	2,289	811	1,203	248	90	33	11,458
436	Acute, ill-defined cerebrovascular disease	3,646	2,404	1,654	757	1,089	230	63	42	9,885
433–434, 437–438	Other cerebrovascular disease	7,329	6,654	4,065	1,962	2,192	596	264	79	23,141
440–448	Diseases of arteries, arterioles & capillaries	9,211	8,372	5,622	2,883	3,667	694	538	86	31,073
454	Varicose veins of lower extremities	6,654	6,283	3,692	1,746	2,202	686	319	72	21,654
455	Haemorrhoids	13,131	7,194	5,151	3,115	2,568	675	441	130	32,405
451–453, 456–459	Other dis. of veins, lymphatics, circulatory system	6,203	5,100	3,599	1,300	1,696	456	185	101	18,640
V codes <sup>(v)</sup>	Personal/family history, post-surgical states, aftercare	313	276	151	74	45	13	13	2	887
V71.7, V81.0–V81.2	Observation, screening	44	122	22	11	28	2	6	1	236
<i>Cardiovascular disease total</i>		<i>152,286</i>	<i>109,569</i>	<i>80,235</i>	<i>35,308</i>	<i>39,885</i>	<i>10,358</i>	<i>5,245</i>	<i>1,862</i>	<i>434,748</i>
		<b>Injury or poisoning<sup>(i)</sup></b>								
E810–E819	Motor vehicle traffic accidents	10,473	7,234	4,418	3,149	2,765	773	337	463	29,612
E826–E829	Other road vehicle accidents	3,328	2,219	2,566	1,002	723	236	159	130	10,363
E800–E807, E820–E825, E830–E848	Other transport & vehicle accidents	3,214	1,469	1,615	973	502	204	96	91	8,164
E850–E858	Accidental poisoning by drugs, medicines, biologicals	3,745	2,492	2,948	823	1,143	315	69	90	11,625
E860–E869	Other accidental poisoning	782	651	894	337	326	108	15	31	3,144
E870–E876	Misadventure during surgical or medical care	211	106	71	36	57	10	5	2	498
E878–E879	Abnormal reaction following surgical or medical care	20,729	18,213	10,120	7,220	6,223	1,798	984	443	65,730
E880–E884	Accidental fall from one level to another	12,634	7,536	6,571	3,074	2,681	850	454	399	34,199
E885–E886	Accidental fall on same level	14,904	8,940	7,108	3,331	3,431	1,069	288	250	39,321
E887	Fracture, cause unspecified	2,970	2,412	1,305	777	715	152	210	27	8,568
E888	Other & unspecified fall	10,123	8,423	5,319	3,110	2,947	496	278	146	30,842
E890–E899, E924.0	Accidents caused by fire & flames, scalds	1,315	685	507	644	384	84	24	81	3,724
E900–E909	Accidents due to natural, environmental factors	2,761	1,496	3,594	1,217	850	195	76	218	10,407
E910	Accidental drowning & submersion	260	66	193	54	33	7	6	17	636

(continued)

**Table 7.2 (continued): Separations for National Health Priority Areas, all hospitals, States and Territories, 1997–98**

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT <sup>(a)</sup>	Total
<b>Principal diagnosis or external cause</b>		<b>Injury or poisoning (continued)<sup>(i)</sup></b>								
E911–E915	Other submersion, suffocation, foreign bodies	1,962	1,360	1,739	587	519	135	76	82	6,460
E916–E928	Other accidents (excluding scalds E924.0)	23,513	17,566	17,145	8,139	7,486	1,869	673	690	77,081
E929	Late effects of accidental injury	312	124	80	40	59	18	4	6	643
E930–E949	Adverse effects of therapeutic drugs, medicines, biologicals	1,082	886	733	357	376	93	64	25	3,616
E950	Suicide, self-inflicted poisoning by solids, liquids	5,813	4,757	2,516	1,825	1,273	403	282	125	16,994
E951–E959	Suicide, self-inflicted injury by other means	1,026	646	682	349	259	87	38	50	3,137
E960–E978	Homicide & injury purposely inflicted by others	6,037	3,015	3,811	2,689	1,447	320	108	959	18,386
E980–E999	Injuries from operations of war & other	133	185	162	130	60	31	13	15	729
	External cause not reported	3,380	370	15,503	284	1,535	87	319	31	21,509
<i>Injury and poisoning total</i>		<i>130,707</i>	<i>90,851</i>	<i>89,600</i>	<i>40,147</i>	<i>35,794</i>	<i>9,340</i>	<i>4,578</i>	<i>4,371</i>	<i>405,388</i>
<b>Total separations for National Health Priority Areas</b>		<b>508,031</b>	<b>396,556</b>	<b>316,591</b>	<b>147,854</b>	<b>141,244</b>	<b>38,628</b>	<b>20,172</b>	<b>8,321</b>	<b>1,577,397</b>

(a) Public hospitals only.

(b) V66.1–V66.2, V67.1–V67.2, V71.1 and V76 only.

(c) V12.5, V15.1, V17.1, V17.3, V17.4, V42.1, V42.2, V43.2–V43.4, V45.0, V45.81, V45.82, V53.3 only.

(d) Excludes dementia in conditions classified elsewhere (294.1).

(e) Excludes major depressive disorder 296.2–296.3.

(f) V11, V15.4, V17.0, V40, V65.2, V66.3, V67.3, V79.0, V79.1, V79.3, V79.8 and V79.9 only.

(g) Insulin dependent type. Includes diagnoses where the fifth digit is 1 or 3.

(h) Non-insulin dependent type. Includes diagnoses where the fifth digit is 0 or 2.

(i) Separations with principal diagnoses of 800-999, V14, V15.0, V15.5, V15.6, V66.4, V67.4, V82.5 and 799.5 only.

Note: Main abbreviations: dis.— diseases, nec.—not elsewhere classified.

**Table 7.3: Separation, same day separation, patient day and average length of stay statistics by principal diagnosis in ICD-9-CM groupings, public hospitals, Australia, 1997–98**

Principal diagnosis		Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)	ALOS (days) excluding same day
001–009	Intestinal infectious diseases	25,546	3,836	15.0	1.4	59,994	3.2	2.3	2.6
010–018	Tuberculosis	752	104	13.8	<0.1	10,710	0.6	14.2	16.4
020–041	Other bacterial diseases	11,049	1,172	10.6	0.6	90,023	4.8	8.1	9.0
042	Human immunodeficiency virus infection	204	110	53.9	<0.1	1,237	0.1	6.1	12.0
045–079	Viral & chlamydial diseases	25,260	7,618	30.2	1.4	69,355	3.7	2.7	3.5
080–139	Other & late effects of infectious & parasitic diseases	5,032	1,665	33.1	0.3	32,092	1.7	6.4	9.0
140–149	Mal. neoplasm—lip, oral cavity & pharynx	4,105	869	21.2	0.2	32,453	1.7	7.9	9.8
150–159	Mal. neoplasm—digestive organs & peritoneum	23,242	4,839	20.8	1.2	220,142	11.8	9.5	11.7
160–165	Mal. neoplasm—respiratory & intrathoracic organs	15,308	3,033	19.8	0.8	116,617	6.3	7.6	9.3
170–176	Mal. neoplasm—bone, conn. tissue, skin & breast	39,220	21,056	53.7	2.1	125,250	6.7	3.2	5.7
179–189	Mal. neoplasm—genitourinary organs	23,110	5,612	24.3	1.2	135,607	7.3	5.9	7.4
190–199	Mal. neoplasm—other & unspecified sites	32,963	6,019	18.3	1.8	260,938	14.0	7.9	9.5
200–208	Mal. neoplasm—lymphatic & haematopoietic tissue	25,921	12,542	48.4	1.4	145,055	7.8	5.6	9.9
210–229	Benign neoplasm	41,999	25,082	59.7	2.3	106,938	5.7	2.5	4.8
230–234	Carcinoma in situ	9,674	7,010	72.5	0.5	17,961	1.0	1.9	4.1
235–239	Other neoplasms	5,996	3,420	57.0	0.3	20,892	1.1	3.5	6.8
240–259	Diseases of thyroid and other endocrine glands	27,683	5,140	18.6	1.5	163,099	8.8	5.9	7.0
260–279	Nutritional def. & other metabolic, immunity disorders	26,209	12,432	47.4	1.4	117,676	6.3	4.5	7.6
280–289	Diseases of the blood & blood forming organs	53,060	31,474	59.3	2.8	129,169	6.9	2.4	4.5
290–319	Mental disorders	160,647	40,094	25.0	8.6	2,647,256	142.1	16.5	21.6
320–359	Diseases & disorders of the nervous system	58,259	23,599	40.5	3.1	324,873	17.4	5.6	8.7
360–379	Disorders of eye & adnexa	58,844	38,847	66.0	3.2	88,834	4.8	1.5	2.5
380–389	Diseases of ear & mastoid process	34,960	20,464	58.5	1.9	56,647	3.0	1.6	2.5
390–398	Rheumatic fever & rheumatic heart disease	1,585	286	18.0	0.1	12,162	0.7	7.7	9.1
401–405	Hypertensive disease	5,930	717	12.1	0.3	27,736	1.5	4.7	5.2
410–414	Ischaemic heart disease	120,063	20,341	16.9	6.4	557,994	30.0	4.6	5.4
415–417	Diseases of pulmonary circulation	5,501	359	6.5	0.3	43,746	2.3	8.0	8.4
420–429	Other forms of heart disease	78,760	12,910	16.4	4.2	458,598	24.6	5.8	6.8
430–438	Cerebrovascular disease	41,172	3,808	9.2	2.2	424,942	22.8	10.3	11.3
440–459	Other diseases of the circulatory system	60,271	16,772	27.8	3.2	303,246	16.3	5.0	6.6
460–466	Acute respiratory infections	45,763	7,951	17.4	2.5	111,833	6.0	2.4	2.7
470–478	Other diseases of upper respiratory tract	39,837	6,350	15.9	2.1	58,917	3.2	1.5	1.6
480–487	Pneumonia and influenza	56,640	2,986	5.3	3.0	368,590	19.8	6.5	6.8

(continued)

**Table 7.3 (continued): Separation, same day separation, patient day and average length of stay statistics by principal diagnosis in ICD-9-CM groupings, public hospitals, Australia, 1997-98**

Principal diagnosis		Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)	ALOS (days) excluding same day
490-496	Chronic obstructive pulmonary disease & allied	87,827	9,675	11.0	4.7	436,498	23.4	5.0	5.5
500-519	Other diseases of the respiratory system	30,528	4,328	14.2	1.6	197,370	10.6	6.5	7.4
520-529	Diseases of the oral cavity, salivary glands & jaws	33,262	26,827	80.7	1.8	46,008	2.5	1.4	3.0
530-537	Diseases of oesophagus, stomach & duodenum	90,362	66,364	73.4	4.9	180,171	9.7	2.0	4.7
540-543	Appendicitis	18,704	767	4.1	1.0	63,462	3.4	3.4	3.5
550-553	Hernia of abdominal cavity	39,008	12,586	32.3	2.1	88,301	4.7	2.3	2.9
555-558	Noninfectious enteritis & colitis	21,453	8,080	37.7	1.2	75,227	4.0	3.5	5.0
560-569	Other diseases of intestines, peritoneum	71,180	31,468	44.2	3.8	251,016	13.5	3.5	5.5
570-579	Other diseases of digestive system	77,983	17,886	22.9	4.2	319,705	17.2	4.1	5.0
580-599	Diseases of the urinary system	79,120	24,890	31.5	4.2	313,021	16.8	4.0	5.3
600-608	Diseases of male genital organs	26,258	9,616	36.6	1.4	74,295	4.0	2.8	3.9
610-611	Disorders of the breast	8,554	5,412	63.3	0.5	13,133	0.7	1.5	2.5
614-629	Dis. & disorders of female pelvic organs & genital tract	104,203	65,187	62.6	5.6	212,150	11.4	2.0	3.8
630-639	Pregnancy with abortive outcome	47,280	30,844	65.2	2.5	57,731	3.1	1.2	1.6
640-648	Complications mainly related to pregnancy	114,491	30,688	26.8	6.1	345,995	18.6	3.0	3.8
650-669	Other indications re. pregnancy, labour & delivery	162,395	9,963	6.1	8.7	614,551	33.0	3.8	4.0
670-677	Complications of the puerperium	6,458	1,246	19.3	0.3	21,065	1.1	3.3	3.8
680-709	Diseases of the skin & subcutaneous tissue	68,104	24,923	36.6	3.7	319,765	17.2	4.7	6.8
710-739	Diseases of the musculoskeletal system & conn. tissue	142,081	53,052	37.3	7.6	628,340	33.7	4.4	6.5
740-759	Congenital anomalies	25,067	10,658	42.5	1.3	96,161	5.2	3.8	5.9
760-779	Certain conditions originating in perinatal period	39,033	3,455	8.9	2.1	378,955	20.3	9.7	10.6
780-799	Symptoms, signs & ill-defined conditions	228,293	83,292	36.5	12.3	593,884	31.9	2.6	3.5
800-848	Fractures, dislocations, sprains & strains	125,435	28,401	22.6	6.7	665,025	35.7	5.3	6.6
850-904	Open wounds, intracranial, internal, blood vessel injury	72,609	26,947	37.1	3.9	187,748	10.1	2.6	3.5
905-959	Late effects, burns, superficial & other injuries	38,886	13,370	34.4	2.1	126,576	6.8	3.3	4.4
960-989	Poisoning, toxic effects	36,275	12,054	33.2	1.9	74,432	4.0	2.1	2.6
990-995	Other & unspecified effects of external causes	7,345	2,993	40.7	0.4	16,824	0.9	2.3	3.2
996-999	Complications of surgical & medical care nec.	48,102	8,693	18.1	2.6	302,068	16.2	6.3	7.4
V01-V19	Contact re. communicable dis., personal, family history	10,818	10,453	96.6	0.6	11,402	0.6	1.1	2.6
V20-V39	Contact re. reproduction; liveborn infants	41,601	25,464	61.2	2.2	76,985	4.1	1.9	3.2
V40-V59	Contact re. condition, specific procedures or aftercare	638,528	579,201	90.7	34.3	1,693,142	90.9	2.7	18.8
V60-V82	Contact for other reasons	63,239	37,242	58.9	3.4	681,321	36.6	10.8	24.8
	Not reported	1,051	187	17.8	0.1	57,520	3.1	54.7	66.4
<b>Total</b>		<b>3,770,098</b>	<b>1,624,729</b>	<b>43.1</b>	<b>202.4</b>	<b>16,560,429</b>	<b>889.2</b>	<b>4.4</b>	<b>7.0</b>

Note: Abbreviations: ALOS—average length of stay, mal.—malignant, dis.—diseases, def.—deficiency, nec.—not elsewhere classified, conn.—connective, re.—related to.



**Table 7.4: Separation, same day separation, patient day and average length of stay statistics by principal diagnosis in ICD-9-CM groupings, private hospitals, Australia, 1997–98**

Principal diagnosis		Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)	ALOS (days) excluding same day
001–009	Intestinal infectious diseases	2,945	284	9.6	0.2	8,960	0.5	3.0	3.3
010–018	Tuberculosis	66	24	36.4	<0.1	597	<0.1	9.0	13.6
020–041	Other bacterial diseases	2,156	452	21.0	0.1	17,144	0.9	8.0	9.8
042	Human immunodeficiency virus infection	11	1	9.1	<0.1	83	<0.1	7.5	8.2
045–079	Viral & chlamydial diseases	4,774	1,624	34.0	0.3	16,881	0.9	3.5	4.8
080–139	Other & late effects of infectious & parasitic diseases	1,361	812	59.7	0.1	4,922	0.3	3.6	7.5
140–149	Mal. neoplasm—lip, oral cavity & pharynx	1,127	365	32.4	0.1	6,197	0.3	5.5	7.7
150–159	Mal. neoplasm—digestive organs & peritoneum	14,238	4,746	33.3	0.8	109,868	6.0	7.7	11.1
160–165	Mal. neoplasm—respiratory & intrathoracic organs	4,747	831	17.5	0.3	37,055	2.0	7.8	9.3
170–176	Mal. neoplasm—bone, conn. tissue, skin & breast	41,608	26,269	63.1	2.3	101,927	5.5	2.4	4.9
179–189	Mal. neoplasm—genitourinary organs	16,799	4,933	29.4	0.9	81,356	4.4	4.8	6.4
190–199	Mal. neoplasm—other & unspecified sites	12,738	2,125	16.7	0.7	102,207	5.5	8.0	9.4
200–208	Mal. neoplasm—lymphatic & haematopoietic tissue	9,246	4,297	46.5	0.5	40,822	2.2	4.4	7.4
210–229	Benign neoplasm	45,910	32,650	71.1	2.5	92,847	5.0	2.0	4.5
230–234	Carcinoma in situ	6,085	4,113	67.6	0.3	12,083	0.7	2.0	4.0
235–239	Other neoplasms	4,034	2,534	62.8	0.2	11,237	0.6	2.8	5.8
240–259	Diseases of thyroid and other endocrine glands	6,732	836	12.4	0.4	44,851	2.4	6.7	7.5
260–279	Nutritional def. & other metabolic, immunity disorders	7,981	3,082	38.6	0.4	29,097	1.6	3.6	5.3
280–289	Diseases of the blood & blood forming organs	14,612	7,784	53.3	0.8	37,633	2.0	2.6	4.4
290–319	Mental disorders	74,306	45,190	60.8	4.0	544,690	29.5	7.3	17.2
320–359	Diseases & disorders of the nervous system	25,077	12,567	50.1	1.4	99,830	5.4	4.0	7.0
360–379	Disorders of eye & adnexa	94,004	65,628	69.8	5.1	109,245	5.9	1.2	1.5
380–389	Diseases of ear & mastoid process	24,492	18,097	73.9	1.3	32,108	1.7	1.3	2.2
390–398	Rheumatic fever & rheumatic heart disease	487	135	27.7	<0.1	3,474	0.2	7.1	9.5
401–405	Hypertensive disease	1,795	136	7.6	0.1	12,024	0.7	6.7	7.2
410–414	Ischaemic heart disease	39,776	7,025	17.7	2.2	190,097	10.3	4.8	5.6
415–417	Diseases of pulmonary circulation	1,369	40	2.9	0.1	11,844	0.6	8.7	8.9
420–429	Other forms of heart disease	22,539	2,959	13.1	1.2	151,753	8.2	6.7	7.6
430–438	Cerebrovascular disease	10,839	415	3.8	0.6	106,733	5.8	9.8	10.2
440–459	Other diseases of the circulatory system	43,495	16,883	38.8	2.4	155,967	8.5	3.6	5.2
460–466	Acute respiratory infections	5,119	431	8.4	0.3	22,338	1.2	4.4	4.7
470–478	Other diseases of upper respiratory tract	33,960	5,625	16.6	1.8	45,238	2.5	1.3	1.4
480–487	Pneumonia and influenza	11,043	219	2.0	0.6	94,671	5.1	8.6	8.7

(continued)

**Table 7.4 (continued): Separation, same day separation, patient day and average length of stay statistics by principal diagnosis in ICD-9-CM groupings, private hospitals, Australia, 1997–98**

Principal diagnosis		Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)	ALOS (days) excluding same day
490–496	Chronic obstructive pulmonary disease & allied	14,272	697	4.9	0.8	117,967	6.4	8.3	8.6
500–519	Other diseases of the respiratory system	6,505	658	10.1	0.4	49,629	2.7	7.6	8.4
520–529	Diseases of the oral cavity, salivary glands & jaws	57,428	44,875	78.1	3.1	63,341	3.4	1.1	1.5
530–537	Diseases of oesophagus, stomach & duodenum	97,502	90,467	92.8	5.3	125,752	6.8	1.3	5.0
540–543	Appendicitis	4,866	91	1.9	0.3	16,716	0.9	3.4	3.5
550–553	Hernia of abdominal cavity	35,186	11,070	31.5	1.9	78,140	4.2	2.2	2.8
555–558	Noninfectious enteritis & colitis	12,067	8,350	69.2	0.7	31,151	1.7	2.6	6.1
560–569	Other diseases of intestines, peritoneum	73,607	55,538	75.5	4.0	155,524	8.4	2.1	5.5
570–579	Other diseases of digestive system	30,933	8,796	28.4	1.7	105,115	5.7	3.4	4.4
580–599	Diseases of the urinary system	36,608	17,559	48.0	2.0	103,802	5.6	2.8	4.5
600–608	Diseases of male genital organs	18,908	7,386	39.1	1.0	51,642	2.8	2.7	3.8
610–611	Disorders of the breast	8,709	4,526	52.0	0.5	13,942	0.8	1.6	2.3
614–629	Dis. & disorders of female pelvic organs & genital tract	80,980	55,066	68.0	4.4	171,138	9.3	2.1	4.5
630–639	Pregnancy with abortive outcome	28,733	25,978	90.4	1.6	30,323	1.6	1.1	1.6
640–648	Complications mainly related to pregnancy	21,098	3,718	17.6	1.1	95,798	5.2	4.5	5.3
650–669	Other indications re. pregnancy, labour & delivery	50,983	1,255	2.5	2.8	292,207	15.9	5.7	5.9
670–676	Complications of the puerperium	2,696	709	26.3	0.1	10,282	0.6	3.8	4.8
680–709	Diseases of the skin & subcutaneous tissue	29,874	17,194	57.6	1.6	107,438	5.8	3.6	7.1
710–739	Diseases of the musculoskeletal system & conn. tissue	170,302	63,294	37.2	9.2	662,923	36.0	3.9	5.6
740–759	Congenital anomalies	9,546	4,660	48.8	0.5	21,451	1.2	2.2	3.4
760–779	Certain conditions originating in perinatal period	9,066	548	6.0	0.5	66,046	3.6	7.3	7.7
780–799	Symptoms, signs & ill-defined conditions	89,795	44,338	49.4	4.9	195,062	10.6	2.2	3.3
800–848	Fractures, dislocations, sprains & strains	36,213	8,477	23.4	2.0	189,274	10.3	5.2	6.5
850–904	Open wounds, intracranial, internal, blood vessel injury	9,328	3,131	33.6	0.5	30,173	1.6	3.2	4.4
905–959	Late effects, burns, superficial & other injuries	6,372	1,956	30.7	0.3	26,288	1.4	4.1	5.5
960–989	Poisoning, toxic effects	1,675	209	12.5	0.1	6,100	0.3	3.6	4.0
990–995	Other & unspecified effects of external causes	617	83	13.5	<0.1	2,626	0.1	4.3	4.8
996–999	Complications of surgical & medical care nec.	20,529	3,041	14.8	1.1	138,342	7.5	6.7	7.7
V01–V19	Contact re. communicable dis., personal, family history	12,063	11,906	98.7	0.7	12,208	0.7	1.0	1.9
V20–V39	Contact re. reproduction; liveborn infants	23,259	15,275	65.7	1.3	51,352	2.8	2.2	4.5
V40–V59	Contact re. condition, specific procedures or aftercare	170,966	138,862	81.2	9.3	522,828	28.4	3.1	12.0
V60–V82	Contact for other reasons	36,313	29,820	82.1	2.0	120,492	6.5	3.3	14.0
	Not reported	506	278	54.9	<0.1	4,076	0.2	8.1	16.7
<b>Total</b>		<b>1,792,976</b>	<b>952,923</b>	<b>53.1</b>	<b>97.3</b>	<b>6,004,927</b>	<b>325.7</b>	<b>3.3</b>	<b>6.0</b>

Note: Abbreviations: ALOS—average length of stay, mal.—malignant, dis.—diseases, def.—deficiency, nec.—not elsewhere classified, conn.—connective, re.—related to.

**Table 7.5: Separations by principal diagnosis in ICD-9-CM groupings, public hospitals, States and Territories, 1997-98**

Principal diagnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
001-009 Intestinal infectious diseases	10,314	3,901	4,827	2,533	2,485	299	464	723	25,546
010-018 Tuberculosis	277	226	96	37	72	6	9	29	752
020-041 Other bacterial diseases	3,929	2,757	1,772	1,019	969	222	112	269	11,049
042 Human immunodeficiency virus infection	42	22	10	7	121	1	1	0	204
045-079 Viral & chlamydial diseases	9,689	4,950	4,556	2,669	2,444	415	302	235	25,260
080-139 Other & late effects of infectious & parasitic diseases	1,375	1,071	1,145	638	445	109	62	187	5,032
140-149 Mal. neoplasm—lip, oral cavity & pharynx	1,358	1,040	879	285	370	90	44	39	4,105
150-159 Mal. neoplasm—digestive organs & peritoneum	8,932	5,935	3,493	1,704	2,211	520	373	74	23,242
160-165 Mal. neoplasm—respiratory & intrathoracic organs	5,141	3,776	2,949	1,129	1,717	331	175	90	15,308
170-176 Mal. neoplasm—bone, conn. tissue, skin & breast	12,459	8,512	9,534	3,164	3,919	790	705	137	39,220
179-189 Mal. neoplasm—genitourinary organs	8,053	6,166	3,683	1,759	2,460	574	318	97	23,110
190-199 Mal. neoplasm—other & unspecified sites	11,460	9,620	5,690	2,290	2,447	950	407	99	32,963
200-208 Mal. neoplasm—lymphatic & haematopoietic tissue	7,590	6,815	4,967	2,104	3,028	681	715	21	25,921
210-229 Benign neoplasm	14,695	10,139	7,527	4,117	3,757	844	671	249	41,999
230-234 Carcinoma in situ	2,776	2,201	2,493	673	1,076	201	126	128	9,674
235-239 Other neoplasms	1,817	1,437	1,240	651	479	215	134	23	5,996
240-259 Diseases of thyroid and other endocrine glands	8,475	6,687	4,855	2,664	3,439	835	317	411	27,683
260-279 Nutritional def. & other metabolic, immunity disorders	7,925	6,564	4,066	2,878	3,170	646	358	602	26,209
280-289 Diseases of the blood & blood forming organs	18,256	14,979	7,346	4,373	5,380	1,531	931	264	53,060
290-319 Mental disorders	57,572	32,698	29,960	18,552	15,217	4,203	1,491	954	160,647
320-359 Diseases & disorders of the nervous system	19,025	15,566	10,248	6,008	5,022	1,260	716	414	58,259
360-379 Disorders of eye & adnexa	19,539	17,188	9,016	5,107	6,415	518	528	533	58,844
380-389 Diseases of ear & mastoid process	10,186	8,681	7,582	3,169	3,920	477	565	380	34,960
390-398 Rheumatic fever & rheumatic heart disease	402	291	452	146	123	34	31	106	1,585
401-405 Hypertensive disease	2,291	1,251	1,082	637	486	82	50	51	5,930
410-414 Ischaemic heart disease	44,868	28,842	20,859	9,347	10,975	2,804	1,816	552	120,063
415-417 Diseases of pulmonary circulation	2,594	1,049	824	378	411	88	122	35	5,501
420-429 Other forms of heart disease	29,861	18,432	13,471	6,666	7,088	1,697	1,033	512	78,760
430-438 Cerebrovascular disease	15,704	10,551	6,300	3,353	3,770	819	462	213	41,172
440-459 Other diseases of the circulatory system	20,754	15,106	9,843	5,265	6,605	1,218	1,091	389	60,271
460-466 Acute respiratory infections	17,211	8,434	8,711	4,774	4,554	760	593	726	45,763
470-478 Other diseases of upper respiratory tract	12,013	12,451	6,104	2,999	4,681	616	738	235	39,837
480-487 Pneumonia and influenza	20,646	13,586	9,267	4,974	5,031	996	638	1,502	56,640

(continued)

**Table 7.5 (continued): Separations by principal diagnosis in ICD-9-CM groupings, public hospitals, States and Territories, 1997-98**

Principal diagnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
490-496 Chronic obstructive pulmonary disease & allied	33,203	18,221	15,292	8,583	9,481	1,340	810	897	87,827
500-519 Other diseases of the respiratory system	11,553	6,720	5,052	3,122	3,005	515	291	270	30,528
520-529 Diseases of the oral cavity, salivary glands & jaws	8,337	8,857	7,030	3,486	3,430	989	611	522	33,262
530-537 Diseases of oesophagus, stomach & duodenum	31,995	20,856	14,629	9,934	8,844	1,858	1,337	909	90,362
540-543 Appendicitis	6,580	4,652	3,296	1,953	1,291	355	368	209	18,704
550-553 Hernia of abdominal cavity	13,394	10,088	7,443	3,053	3,480	758	535	257	39,008
555-558 Noninfectious enteritis & colitis	7,908	5,087	3,870	1,932	1,837	362	324	133	21,453
560-569 Other diseases of intestines, peritoneum	25,224	16,547	12,740	6,832	7,032	1,416	917	472	71,180
570-579 Other diseases of digestive system	28,556	18,982	13,870	6,478	6,640	1,579	1,208	670	77,983
580-599 Diseases of the urinary system	29,283	18,292	13,815	7,584	6,904	1,595	846	801	79,120
600-608 Diseases of male genital organs	9,296	6,772	3,808	2,664	2,349	789	353	227	26,258
610-611 Disorders of the breast	2,562	2,712	1,260	838	791	172	101	118	8,554
614-629 Dis. & disorders of female pelvic organs & genital tract	32,855	28,984	18,655	8,951	10,298	1,887	1,444	1,129	104,203
630-639 Pregnancy with abortive outcome	13,645	12,963	5,862	3,938	7,735	1,095	573	1,469	47,280
640-648 Complications mainly related to pregnancy	38,884	31,289	20,907	9,545	8,447	2,273	1,481	1,665	114,491
650-669 Other indications re. pregnancy, labour & delivery	58,038	37,788	30,619	14,664	12,394	3,407	2,835	2,650	162,395
670-677 Complications of the puerperium	1,442	1,860	1,396	506	969	92	83	110	6,458
680-709 Diseases of the skin & subcutaneous tissue	21,649	13,790	14,487	6,491	8,153	1,441	725	1,368	68,104
710-739 Diseases of the musculoskeletal system & conn. tissue	45,381	36,115	24,563	13,260	16,039	3,317	2,104	1,302	142,081
740-759 Congenital anomalies	8,926	6,379	4,731	2,054	1,943	436	366	232	25,067
760-779 Certain conditions originating in perinatal period	14,651	9,963	7,821	2,356	2,269	499	664	810	39,033
780-799 Symptoms, signs & ill-defined conditions	80,220	56,631	43,925	18,523	20,704	4,241	2,292	1,757	228,293
800-848 Fractures, dislocations, sprains & strains	45,534	27,397	24,973	11,433	10,262	2,364	1,731	1,741	125,435
850-904 Open wounds, intracranial, internal, blood vessel injury	22,627	13,547	20,505	7,650	5,288	1,165	587	1,240	72,609
905-959 Late effects, burns, superficial & other injuries	13,728	7,935	8,200	4,362	3,178	608	334	541	38,886
960-989 Poisoning, toxic effects	11,314	8,253	8,548	3,501	3,117	808	421	313	36,275
990-995 Other & unspecified effects of external causes	2,344	1,306	2,189	615	603	163	49	76	7,345
996-999 Complications of surgical & medical care nec.	15,485	12,463	8,479	4,959	4,417	1,098	753	448	48,102
V01-V19 Contact re. communicable dis., personal, family history	3,455	2,818	1,993	1,115	1,005	163	177	92	10,818
V20-V39 Contact re. reproduction; liveborn infants	12,029	10,924	5,897	3,970	6,657	706	304	1,114	41,601
V40-V59 Contact re. condition, specific procedures or aftercare	195,298	175,503	111,397	60,365	46,229	16,003	15,612	18,121	638,528
V60-V82 Contact for other reasons	20,172	13,560	13,246	5,555	7,704	1,703	841	458	63,239
Not reported	0	669	0	22	0	360	0	0	1,051
<b>Total</b>	<b>1,272,797</b>	<b>928,847</b>	<b>685,345</b>	<b>346,363</b>	<b>346,782</b>	<b>80,389</b>	<b>57,175</b>	<b>52,400</b>	<b>3,770,098</b>

Note : Abbreviations: mal.—malignant, dis.—diseases, def.—deficiency, nec.—not elsewhere classified, conn.—connective, re.—related to.

**Table 7.6: Separations by principal diagnosis in ICD-9-CM groupings, private hospitals, States and Territories, 1997-98**

Principal diagnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
001-009 Intestinal infectious diseases	598	579	1,172	257	193	n.p.	n.p.	n.a.	2,945
010-018 Tuberculosis	20	9	17	12	4	n.p.	n.p.	n.a.	66
020-041 Other bacterial diseases	542	667	567	138	146	n.p.	n.p.	n.a.	2,156
042 Human immunodeficiency virus infection	0	1	5	2	3	n.p.	n.p.	n.a.	11
045-079 Viral & chlamydial diseases	1,212	1,061	1,310	504	430	n.p.	n.p.	n.a.	4,774
080-139 Other & late effects of infectious & parasitic diseases	405	288	406	99	93	n.p.	n.p.	n.a.	1,361
140-149 Mal. neoplasm—lip, oral cavity & pharynx	270	280	317	122	95	n.p.	n.p.	n.a.	1,127
150-159 Mal. neoplasm—digestive organs & peritoneum	3,567	4,629	3,251	1,163	1,181	n.p.	n.p.	n.a.	14,238
160-165 Mal. neoplasm—respiratory & intrathoracic organs	776	1,503	1,293	585	441	n.p.	n.p.	n.a.	4,747
170-176 Mal. neoplasm—bone, conn. tissue, skin & breast	13,644	9,020	10,777	2,495	4,322	n.p.	n.p.	n.a.	41,608
179-189 Mal. neoplasm—genitourinary organs	5,021	4,921	3,506	1,285	1,287	n.p.	n.p.	n.a.	16,799
190-199 Mal. neoplasm—other & unspecified sites	2,292	4,211	3,384	1,238	1,184	n.p.	n.p.	n.a.	12,738
200-208 Mal. neoplasm—lymphatic & haematopoietic tissue	1,413	2,668	3,777	583	523	n.p.	n.p.	n.a.	9,246
210-229 Benign neoplasm	17,009	11,657	8,979	3,702	3,100	n.p.	n.p.	n.a.	45,910
230-234 Carcinoma in situ	2,031	1,133	1,324	395	916	n.p.	n.p.	n.a.	6,085
235-239 Other neoplasms	1,300	985	1,055	287	235	n.p.	n.p.	n.a.	4,034
240-259 Diseases of thyroid and other endocrine glands	1,632	1,744	1,876	550	607	n.p.	n.p.	n.a.	6,732
260-279 Nutritional def. & other metabolic, immunity disorders	1,826	2,254	2,231	734	689	n.p.	n.p.	n.a.	7,981
280-289 Diseases of the blood & blood forming organs	3,397	4,378	3,920	1,166	1,145	n.p.	n.p.	n.a.	14,612
290-319 Mental disorders	22,162	23,115	12,906	9,890	3,609	n.p.	n.p.	n.a.	74,306
320-359 Diseases & disorders of the nervous system	6,902	6,927	5,178	2,690	2,291	n.p.	n.p.	n.a.	25,077
360-379 Disorders of eye & adnexa	34,493	20,258	23,711	7,368	4,854	n.p.	n.p.	n.a.	94,004
380-389 Diseases of ear & mastoid process	6,715	6,341	5,058	2,220	3,144	n.p.	n.p.	n.a.	24,492
390-398 Rheumatic fever & rheumatic heart disease	194	155	89	32	10	n.p.	n.p.	n.a.	487
401-405 Hypertensive disease	345	435	675	93	172	n.p.	n.p.	n.a.	1,795
410-414 Ischaemic heart disease	13,011	10,693	9,177	2,910	2,983	n.p.	n.p.	n.a.	39,776
415-417 Diseases of pulmonary circulation	304	349	393	114	114	n.p.	n.p.	n.a.	1,369
420-429 Other forms of heart disease	5,249	6,921	5,624	1,713	2,190	n.p.	n.p.	n.a.	22,539
430-438 Cerebrovascular disease	1,897	3,249	3,044	787	1,349	n.p.	n.p.	n.a.	10,839
440-459 Other diseases of the circulatory system	14,442	11,843	8,220	3,778	3,527	n.p.	n.p.	n.a.	43,495
460-466 Acute respiratory infections	1,149	1,056	1,701	507	433	n.p.	n.p.	n.a.	5,119
470-478 Other diseases of upper respiratory tract	10,643	7,840	6,636	3,295	4,096	n.p.	n.p.	n.a.	33,960
480-487 Pneumonia and influenza	2,030	3,487	3,017	813	1,106	n.p.	n.p.	n.a.	11,043

(continued)

**Table 7.6 (continued): Separations by principal diagnosis in ICD-9-CM groupings, private hospitals, States and Territories, 1997-98**

Principal diagnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
490-496 Chronic obstructive pulmonary disease & allied	2,481	3,458	4,222	1,795	1,672	n.p.	n.p.	n.a.	14,272
500-519 Other diseases of the respiratory system	1,309	1,972	1,871	547	510	n.p.	n.p.	n.a.	6,505
520-529 Diseases of the oral cavity, salivary glands & jaws	15,901	16,482	10,779	6,712	5,591	n.p.	n.p.	n.a.	57,428
530-537 Diseases of oesophagus, stomach & duodenum	33,748	28,162	20,529	6,612	5,958	n.p.	n.p.	n.a.	97,502
540-543 Appendicitis	1,137	1,190	1,300	617	375	n.p.	n.p.	n.a.	4,866
550-553 Hernia of abdominal cavity	11,671	10,035	7,295	2,525	2,221	n.p.	n.p.	n.a.	35,186
555-558 Noninfectious enteritis & colitis	3,789	3,419	2,738	846	847	n.p.	n.p.	n.a.	12,067
560-569 Other diseases of intestines, peritoneum	23,734	20,450	17,520	4,971	4,865	n.p.	n.p.	n.a.	73,607
570-579 Other diseases of digestive system	9,422	7,530	7,278	2,701	2,590	n.p.	n.p.	n.a.	30,933
580-599 Diseases of the urinary system	12,304	8,785	7,915	3,051	2,898	n.p.	n.p.	n.a.	36,608
600-608 Diseases of male genital organs	6,449	5,058	3,437	1,837	1,136	n.p.	n.p.	n.a.	18,908
610-611 Disorders of the breast	2,728	2,734	1,374	797	674	n.p.	n.p.	n.a.	8,709
614-629 Dis. & disorders of female pelvic organs & genital tract	27,677	20,257	16,657	6,777	5,588	n.p.	n.p.	n.a.	80,980
630-639 Pregnancy with abortive outcome	16,267	3,956	2,615	4,437	903	n.p.	n.p.	n.a.	28,733
640-648 Complications mainly related to pregnancy	5,509	5,199	5,061	2,608	1,256	n.p.	n.p.	n.a.	21,098
650-669 Other indications re. pregnancy, labour & delivery	13,482	12,958	11,493	5,989	4,047	n.p.	n.p.	n.a.	50,983
670-677 Complications of the puerperium	657	1,181	352	179	156	n.p.	n.p.	n.a.	2,696
680-709 Diseases of the skin & subcutaneous tissue	10,420	7,343	5,566	2,563	2,868	n.p.	n.p.	n.a.	29,874
710-739 Diseases of the musculoskeletal system & conn. tissue	50,640	44,994	26,349	21,585	19,095	n.p.	n.p.	n.a.	170,302
740-759 Congenital anomalies	3,231	2,230	1,988	856	704	n.p.	n.p.	n.a.	9,546
760-779 Certain conditions originating in perinatal period	2,834	2,501	1,509	854	492	n.p.	n.p.	n.a.	9,066
780-799 Symptoms, signs & ill-defined conditions	24,097	26,248	22,652	7,299	6,422	n.p.	n.p.	n.a.	89,795
800-848 Fractures, dislocations, sprains & strains	9,484	9,402	7,855	3,264	4,454	n.p.	n.p.	n.a.	36,213
850-904 Open wounds, intracranial, internal, blood vessel injury	2,018	2,423	2,140	1,140	1,061	n.p.	n.p.	n.a.	9,328
905-959 Late effects, burns, superficial & other injuries	1,484	1,600	1,515	669	741	n.p.	n.p.	n.a.	6,372
960-989 Poisoning, toxic effects	252	386	523	232	149	n.p.	n.p.	n.a.	1,675
990-995 Other & unspecified effects of external causes	110	192	174	47	56	n.p.	n.p.	n.a.	617
996-999 Complications of surgical & medical care nec.	5,612	5,728	4,185	2,120	1,924	n.p.	n.p.	n.a.	20,529
V01-V19 Contact re. communicable dis., personal, family history	4,604	3,687	2,453	791	301	n.p.	n.p.	n.a.	12,063
V20-V39 Contact re. reproduction; liveborn infants	8,985	5,918	3,144	1,745	1,307	n.p.	n.p.	n.a.	23,259
V40-V59 Contact re. condition, specific procedures or aftercare	41,845	55,570	42,887	10,607	16,867	n.p.	n.p.	n.a.	170,966
V60-V82 Contact for other reasons	13,976	7,993	8,106	2,058	3,220	n.p.	n.p.	n.a.	36,313
Not reported	3	503	0	0	0	n.p.	n.p.	n.a.	506
<b>Total</b>	<b>544,351</b>	<b>484,201</b>	<b>388,078</b>	<b>160,358</b>	<b>147,420</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.a.</b>	<b>1,792,976</b>

Note: Abbreviations: mal.—malignant, dis.—diseases, def.—deficiency, nec.—not elsewhere classified, conn.—connective, re.—related to.

n.p. not published.

n.a. not available.

**Table 7.7: Patient days by principal diagnosis in ICD-9-CM groupings, public hospitals, States and Territories, 1997-98**

Principal diagnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
001-009 Intestinal infectious diseases	22,421	9,194	10,482	6,492	5,546	692	1,116	4,051	59,994
010-018 Tuberculosis	4,139	2,856	1,159	541	1,173	77	130	635	10,710
020-041 Other bacterial diseases	32,101	23,851	13,654	7,474	7,063	2,077	882	2,921	90,023
042 Human immunodeficiency virus infection	366	198	102	143	423	1	4	0	1,237
045-079 Viral & chlamydial diseases	26,840	13,256	11,761	7,269	7,094	1,226	1,008	901	69,355
080-139 Other & late effects of infectious & parasitic diseases	8,107	10,746	5,781	3,441	1,629	499	416	1,473	32,092
140-149 Mal. neoplasm—lip, oral cavity & pharynx	11,610	7,429	6,324	2,220	3,478	774	420	198	32,453
150-159 Mal. neoplasm—digestive organs & peritoneum	87,181	55,594	30,627	15,707	21,338	4,879	3,924	892	220,142
160-165 Mal. neoplasm—respiratory & intrathoracic organs	43,490	27,828	19,293	7,556	13,131	2,811	1,544	964	116,617
170-176 Mal. neoplasm—bone, conn. tissue, skin & breast	49,660	29,161	22,436	9,240	10,083	1,899	2,185	586	125,250
179-189 Mal. neoplasm—genitourinary organs	54,424	34,502	19,917	8,421	11,911	3,231	2,707	494	135,607
190-199 Mal. neoplasm—other & unspecified sites	101,043	68,798	42,168	17,024	20,317	6,122	4,544	922	260,938
200-208 Mal. neoplasm—lymphatic & haematopoietic tissue	53,461	33,770	24,343	11,233	15,717	3,043	3,382	106	145,055
210-229 Benign neoplasm	39,124	26,283	18,047	9,889	8,897	2,272	1,893	533	106,938
230-234 Carcinoma in situ	6,149	3,960	4,010	1,363	1,672	350	288	169	17,961
235-239 Other neoplasms	7,761	4,894	3,355	2,085	1,621	531	559	86	20,892
240-259 Diseases of thyroid and other endocrine glands	51,300	39,494	31,481	15,720	15,227	3,584	2,501	3,792	163,099
260-279 Nutritional def. & other metabolic, immunity disorders	34,801	28,112	21,837	10,514	13,308	2,161	1,148	5,795	117,676
280-289 Diseases of the blood & blood forming organs	48,831	32,783	18,776	9,945	12,571	2,927	2,195	1,141	129,169
290-319 Mental disorders	903,225	397,193	779,548	279,579	210,596	49,940	18,387	8,788	2,647,256
320-359 Diseases & disorders of the nervous system	114,423	72,901	78,545	29,021	19,821	5,139	3,125	1,898	324,873
360-379 Disorders of eye & adnexa	32,171	22,478	14,343	8,460	8,647	986	753	996	88,834
380-389 Diseases of ear & mastoid process	18,105	12,878	11,345	5,456	6,430	841	855	737	56,647
390-398 Rheumatic fever & rheumatic heart disease	3,262	2,272	3,027	1,457	883	156	270	835	12,162
401-405 Hypertensive disease	12,120	4,327	5,196	3,032	2,105	484	248	224	27,736
410-414 Ischaemic heart disease	216,124	130,792	95,309	40,683	50,236	14,486	7,641	2,723	557,994
415-417 Diseases of pulmonary circulation	21,424	8,385	6,036	2,641	3,283	701	994	282	43,746
420-429 Other forms of heart disease	183,456	102,037	74,906	38,213	39,974	10,937	5,701	3,374	458,598
430-438 Cerebrovascular disease	165,710	98,943	69,503	38,669	34,591	8,355	6,244	2,927	424,942
440-459 Other diseases of the circulatory system	115,682	69,448	48,767	26,146	30,168	6,510	4,957	1,568	303,246
460-466 Acute respiratory infections	42,565	19,286	20,919	11,959	10,800	1,809	1,554	2,941	111,833
470-478 Other diseases of upper respiratory tract	19,330	16,870	8,350	5,030	6,838	987	1,130	382	58,917
480-487 Pneumonia and influenza	136,804	92,306	56,515	27,986	34,329	7,252	4,501	8,897	368,590

(continued)

**Table 7.7 (continued): Patient days by principal diagnosis in ICD-9-CM groupings, public hospitals, States and Territories, 1997–98**

Principal diagnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
490–496 Chronic obstructive pulmonary disease & allied	176,081	82,349	77,134	40,881	42,421	7,591	4,806	5,235	436,498
500–519 Other diseases of the respiratory system	75,318	46,580	29,327	18,701	19,102	3,929	2,584	1,829	197,370
520–529 Diseases of the oral cavity, salivary glands & jaws	12,585	10,977	9,364	4,680	5,512	1,187	856	847	46,008
530–537 Diseases of oesophagus, stomach & duodenum	68,990	40,339	28,229	17,678	17,186	3,504	2,559	1,686	180,171
540–543 Appendicitis	23,447	15,730	10,009	6,206	4,621	1,258	1,356	835	63,462
550–553 Hernia of abdominal cavity	33,914	21,404	13,609	7,402	8,390	1,675	1,302	605	88,301
555–558 Noninfectious enteritis & colitis	28,339	19,092	11,181	6,444	6,844	1,531	1,452	344	75,227
560–569 Other diseases of intestines, peritoneum	94,476	59,538	40,998	21,946	23,148	5,564	3,446	1,900	251,016
570–579 Other diseases of digestive system	126,279	74,410	51,894	26,725	25,380	6,181	5,100	3,736	319,705
580–599 Diseases of the urinary system	117,723	70,671	57,702	26,860	25,480	6,075	4,037	4,473	313,021
600–608 Diseases of male genital organs	27,902	19,168	9,676	6,734	6,746	1,974	1,336	759	74,295
610–611 Disorders of the breast	4,031	3,839	1,909	1,290	1,413	284	129	238	13,133
614–629 Dis. & disorders of female pelvic organs & genital tract	70,560	53,578	34,923	21,103	22,059	4,191	3,763	1,973	212,150
630–639 Pregnancy with abortive outcome	17,436	14,844	7,903	5,115	8,656	1,296	766	1,715	57,731
640–648 Complications mainly related to pregnancy	123,765	89,113	56,360	34,063	25,421	6,126	5,380	5,767	345,995
650–669 Other indications re. pregnancy, labour & delivery	220,454	146,500	105,079	57,860	46,747	15,050	10,721	12,140	614,551
670–677 Complications of the puerperium	5,417	5,717	4,444	1,936	2,357	442	267	485	21,065
680–709 Diseases of the skin & subcutaneous tissue	115,389	72,712	58,693	29,302	26,712	5,870	3,414	7,673	319,765
710–739 Diseases of the musculoskeletal system & conn. tissue	228,701	149,085	106,603	58,061	56,743	13,348	10,460	5,339	628,340
740–759 Congenital anomalies	34,488	23,896	18,760	6,985	7,039	1,192	2,248	1,553	96,161
760–779 Certain conditions originating in perinatal period	131,300	95,474	68,147	29,871	31,313	4,981	8,554	9,315	378,955
780–799 Symptoms, signs & ill-defined conditions	211,429	150,549	103,375	55,318	51,021	10,562	6,232	5,398	593,884
800–848 Fractures, dislocations, sprains & strains	248,070	145,751	120,398	63,596	50,429	13,714	11,840	11,227	665,025
850–904 Open wounds, intracranial, internal, blood vessel injury	63,848	34,874	43,480	19,906	12,882	3,991	3,027	5,740	187,748
905–959 Late effects, burns, superficial & other injuries	43,896	25,219	23,143	17,614	11,182	2,185	1,074	2,263	126,576
960–989 Poisoning, toxic effects	24,955	15,104	16,760	6,523	6,430	1,814	1,930	916	74,432
990–995 Other & unspecified effects of external causes	6,120	3,213	3,956	1,311	1,513	367	146	198	16,824
996–999 Complications of surgical & medical care nec.	104,357	74,607	50,542	32,396	24,685	6,318	5,964	3,199	302,068
V01–V19 Contact re. communicable dis., personal, family history	3,626	2,997	2,125	1,146	1,058	163	188	99	11,402
V20–V39 Contact re. reproduction; liveborn infants	24,427	20,768	9,392	7,135	10,637	1,160	640	2,826	76,985
V40–V59 Contact re. condition, specific procedures or aftercare	605,148	534,979	217,647	138,680	114,713	36,217	24,125	21,633	1,693,142
V60–V82 Contact for other reasons	227,402	92,457	119,455	21,717	158,132	32,983	26,336	2,839	681,321
Not reported	0	10,103	0	883	0	46,534	0	0	57,520
<b>Total</b>	<b>5,967,083</b>	<b>3,728,462</b>	<b>3,090,079</b>	<b>1,460,677</b>	<b>1,486,872</b>	<b>396,996</b>	<b>243,244</b>	<b>187,016</b>	<b>16,560,429</b>

Note: Abbreviations: mal.—malignant, dis.—diseases, def.—deficiency, nec.—not elsewhere classified, conn.—connective, re.—related to.



**Table 7.8: Patient days by principal diagnosis in ICD-9-CM groupings, private hospitals, States and Territories, 1997–98**

Principal diagnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
001–009 Intestinal infectious diseases	1,592	2,028	3,429	855	616	n.p.	n.p.	n.a.	8,960
010–018 Tuberculosis	154	80	150	117	13	n.p.	n.p.	n.a.	597
020–041 Other bacterial diseases	2,771	6,032	4,792	1,339	1,354	n.p.	n.p.	n.a.	17,144
042 Human immunodeficiency virus infection	0	7	33	11	32	n.p.	n.p.	n.a.	83
045–079 Viral & chlamydial diseases	3,647	4,048	4,625	1,835	1,747	n.p.	n.p.	n.a.	16,881
080–139 Other & late effects of infectious & parasitic diseases	1,209	919	1,859	337	287	n.p.	n.p.	n.a.	4,922
140–149 Mal. neoplasm—lip, oral cavity & pharynx	1,571	1,301	1,899	674	584	n.p.	n.p.	n.a.	6,197
150–159 Mal. neoplasm—digestive organs & peritoneum	26,295	32,450	25,919	11,340	10,189	n.p.	n.p.	n.a.	109,868
160–165 Mal. neoplasm—respiratory & intrathoracic organs	7,298	9,059	11,552	4,831	3,239	n.p.	n.p.	n.a.	37,055
170–176 Mal. neoplasm—bone, conn. tissue, skin & breast	33,655	22,700	24,369	8,752	8,920	n.p.	n.p.	n.a.	101,927
179–189 Mal. neoplasm—genitourinary organs	22,424	22,266	18,649	7,188	6,482	n.p.	n.p.	n.a.	81,356
190–199 Mal. neoplasm—other & unspecified sites	20,679	29,175	26,271	12,448	9,811	n.p.	n.p.	n.a.	102,207
200–208 Mal. neoplasm—lymphatic & haematopoietic tissue	7,845	10,783	14,212	3,858	2,815	n.p.	n.p.	n.a.	40,822
210–229 Benign neoplasm	31,420	23,514	18,075	8,484	7,197	n.p.	n.p.	n.a.	92,847
230–234 Carcinoma in situ	3,801	2,345	2,552	1,179	1,634	n.p.	n.p.	n.a.	12,083
235–239 Other neoplasms	3,688	2,814	2,592	1,000	681	n.p.	n.p.	n.a.	11,237
240–259 Diseases of thyroid and other endocrine glands	8,975	11,152	14,661	3,861	4,020	n.p.	n.p.	n.a.	44,851
260–279 Nutritional def. & other metabolic, immunity disorders	5,973	8,783	7,082	2,868	3,084	n.p.	n.p.	n.a.	29,097
280–289 Diseases of the blood & blood forming organs	7,731	10,819	10,875	3,357	3,171	n.p.	n.p.	n.a.	37,633
290–319 Mental disorders	157,074	148,296	129,735	43,565	52,633	n.p.	n.p.	n.a.	544,690
320–359 Diseases & disorders of the nervous system	23,544	24,805	33,256	7,301	6,999	n.p.	n.p.	n.a.	99,830
360–379 Disorders of eye & adnexa	39,279	23,351	27,713	9,291	5,499	n.p.	n.p.	n.a.	109,245
380–389 Diseases of ear & mastoid process	8,812	8,407	6,549	2,862	4,201	n.p.	n.p.	n.a.	32,108
390–398 Rheumatic fever & rheumatic heart disease	1,385	1,101	709	229	29	n.p.	n.p.	n.a.	3,474
401–405 Hypertensive disease	2,274	2,293	3,700	658	2,686	n.p.	n.p.	n.a.	12,024
410–414 Ischaemic heart disease	54,531	54,686	49,618	10,664	15,839	n.p.	n.p.	n.a.	190,097
415–417 Diseases of pulmonary circulation	2,585	3,042	3,429	884	1,106	n.p.	n.p.	n.a.	11,844
420–429 Other forms of heart disease	33,138	50,241	37,772	10,932	14,151	n.p.	n.p.	n.a.	151,753
430–438 Cerebrovascular disease	19,745	28,350	30,527	8,836	14,518	n.p.	n.p.	n.a.	106,733
440–459 Other diseases of the circulatory system	41,015	43,536	35,786	15,869	14,010	n.p.	n.p.	n.a.	155,967
460–466 Acute respiratory infections	4,722	5,113	7,705	1,565	2,135	n.p.	n.p.	n.a.	22,338
470–478 Other diseases of upper respiratory tract	13,635	11,153	7,905	4,416	6,062	n.p.	n.p.	n.a.	45,238
480–487 Pneumonia and influenza	17,172	31,480	25,582	6,047	9,534	n.p.	n.p.	n.a.	94,671

(continued)

**Table 7.8 (continued): Patient days by principal diagnosis in ICD-9-CM groupings, private hospitals, States and Territories, 1997–98**

Principal diagnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
490–496 Chronic obstructive pulmonary disease & allied	21,958	29,207	35,523	14,436	12,152	n.p.	n.p.	n.a.	117,967
500–519 Other diseases of the respiratory system	9,967	16,426	13,831	3,746	3,536	n.p.	n.p.	n.a.	49,629
520–529 Diseases of the oral cavity, salivary glands & jaws	17,212	18,094	11,732	7,681	6,353	n.p.	n.p.	n.a.	63,341
530–537 Diseases of oesophagus, stomach & duodenum	39,641	35,940	29,095	8,811	8,706	n.p.	n.p.	n.a.	125,752
540–543 Appendicitis	3,806	4,228	4,351	2,019	1,344	n.p.	n.p.	n.a.	16,716
550–553 Hernia of abdominal cavity	26,626	20,512	14,770	6,751	6,311	n.p.	n.p.	n.a.	78,140
555–558 Noninfectious enteritis & colitis	7,630	9,008	7,552	2,778	2,552	n.p.	n.p.	n.a.	31,151
560–569 Other diseases of intestines, peritoneum	41,172	42,970	40,328	12,671	12,694	n.p.	n.p.	n.a.	155,524
570–579 Other diseases of digestive system	30,030	26,381	25,565	8,623	9,164	n.p.	n.p.	n.a.	105,115
580–599 Diseases of the urinary system	26,056	29,714	24,753	9,234	8,863	n.p.	n.p.	n.a.	103,802
600–608 Diseases of male genital organs	16,842	13,272	9,431	4,690	3,922	n.p.	n.p.	n.a.	51,642
610–611 Disorders of the breast	4,444	4,045	2,075	1,375	1,334	n.p.	n.p.	n.a.	13,942
614–629 Dis. & disorders of female pelvic organs & genital tract	53,202	40,660	34,342	16,569	16,352	n.p.	n.p.	n.a.	171,138
630–639 Pregnancy with abortive outcome	16,777	4,260	3,005	4,610	1,030	n.p.	n.p.	n.a.	30,323
640–648 Complications mainly related to pregnancy	26,132	27,043	19,350	12,117	5,326	n.p.	n.p.	n.a.	95,798
650–669 Other indications re. pregnancy, labour & delivery	76,358	76,337	66,491	34,863	22,314	n.p.	n.p.	n.a.	292,207
670–677 Complications of the puerperium	3,186	3,428	1,414	747	654	n.p.	n.p.	n.a.	10,282
680–709 Diseases of the skin & subcutaneous tissue	31,002	29,250	23,171	8,909	10,644	n.p.	n.p.	n.a.	107,438
710–739 Diseases of the musculoskeletal system & conn. tissue	193,625	179,148	116,828	76,576	63,523	n.p.	n.p.	n.a.	662,923
740–759 Congenital anomalies	8,376	4,749	4,060	1,455	1,303	n.p.	n.p.	n.a.	21,451
760–779 Certain conditions originating in perinatal period	20,160	14,996	14,763	7,350	2,966	n.p.	n.p.	n.a.	66,046
780–799 Symptoms, signs & ill-defined conditions	45,440	57,714	50,941	17,705	15,099	n.p.	n.p.	n.a.	195,062
800–848 Fractures, dislocations, sprains & strains	43,599	48,734	53,168	16,014	18,400	n.p.	n.p.	n.a.	189,274
850–904 Open wounds, intracranial, internal, blood vessel injury	6,550	9,501	7,190	2,443	2,858	n.p.	n.p.	n.a.	30,173
905–959 Late effects, burns, superficial & other injuries	5,923	7,052	6,453	2,307	3,298	n.p.	n.p.	n.a.	26,288
960–989 Poisoning, toxic effects	1,244	1,545	1,910	631	401	n.p.	n.p.	n.a.	6,100
990–995 Other & unspecified effects of external causes	544	905	610	109	252	n.p.	n.p.	n.a.	2,626
996–999 Complications of surgical & medical care nec.	35,831	39,766	28,872	14,886	12,644	n.p.	n.p.	n.a.	138,342
V01–V19 Contact re. communicable dis., personal, family history	4,625	3,739	2,460	813	308	n.p.	n.p.	n.a.	12,208
V20–V39 Contact re. reproduction; liveborn infants	24,609	7,951	5,514	3,432	2,224	n.p.	n.p.	n.a.	51,352
V40–V59 Contact re. condition, specific procedures or aftercare	165,609	213,592	80,380	17,093	37,916	n.p.	n.p.	n.a.	522,828
V60–V82 Contact for other reasons	23,289	23,845	40,851	3,739	27,038	n.p.	n.p.	n.a.	120,492
Not reported	32	4,044	0	0	0	n.p.	n.p.	n.a.	4,076
<b>Total</b>	<b>1,641,136</b>	<b>1,684,185</b>	<b>1,374,361</b>	<b>522,636</b>	<b>536,759</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.a.</b>	<b>6,004,927</b>

Note: Abbreviations: mal.—malignant, dis.—diseases, def.—deficiency, nec.—not elsewhere classified, conn.—connective, re.—related to.

n.p. not published.

n.a. not available.

**Table 7.9: Separations for males by age group and principal diagnosis in ICD-9-CM groupings, all hospitals, Australia, 1997–98**

Principal diagnosis	<1	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total <sup>(a)</sup>
001–009 Intestinal infectious diseases	2,605	5,826	2,365	693	700	462	370	287	337	413	14,058
010–018 Tuberculosis	1	9	3	31	76	59	48	56	68	81	432
020–041 Other bacterial diseases	541	468	375	318	417	528	582	790	1,251	1,493	6,763
042 Human immunodeficiency virus infection	0	0	1	1	71	80	30	7	6	1	197
045–079 Viral & chlamydial diseases	1,456	2,570	2,126	2,081	2,170	1,908	1,036	622	605	578	15,152
080–139 Other & late effects of infectious & parasitic diseases	156	150	161	289	652	627	464	474	326	255	3,554
140–149 Mal. neoplasm—lip, oral cavity & pharynx	0	18	31	27	71	354	689	929	1,034	566	3,719
150–159 Mal. neoplasm—digestive organs & peritoneum	42	84	60	69	155	632	2,432	5,033	7,686	5,918	22,111
160–165 Mal. neoplasm—respiratory & intrathoracic organs	4	1	15	35	44	325	1,306	3,489	5,638	3,388	14,245
170–176 Mal. neoplasm—bone, conn. tissue, skin & breast	4	69	327	390	757	2,059	4,510	6,087	10,619	12,268	37,090
179–189 Mal. neoplasm—genitourinary organs	7	100	28	225	524	551	1,566	4,304	8,865	9,751	25,921
190–199 Mal. neoplasm—other & unspecified sites	62	524	372	361	682	1,190	2,958	4,485	6,273	4,897	21,804
200–208 Mal. neoplasm—lymphatic & haematopoietic tissue	42	439	1,170	971	963	1,688	3,411	3,824	4,428	3,064	20,000
210–229 Benign neoplasm	246	634	1,419	1,368	2,141	3,414	5,477	6,344	6,475	3,514	31,032
230–234 Carcinoma in situ	0	2	4	20	28	125	363	658	1,149	1,060	3,409
235–239 Other neoplasms	11	43	79	118	182	328	701	908	1,434	1,390	5,194
240–259 Diseases of thyroid and other endocrine glands	85	248	901	989	1,074	1,501	2,352	2,399	3,159	2,522	15,230
260–279 Nutritional def. & other metabolic, immunity disorders	343	777	1,728	1,243	1,230	1,896	2,254	2,087	2,310	2,160	16,028
280–289 Diseases of the blood & blood forming organs	167	1,737	2,405	2,405	2,000	2,048	2,655	3,889	7,238	9,181	33,725
290–319 Mental disorders	187	855	6,642	17,151	22,223	19,115	18,743	7,971	8,011	10,954	111,855
320–359 Diseases & disorders of the nervous system	531	1,876	2,367	2,616	4,433	5,889	5,420	4,974	5,638	4,944	38,688
360–379 Disorders of eye & adnexa	438	1,533	1,416	959	1,742	2,569	4,609	7,684	18,574	25,847	65,371
380–389 Diseases of ear & mastoid process	1,230	11,723	9,603	1,054	1,312	1,804	1,895	1,491	1,466	996	32,574
390–398 Rheumatic fever & rheumatic heart disease	1	4	62	52	39	75	92	154	167	118	764
401–405 Hypertensive disease	9	23	59	54	141	303	528	521	686	640	2,964
410–414 Ischaemic heart disease	3	1	2	44	637	5,293	17,751	26,933	33,376	20,848	104,888
415–417 Diseases of pulmonary circulation	32	5	9	38	179	293	406	556	731	680	2,929
420–429 Other forms of heart disease	138	123	245	779	1,487	2,567	5,274	8,568	15,686	19,812	54,679
430–438 Cerebrovascular disease	28	26	59	136	328	783	1,927	4,154	8,494	11,072	27,007
440–459 Other diseases of the circulatory system	39	120	270	1,165	3,432	6,320	8,730	9,200	12,568	10,368	52,212
460–466 Acute respiratory infections	9,937	9,982	3,064	1,228	855	621	481	530	804	1,141	28,643
470–478 Other diseases of upper respiratory tract	225	5,860	9,466	5,000	4,746	4,424	4,118	2,753	2,013	704	39,309
480–487 Pneumonia and influenza	1,412	4,073	2,279	1,156	1,845	2,171	2,396	3,362	6,506	10,782	35,982

(continued)

**Table 7.9 (continued): Separations for males by age group and principal diagnosis in ICD-9-CM groupings, all hospitals, Australia, 1997–98**

Principal diagnosis		<1	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total <sup>(a)</sup>
490–496	Chronic obstructive pulmonary disease & allied	1,131	9,315	7,197	2,158	1,417	1,454	2,319	5,161	11,414	11,612	53,178
500–519	Other diseases of the respiratory system	592	1,050	596	1,222	1,077	1,173	1,633	2,693	4,768	5,762	20,566
520–529	Diseases of the oral cavity, salivary glands & jaws	62	4,239	6,028	12,365	6,522	3,422	2,469	1,832	1,289	773	39,001
530–537	Diseases of oesophagus, stomach & duodenum	1,405	665	1,013	3,751	9,689	14,241	18,390	17,102	17,363	11,140	94,759
540–543	Appendicitis	1	121	3,288	3,581	2,547	1,474	883	424	289	165	12,773
550–553	Hernia of abdominal cavity	1,858	2,034	1,617	2,127	4,134	6,612	9,786	9,488	9,568	6,255	53,479
555–558	Noninfectious enteritis & colitis	96	223	361	1,831	2,599	2,313	2,074	1,587	1,573	1,430	14,087
560–569	Other diseases of intestines, peritoneum	619	996	1,679	1,623	4,126	7,560	11,846	12,823	14,326	10,596	66,194
570–579	Other diseases of digestive system	144	275	367	1,174	3,669	6,657	8,480	8,055	8,664	6,567	44,052
580–599	Diseases of the urinary system	1,167	1,198	1,369	1,761	4,121	6,978	9,854	10,424	13,042	11,973	61,887
600–608	Diseases of male genital organs	785	3,060	4,237	2,303	2,237	2,509	3,727	7,280	10,978	8,049	45,165
610–611	Disorders of the breast	9	1	78	525	406	211	185	138	129	109	1,791
614–629	Dis. & disorders of female pelvic organs & genital tract	0	0	0	0	0	0	1	0	0	0	1
630–677	Complications of pregnancy, childbirth & puerperium	0	0	0	0	0	0	0	0	0	0	0
680–709	Diseases of the skin & subcutaneous tissue	766	2,109	3,898	7,321	6,926	6,450	6,217	5,251	6,269	5,860	51,067
710–739	Diseases of the musculoskeletal system & conn. tissue	126	1,080	3,970	15,840	23,565	26,804	26,811	23,219	22,638	15,404	159,457
740–759	Congenital anomalies	5,637	5,499	4,422	1,333	737	607	459	361	313	209	19,577
760–779	Certain conditions originating in perinatal period	26,573	197	85	3	0	0	1	0	0	2	26,861
780–799	Symptoms, signs & ill-defined conditions	8,279	9,061	6,798	7,202	12,743	19,750	25,125	22,492	22,952	20,309	154,711
800–848	Fractures, dislocations, sprains & strains	262	2,704	15,298	21,200	16,034	11,304	7,909	5,115	4,673	7,408	91,908
850–904	Open wounds, intracranial, internal, blood vessel injury	366	4,156	7,741	14,312	11,119	7,350	5,070	3,063	2,184	2,273	57,634
905–959	Late effects, burns, superficial & other injuries	402	2,270	3,089	5,426	4,812	3,572	2,560	1,556	1,444	1,777	26,908
960–989	Poisoning, toxic effects	165	1,990	880	3,430	4,064	3,239	1,901	830	483	422	17,404
990–995	Other & unspecified effects of external causes	156	354	329	571	706	569	397	512	428	264	4,286
996–999	Complications of surgical & medical care nec.	368	911	1,338	2,310	3,037	3,338	4,019	5,525	7,943	6,584	35,373
V01–V19	Contact re. communicable dis., personal, family history	102	162	446	488	724	2,429	3,061	1,799	880	248	10,339
V20–V39	Contact re. reproduction; liveborn infants	5,289	24	13	84	4,218	8,245	1,605	157	14	4	19,653
V40–V59	Contact re. condition, specific procedures or aftercare	5,060	4,949	7,403	17,389	31,465	46,163	65,823	87,321	111,633	57,305	434,512
V60–V82	Contact for other reasons	1,033	1,152	836	1,083	2,356	3,648	6,879	9,462	13,117	12,547	52,113
	Not reported	27	3	13	141	194	119	71	67	100	110	845
<b>Total</b>		<b>82,462</b>	<b>109,701</b>	<b>133,502</b>	<b>175,620</b>	<b>222,580</b>	<b>270,193</b>	<b>335,129</b>	<b>369,260</b>	<b>472,095</b>	<b>386,563</b>	<b>2,557,110</b>

(a) Total includes separations for which age was not reported.

Note: Abbreviations: mal.—malignant, dis.—diseases, def.—deficiency, nec.—not elsewhere classified, conn.—connective, re.—related to.

**Table 7.10: Separations for females by age group and principal diagnosis in ICD-9-CM groupings, all hospitals, Australia, 1997–98**

Principal diagnosis	<1	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total <sup>(a)</sup>
001–009 Intestinal infectious diseases	2,199	5,481	2,156	887	857	552	501	394	545	860	14,432
010–018 Tuberculosis	0	9	5	49	77	55	49	27	47	68	386
020–041 Other bacterial diseases	465	411	341	344	349	399	773	701	965	1,694	6,442
042 Human immunodeficiency virus infection	0	0	0	0	12	6	0	0	0	0	18
045–079 Viral & chlamydial diseases	1,174	2,258	2,031	2,693	1,888	1,450	917	655	675	1,141	14,882
080–139 Other & late effects of infectious & parasitic diseases	131	136	175	337	356	375	404	299	330	296	2,839
140–149 Mal. neoplasm—lip, oral cavity & pharynx	0	12	9	29	64	142	218	262	387	390	1,513
150–159 Mal. neoplasm—digestive organs & peritoneum	11	48	17	28	195	564	1,549	2,795	4,513	5,649	15,369
160–165 Mal. neoplasm—respiratory & intrathoracic organs	2	39	1	6	30	214	763	1,353	1,929	1,473	5,810
170–176 Mal. neoplasm—bone, conn. tissue, skin & breast	8	97	192	439	1,260	4,843	8,354	7,880	9,111	11,553	43,737
179–189 Mal. neoplasm—genitourinary organs	29	134	40	110	454	995	2,056	2,763	3,701	3,706	13,988
190–199 Mal. neoplasm—other & unspecified sites	61	327	287	229	1,034	2,578	4,634	4,952	5,139	4,655	23,896
200–208 Mal. neoplasm—lymphatic & haematopoietic tissue	20	546	689	688	787	1,330	2,411	2,698	3,138	2,860	15,167
210–229 Benign neoplasm	240	695	1,668	3,156	5,850	12,449	14,884	7,614	6,433	3,886	56,875
230–234 Carcinoma in situ	0	1	4	1,202	3,249	2,145	1,632	1,289	1,436	1,392	12,350
235–239 Other neoplasms	16	41	74	156	322	374	670	727	1,069	1,387	4,836
240–259 Diseases of thyroid and other endocrine glands	67	250	1,095	1,593	2,375	2,307	2,573	2,528	2,952	3,444	19,184
260–279 Nutritional def. & other metabolic, immunity disorders	355	769	1,295	1,529	2,000	2,479	2,630	2,065	2,113	2,927	18,162
280–289 Diseases of the blood & blood forming organs	106	792	1,848	2,406	2,237	3,157	4,228	3,529	5,848	9,796	33,947
290–319 Mental disorders	165	334	2,749	17,920	25,109	24,859	19,734	9,468	9,121	13,635	123,094
320–349 Diseases & disorders of the nervous system	414	1,177	2,085	2,746	5,906	7,945	8,652	5,438	4,799	5,483	44,645
360–379 Disorders of eye & adnexa	389	1,542	1,333	913	1,605	2,288	4,234	7,959	24,148	43,061	87,473
380–389 Diseases of ear & mastoid process	788	7,478	7,062	1,159	1,621	1,878	2,021	1,606	1,615	1,650	26,878
390–398 Rheumatic fever & rheumatic heart disease	0	5	69	60	94	107	163	292	321	197	1,308
401–405 Hypertensive disease	4	9	41	65	145	322	644	711	1,195	1,625	4,761
410–414 Ischaemic heart disease	1	2	4	14	204	1,392	5,011	9,564	17,506	21,253	54,951
415–417 Diseases of pulmonary circulation	30	9	7	104	285	341	525	595	873	1,172	3,941
420–429 Other forms of heart disease	106	96	166	461	894	1,369	2,709	4,761	11,071	24,987	46,620
430–438 Cerebrovascular disease	10	31	53	137	306	660	1,456	2,364	5,797	14,189	25,004
440–459 Other diseases of the circulatory system	24	76	120	926	4,227	8,109	9,428	8,073	9,518	11,052	51,553
460–466 Acute respiratory infections	6,446	5,802	2,094	1,752	1,303	792	630	668	950	1,802	22,239
470–478 Other diseases of upper respiratory tract	158	3,736	9,506	7,084	4,046	3,243	2,872	2,022	1,243	578	34,488
480–487 Pneumonia and influenza	1,003	3,236	1,826	1,074	1,987	2,076	2,219	2,830	4,748	10,702	31,701

(continued)

**Table 7.10 (continued): Separations for females by age group and principal diagnosis in ICD-9-CM groupings, all hospitals, Australia, 1997–98**

Principal diagnosis	<1	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total <sup>(a)</sup>
490–496 Chronic obstructive pulmonary disease & allied	460	4,873	4,680	3,775	2,917	2,961	4,484	5,781	8,696	10,294	48,921
500–519 Other diseases of the respiratory system	398	822	476	649	935	1,136	1,446	1,927	3,002	5,676	16,467
520–529 Diseases of the oral cavity, salivary glands & jaws	45	3,702	6,619	21,953	9,274	4,046	2,621	1,510	1,088	831	51,689
530–537 Diseases of oesophagus, stomach & duodenum	1,136	437	868	3,537	7,090	12,363	18,446	17,562	17,334	14,313	93,086
540–543 Appendicitis	1	77	2,481	3,525	2,069	1,246	683	327	222	166	10,797
550–553 Hernia of abdominal cavity	422	972	650	369	1,198	2,499	3,491	3,606	4,099	3,409	20,715
555–558 Noninfectious enteritis & colitis	78	171	370	2,659	3,820	3,023	2,456	1,926	2,269	2,658	19,430
560–569 Other diseases of intestines, peritoneum	259	734	1,096	2,522	5,650	9,112	13,715	14,063	15,910	15,528	78,589
570–579 Other diseases of digestive system	104	214	406	4,013	9,088	10,579	11,794	10,377	9,440	8,848	64,863
580–599 Diseases of the urinary system	972	1,525	1,869	4,050	5,199	5,856	6,987	7,125	8,762	11,492	53,837
600–608 Diseases of male genital organs	0	0	0	0	0	0	1	0	0	0	1
610–611 Disorders of the breast	23	10	53	998	2,667	4,118	4,205	1,974	1,097	326	15,471
614–629 Dis. & disorders of female pelvic organs & genital tract	35	48	639	19,717	47,332	51,008	35,392	15,606	10,373	5,031	185,182
630–639 Pregnancy with abortive outcome	2	0	172	24,453	35,110	15,908	353	1	0	0	76,010
640–648 Complications mainly related to pregnancy	0	0	99	39,473	77,536	18,362	117	0	0	1	135,589
650–669 Other indications re. pregnancy, labour & delivery	0	0	91	46,868	133,916	32,346	153	1	0	0	213,378
670–677 Complications of the puerperium	0	0	10	1,751	5,921	1,466	4	1	0	1	9,154
680–709 Diseases of the skin & subcutaneous tissue	596	1,591	3,043	4,528	4,837	5,444	6,268	5,278	5,986	9,336	46,907
710–739 Diseases of the musculoskeletal system & conn. tissue	118	817	3,429	9,207	13,600	19,825	26,086	24,156	27,939	27,745	152,922
740–759 Congenital anomalies	3,394	2,417	2,710	1,802	1,574	1,153	770	462	397	355	15,034
760–779 Certain conditions originating in perinatal period	21,174	38	6	3	8	1	0	1	1	3	21,235
780–799 Symptoms, signs & ill-defined conditions	7,009	6,997	6,351	13,148	18,100	20,274	24,153	20,783	21,077	25,477	163,370
800–848 Fractures, dislocations, sprains & strains	216	1,885	8,271	5,090	4,908	4,675	4,930	5,341	8,851	25,572	69,739
850–904 Open wounds, intracranial, internal, blood vessel injury	313	2,713	3,496	3,944	3,317	2,585	1,749	1,061	1,311	3,809	24,298
905–959 Late effects, burns, superficial & other injuries	334	1,624	1,797	2,302	2,201	1,915	1,490	1,070	1,410	4,207	18,350
960–989 Poisoning, toxic effects	124	1,607	934	5,102	4,496	4,139	2,214	787	538	604	20,545
990–995 Other & unspecified effects of external causes	121	266	224	432	578	423	390	313	359	570	3,676
996–999 Complications of surgical & medical care nec.	179	493	981	1,989	3,396	4,620	5,016	4,391	5,837	6,356	33,258
V01–V19 Contact re. communicable dis., personal, family history	81	131	234	342	793	2,741	3,931	2,542	1,381	366	12,542
V20–V39 Contact re. reproduction; liveborn infants	5,124	17	27	4,160	21,296	13,862	689	22	4	3	45,205
V40–V59 Contact re. condition, specific procedures or aftercare	597	2,428	4,283	9,517	23,860	41,343	65,106	76,760	93,070	58,010	374,975
V60–V82 Contact for other reasons	844	857	658	1,964	4,154	4,441	5,798	7,029	8,893	12,798	47,436
Not reported	11	5	2	47	90	88	70	71	155	170	712
<b>Total</b>	<b>58,592</b>	<b>73,050</b>	<b>96,067</b>	<b>294,185</b>	<b>528,058</b>	<b>395,353</b>	<b>364,552</b>	<b>330,736</b>	<b>402,737</b>	<b>462,518</b>	<b>3,005,872</b>

(a) Total includes separations for which age was not reported.

Note: Abbreviations: mal.—malignant, dis.—diseases, def.—deficiency, nec.—not elsewhere classified, conn.—connective, re.—related to.

**Table 7.11: Separations by number of diagnoses<sup>(a)</sup> reported and hospital sector, States and Territories, 1997–98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Hospital sector</b>									
	<b>Number</b>								
<b>Public hospitals</b>									
Separations <sup>(b)</sup>	1,272,797	928,847	685,345	346,363	346,782	80,389	57,175	52,400	3,770,098
One diagnosis code only	364,930	260,556	219,826	80,094	112,489	19,085	22,117	9,282	1,088,379
Two diagnosis codes only	322,921	258,182	166,661	111,107	93,098	28,453	14,330	27,101	1,021,853
Three diagnosis codes only	195,535	146,128	102,176	55,000	48,695	12,232	7,593	5,931	573,290
Four diagnosis codes only	127,112	90,880	65,125	30,617	29,601	7,268	4,447	3,707	358,757
Five or more diagnosis codes	262,299	172,432	131,557	69,545	62,899	12,992	8,688	6,379	726,791
Mean diagnosis codes per separation	3.0	3.0	3.0	3.2	2.9	2.9	2.6	2.6	3.0
Maximum number of diagnosis codes	11	12	31	21	21	31	14	10	..
<b>Total</b>	<b>1,272,797</b>	<b>928,847</b>	<b>685,345</b>	<b>346,363</b>	<b>346,782</b>	<b>80,389</b>	<b>57,175</b>	<b>52,400</b>	<b>3,770,098</b>
<b>Private hospitals</b>									
Separations <sup>(b)</sup>	544,351	484,201	388,078	160,358	147,420	50,997	17,571	n.a.	1,792,976
One diagnosis code only	200,575	188,421	133,964	61,424	47,968	19,908	4,395	n.a.	656,655
Two diagnosis codes only	155,490	132,164	111,609	50,095	45,838	14,343	4,626	n.a.	514,165
Three diagnosis codes only	85,234	74,960	65,828	22,490	23,641	7,646	3,205	n.a.	283,004
Four diagnosis codes only	44,710	38,568	34,457	11,202	12,663	4,059	2,023	n.a.	147,682
Five or more diagnosis codes	58,342	49,585	42,220	15,147	17,310	5,041	3,322	n.a.	190,967
Mean diagnosis codes per separation	2.4	2.4	2.5	2.3	2.5	2.3	2.7	n.a.	2.4
Maximum number of diagnosis codes	11	12	31	18	21	14	5	n.a.	..
<b>Total</b>	<b>544,351</b>	<b>484,201</b>	<b>388,078</b>	<b>160,358</b>	<b>147,420</b>	<b>50,997</b>	<b>17,571</b>	<b>n.a.</b>	<b>1,792,976</b>
	<b>Per cent</b>								
<b>Public hospitals</b>									
One diagnosis code only	28.7	28.1	32.1	23.1	32.4	23.8	38.7	17.7	28.9
Two diagnosis codes only	25.4	27.8	24.3	32.1	26.8	35.6	25.1	51.7	27.1
Three diagnosis codes only	15.4	15.7	14.9	15.9	14.0	15.3	13.3	11.3	15.2
Four diagnosis codes only	10.0	9.8	9.5	8.8	8.5	9.1	7.8	7.1	9.5
Five or more diagnosis codes	20.6	18.6	19.2	20.1	18.1	16.2	15.2	12.2	19.3
<b>Private hospitals</b>									
One diagnosis code only	36.8	39.0	34.5	38.3	32.5	39.0	25.0	n.a.	36.6
Two diagnosis codes only	28.6	27.3	28.8	31.2	31.1	28.1	26.3	n.a.	28.7
Three diagnosis codes only	15.7	15.5	17.0	14.0	16.0	15.0	18.2	n.a.	15.8
Four diagnosis codes only	8.2	8.0	8.9	7.0	8.6	8.0	11.5	n.a.	8.2
Five or more diagnosis codes	10.7	10.3	10.9	9.4	11.7	9.9	18.9	n.a.	10.7

(a) Codes reporting external causes of injury and poisoning were not included.

(b) Includes separations for which no diagnosis codes were reported.

Note: The Institute requested up to 31 diagnosis codes to be reported.

.. not applicable.

n.a. Not available.

**Table 7.12: Separation, same day separation, patient day and average length of stay statistics for the 30 principal diagnoses in 3-digit ICD-9-CM groupings with the highest number of separations, public hospitals, Australia, 1997-98**

Principal diagnosis	Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	Average length of stay (days)	Rank by patient days
V56 Encounter for dialysis and dialysis catheter care	377,751	377,117	99.8	20.3	378,930	20.3	1.0	5
V58 Encounter for other and unspecified procedures and aftercare	155,763	147,841	94.9	8.4	218,801	11.7	1.4	10
V57 Care involving use of rehabilitation procedures	71,826	30,920	43.0	3.9	1,026,656	55.1	14.3	1
493 Asthma	54,006	6,854	12.7	2.9	173,815	9.3	3.2	15
780 General symptoms	53,673	12,592	23.5	2.9	139,702	7.5	2.6	21
786 Symptoms involving respiratory system and other chest symptoms	51,361	17,928	34.9	2.8	104,033	5.6	2.0	32
789 Other symptoms involving abdomen and pelvis	51,288	22,872	44.6	2.8	100,351	5.4	2.0	33
411 Other acute and subacute forms of ischaemic heart disease	46,499	4,717	10.1	2.5	215,349	11.6	4.6	11
530 Diseases of oesophagus	42,505	32,767	77.1	2.3	74,100	4.0	1.7	45
486 Pneumonia, organism unspecified	39,718	2,217	5.6	2.1	253,027	13.6	6.4	8
664 Trauma to perineum and vulva during delivery	37,809	989	2.6	2.0	127,905	6.9	3.4	25
366 Cataract	36,869	27,434	74.4	2.0	41,981	2.3	1.1	87
574 Cholelithiasis	35,388	4,082	11.5	1.9	119,349	6.4	3.4	26
428 Heart failure	33,829	2,287	6.8	1.8	267,162	14.3	7.9	6
427 Cardiac dysrhythmias	32,144	8,150	25.4	1.7	113,116	6.1	3.5	27
296 Affective psychoses	32,036	9,640	30.1	1.7	471,949	25.3	14.7	3
295 Schizophrenic disorders	28,620	4,271	14.9	1.5	955,643	51.3	33.4	2
410 Acute myocardial infarction	28,247	2,663	9.4	1.5	186,439	10.0	6.6	12
V67 Follow-up examination	26,821	24,690	92.1	1.4	28,767	1.5	1.1	136
535 Gastritis and duodenitis	26,550	20,346	76.6	1.4	43,277	2.3	1.6	81
413 Angina pectoris	26,427	6,649	25.2	1.4	79,388	4.3	3.0	39
813 Fracture of radius and ulna	25,959	7,191	27.7	1.4	50,922	2.7	2.0	63
650 Single spontaneous vaginal delivery	25,569	1,278	5.0	1.4	69,806	3.7	2.7	48
599 Other disorders of urethra and urinary tract	25,151	8,238	32.8	1.4	100,249	5.4	4.0	34
682 Other cellulitis and abscess	24,508	1,719	7.0	1.3	131,122	7.0	5.4	24
644 Early or threatened labour	24,431	9,988	40.9	1.3	57,539	3.1	2.4	53
173 Other malignant neoplasm of skin	23,391	16,340	69.9	1.3	51,356	2.8	2.2	62
642 Hypertension complicating pregnancy, childbirth, and the puerperium	23,169	5,135	22.2	1.2	90,369	4.9	3.9	36
996 Complications peculiar to certain specified procedures	22,163	4,827	21.8	1.2	153,275	8.2	6.9	16
626 Disorders of menstruation and other abnormal bleeding from female genital tract	21,914	15,139	69.1	1.2	38,504	2.1	1.8	99
Other	2,263,662	787,661	34.8	121.6	10,640,027	571.3	4.7	..
Not reported	1,051	187	18.0	0.1	57,520	3.1	55.0	..
<b>Total</b>	<b>3,770,098</b>	<b>1,624,729</b>	<b>43.1</b>	<b>202.4</b>	<b>16,560,429</b>	<b>889.2</b>	<b>4.4</b>	<b>..</b>

Note: A similar listing of all principal diagnoses in 3-digit ICD-9-CM groupings is provided on the internet at <http://www.aihw.gov.au/publications/health/ahs97-8.html>

.. not applicable.



**Table 7.13: Separation, same day separation, patient day and average length of stay statistics for the 30 principal diagnoses in 3-digit ICD-9-CM groupings with the highest number of separations, private hospitals, Australia, 1997-98**

Principal diagnosis	Separations	Same day separations	Per cent Separations		Patient days	Patient days per 1,000 population	Average length of stay (days)	Rank by patient days
			same day separations	per 1,000 population				
366 Cataract	71,258	49,954	70.1	3.9	79,200	4.3	1.1	8
V58 Encounter for other and unspecified procedures and aftercare	69,654	64,804	93.0	3.8	103,630	5.6	1.5	4
530 Diseases of oesophagus	50,054	46,613	93.1	2.7	62,078	3.4	1.2	10
V56 Encounter for dialysis and dialysis catheter care	44,775	44,726	99.9	2.4	44,921	2.4	1.0	22
520 Disorders of tooth development and eruption	36,405	29,166	80.1	2.0	36,697	2.0	1.0	40
717 Internal derangement of knee	35,368	22,540	63.7	1.9	43,867	2.4	1.2	29
715 Osteoarthritis and allied disorders	29,844	6,147	20.6	1.6	225,280	12.2	7.5	2
173 Other malignant neoplasm of skin	29,834	22,576	75.7	1.6	50,140	2.7	1.7	18
V57 Care involving use of rehabilitation procedures	28,509	13,906	48.8	1.5	320,435	17.4	11.2	1
296 Affective psychoses	28,070	18,221	64.9	1.5	210,818	11.4	7.5	3
535 Gastritis and duodenitis	27,465	25,903	94.3	1.5	32,211	1.7	1.2	54
789 Other symptoms involving abdomen and pelvis	27,064	19,497	72.0	1.5	46,351	2.5	1.7	21
V67 Follow-up examination	24,835	22,589	91.0	1.3	26,700	1.4	1.1	67
569 Other disorders of intestine	23,816	20,972	88.1	1.3	36,953	2.0	1.6	39
562 Diverticula of intestine	23,088	18,742	81.2	1.3	44,837	2.4	1.9	23
635 Legally induced abortion	20,092	19,819	98.6	1.1	20,241	1.1	1.0	79
628 Infertility, female	19,693	19,015	96.6	1.1	20,005	1.1	1.0	82
780 General symptoms	19,620	3,387	17.3	1.1	42,587	2.3	2.2	31
211 Benign neoplasm of other parts of digestive system	19,472	17,546	90.1	1.1	26,581	1.4	1.4	68
550 Inguinal hernia	19,213	1,862	9.7	1.0	43,461	2.4	2.3	30
724 Other and unspecified disorders of back	18,683	7,336	39.3	1.0	83,983	4.6	4.5	5
455 Haemorrhoids	17,514	12,837	73.3	1.0	27,971	1.5	1.6	65
727 Other disorders of synovium, tendon, and bursa	15,455	7,924	51.3	0.8	28,916	1.6	1.9	62
553 Other hernia of abdominal cavity without mention of obstruction or gangrene	15,034	9,133	60.7	0.8	30,113	1.6	2.0	58
474 Chronic disease of tonsils and adenoids	14,970	1,507	10.1	0.8	18,024	1.0	1.2	90
574 Cholelithiasis	14,905	594	4.0	0.8	52,856	2.9	3.5	16
787 Symptoms involving digestive system	14,389	11,142	77.4	0.8	28,386	1.5	2.0	64
786 Symptoms involving respiratory system and other chest symptoms	14,137	4,062	28.7	0.8	29,332	1.6	2.1	61
564 Functional digestive disorders, not elsewhere classified	13,998	11,688	83.5	0.8	23,363	1.3	1.7	71
381 Nonsuppurative otitis media and Eustachian tube disorders	13,918	12,791	91.9	0.8	14,228	0.8	1.0	109
Other	991,338	14,449	38.9	53.8	4,146,686	224.9	4.2	..
Not reported	506	278	54.9	<0.1	4,076	0.2	8.1	..
<b>Total</b>	<b>1,792,976</b>	<b>952,923</b>	<b>53.1</b>	<b>97.3</b>	<b>6,004,927</b>	<b>325.7</b>	<b>3.3</b>	<b>..</b>

Note: A similar listing of all principal diagnoses in 3 digit ICD-9-CM groupings is provided on the internet at <http://www.aihw.gov.au/publications/health/ahs97-8.html>.

.. not applicable.

**Table 7.14: Separations for the 30 principal diagnoses in 3-digit ICD-9-CM groupings with the highest number of separations, public hospitals, States and Territories, 1997-98**

Principal diagnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
V56 Encounter for dialysis and dialysis catheter care	110,242	105,320	59,106	38,823	26,667	9,331	10,849	17,413	377,751
V58 Encounter for other and unspecified procedures and aftercare	47,023	42,458	27,119	16,285	13,542	5,084	3,953	299	155,763
V57 Care involving use of rehabilitation procedures	27,161	18,939	19,133	2,863	2,463	906	271	90	71,826
493 Asthma	19,652	11,410	9,321	5,800	6,266	599	472	486	54,006
780 General symptoms	17,558	14,863	10,427	3,682	5,540	844	365	394	53,673
786 Symptoms involving respiratory system and other chest symptoms	20,376	11,021	9,336	3,770	5,023	819	639	377	51,361
789 Other symptoms involving abdomen and pelvis	17,922	12,638	10,163	4,563	3,879	1,066	616	441	51,288
411 Other acute and subacute forms of ischaemic heart disease	16,885	12,883	8,122	3,210	3,095	1,325	726	253	46,499
530 Diseases of oesophagus	14,581	9,229	6,815	4,611	5,133	1,010	785	341	42,505
486 Pneumonia, organism unspecified	14,990	9,681	6,358	3,020	3,399	636	508	1,126	39,718
664 Trauma to perineum and vulva during delivery	14,198	7,544	7,892	3,395	2,751	758	550	721	37,809
366 Cataract	12,363	11,116	5,315	3,082	4,127	187	374	305	36,869
574 Cholelithiasis	13,003	8,787	6,398	2,710	3,015	693	569	213	35,388
428 Heart failure	12,350	8,672	5,262	3,080	3,297	616	305	247	33,829
427 Cardiac dysrhythmias	12,978	6,970	5,558	2,613	2,598	769	478	180	32,144
296 Affective psychoses	9,438	6,456	6,053	4,278	4,119	1,138	435	119	32,036
295 Schizophrenic disorders	9,142	6,704	6,393	2,120	2,898	752	389	222	28,620
410 Acute myocardial infarction	10,422	6,776	5,080	2,344	2,453	585	387	200	28,247
V67 Follow-up examination	8,150	6,359	5,127	2,649	3,321	726	370	119	26,821
535 Gastritis and duodenitis	10,179	5,717	5,101	2,739	1,707	409	270	428	26,550
413 Angina pectoris	9,533	5,536	5,473	2,812	2,121	489	380	83	26,427
813 Fracture of radius and ulna	9,830	5,478	5,174	2,286	1,997	414	372	408	25,959
650 Single spontaneous vaginal delivery	10,467	4,415	5,684	1,923	1,585	470	548	477	25,569
599 Other disorders of urethra and urinary tract	9,438	5,576	4,524	2,428	2,150	592	216	227	25,151
682 Other cellulitis and abscess	8,376	4,983	5,434	2,421	1,777	344	258	915	24,508
644 Early or threatened labour	7,628	6,008	5,134	2,681	1,606	582	314	478	24,431
173 Other malignant neoplasm of skin	6,768	4,666	6,674	1,872	2,518	466	369	58	23,391
642 Hypertension complicating pregnancy, childbirth, and the puerperium	9,300	5,419	3,621	1,724	2,181	410	272	242	23,169
996 Complications peculiar to certain specified procedures	7,231	5,550	3,778	2,290	2,195	504	374	241	22,163
626 Disorders of menstruation and other abnormal bleeding from female genital tract	6,675	6,084	4,094	1,801	2,307	360	369	224	21,914
Other	768,938	550,920	411,676	208,466	221,052	47,145	30,392	25,073	2,263,662
Not reported	0	669	0	22	0	360	0	0	1,051
<b>Total</b>	<b>1,272,797</b>	<b>928,847</b>	<b>685,345</b>	<b>346,363</b>	<b>346,782</b>	<b>80,389</b>	<b>57,175</b>	<b>52,400</b>	<b>3,770,098</b>

**Table 7.15: Separations for the 30 principal diagnoses in 3-digit ICD-9-CM groupings with the highest number of separations, private hospitals States and Territories, 1997-98**

Principal diagnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
366 Cataract	26,069	15,587	18,207	5,322	3,798	1,814	461	n.a.	71,258
V58 Encounter for other and unspecified procedures and aftercare	11,216	24,826	19,084	6,276	6,341	976	935	n.a.	69,654
530 Diseases of oesophagus	16,276	14,004	11,400	3,310	3,572	1,405	87	n.a.	50,054
V56 Encounter for dialysis and dialysis catheter care	10,951	15,814	8,279	1,626	8,104	0	1	n.a.	44,775
520 Disorders of tooth development and eruption	10,534	10,031	7,054	3,924	3,624	677	561	n.a.	36,405
717 Internal derangement of knee	11,453	9,376	5,031	4,349	3,667	869	623	n.a.	35,368
715 Osteoarthritis and allied disorders	9,705	7,577	4,811	3,175	3,173	832	571	n.a.	29,844
173 Other malignant neoplasm of skin	10,279	5,649	8,131	1,701	3,244	414	416	n.a.	29,834
V57 Care involving use of rehabilitation procedures	11,288	6,792	9,232	127	933	n.p.	n.p.	n.a.	28,509
296 Affective psychoses	7,132	9,992	4,796	3,483	1,758	844	65	n.a.	28,070
535 Gastritis and duodenitis	10,805	7,587	5,668	1,768	1,182	420	35	n.a.	27,465
789 Other symptoms involving abdomen and pelvis	7,358	8,519	6,809	2,132	1,338	842	66	n.a.	27,064
V67 Follow-up examination	10,938	5,929	4,185	1,647	1,388	655	93	n.a.	24,835
569 Other disorders of intestine	9,604	5,162	5,314	1,880	1,363	450	43	n.a.	23,816
562 Diverticula of intestine	7,099	6,321	6,613	1,298	1,174	518	65	n.a.	23,088
635 Legally induced abortion	13,582	1,852	698	3,539	264	153	4	n.a.	20,092
628 Infertility, female	7,944	4,402	4,561	1,251	493	644	398	n.a.	19,693
780 General symptoms	6,509	5,403	4,489	1,341	1,346	504	28	n.a.	19,620
211 Benign neoplasm of other parts of digestive system	7,334	5,165	4,108	1,459	1,038	325	43	n.a.	19,472
550 Inguinal hernia	6,531	4,847	3,796	1,645	1,398	628	368	n.a.	19,213
724 Other and unspecified disorders of back	4,545	5,137	2,755	2,550	2,728	900	68	n.a.	18,683
455 Haemorrhoids	7,391	4,188	2,830	1,540	1,011	422	132	n.a.	17,514
727 Other disorders of synovium, tendon, and bursa	4,565	4,203	2,786	1,642	1,743	341	175	n.a.	15,455
553 Other hernia of abdominal cavity without mention of obstruction or gangrene	4,823	4,976	3,262	822	748	305	98	n.a.	15,034
474 Chronic disease of tonsils and adenoids	4,766	3,214	3,001	1,737	1,550	466	236	n.a.	14,970
574 Cholelithiasis	4,916	3,494	3,228	1,214	1,340	472	241	n.a.	14,905
787 Symptoms involving digestive system	3,646	4,196	3,886	1,295	895	438	33	n.a.	14,389
786 Symptoms involving respiratory system and other chest symptoms	3,089	4,115	3,630	1,222	1,598	442	41	n.a.	14,137
564 Functional digestive disorders, not elsewhere classified	3,572	5,597	2,439	788	1,139	408	55	n.a.	13,998
381 Nonsuppurative otitis media and Eustachian tube disorders	3,628	3,654	2,954	1,289	1,715	488	190	n.a.	13,918
0 Other	286,800	266,089	215,041	95,006	83,755	33,215	11,432	n.a.	991,338
0 Not reported	3	503	0	0	0	0	0	n.a.	506
<b>Total</b>	<b>544,351</b>	<b>484,201</b>	<b>388,078</b>	<b>160,358</b>	<b>147,420</b>	<b>50,997</b>	<b>17,571</b>	<b>n.a.</b>	<b>1,792,976</b>

n.a. not available.

n.p. not published.

**Table 7.16: Average length of stay (days) for the 30 principal diagnoses in 3-digit ICD-9-CM groupings with the highest number of separations, public hospitals, States and Territories, 1997–98**

Principal diagnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
V56 Encounter for dialysis and dialysis catheter care	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
V58 Encounter for other and unspecified procedures and aftercare	1.5	1.4	1.2	1.3	1.6	1.3	1.2	4.1	1.4
V57 Care involving use of rehabilitation procedures	14.6	18.6	6.0	25.6	24.3	21.0	28.4	27.0	14.3
493 Asthma	3.3	3.1	3.1	3.3	3.2	3.4	3.5	4.3	3.2
780 General symptoms	2.8	2.6	2.4	2.8	2.3	2.6	3.1	3.1	2.6
786 Symptoms involving respiratory system and other chest symptoms	2.0	1.8	2.1	2.2	2.1	2.5	2.1	2.8	2.0
789 Other symptoms involving abdomen and pelvis	2.1	1.7	1.9	2.0	2.2	2.0	2.4	2.3	2.0
411 Other acute and subacute forms of ischaemic heart disease	4.9	4.4	4.4	4.3	4.7	5.4	4.8	4.4	4.6
530 Diseases of oesophagus	1.9	1.7	1.8	1.5	1.7	1.5	1.6	1.6	1.7
486 Pneumonia, organism unspecified	6.5	6.6	5.8	5.5	6.9	6.8	6.7	5.8	6.4
664 Trauma to perineum and vulva during delivery	3.4	3.5	3.2	3.5	3.3	4.1	3.0	4.2	3.4
366 Cataract	1.1	1.1	1.2	1.2	1.1	1.2	1.1	1.3	1.1
574 Cholelithiasis	3.5	3.4	3.0	3.8	3.1	3.1	3.3	4.1	3.4
428 Heart failure	8.5	7.2	8.0	7.5	7.3	9.8	9.9	9.0	7.9
427 Cardiac dysrhythmias	3.8	3.3	3.3	3.3	3.4	3.5	3.5	3.8	3.5
296 Affective psychoses	14.1	12.3	20.9	14.5	13.1	8.1	14.8	12.9	14.7
295 Schizophrenic disorders	39.2	20.8	44.9	36.5	20.8	31.7	16.4	15.4	33.4
410 Acute myocardial infarction	6.6	6.4	6.6	6.4	7.3	7.2	6.9	6.3	6.6
V67 Follow-up examination	1.1	1.0	1.1	1.1	1.0	1.1	1.0	1.2	1.1
535 Gastritis and duodenitis	1.8	1.5	1.6	1.5	1.7	1.5	1.6	1.7	1.6
413 Angina pectoris	3.0	3.0	3.1	3.1	2.6	3.4	2.6	3.1	3.0
813 Fracture of radius and ulna	2.0	1.9	1.7	2.2	2.0	1.8	2.2	3.6	2.0
650 Single spontaneous vaginal delivery	2.7	2.9	2.4	2.9	2.7	3.4	2.4	3.2	2.7
599 Other disorders of urethra and urinary tract	4.1	3.8	4.1	3.9	3.9	3.6	4.7	5.2	4.0
682 Other cellulitis and abscess	6.0	5.7	4.5	4.8	5.0	5.3	5.8	5.1	5.4
644 Early or threatened labour	2.5	1.9	1.9	4.0	2.1	1.8	2.9	2.5	2.4
173 Other malignant neoplasm of skin	2.8	2.2	1.7	2.3	1.8	1.8	2.0	1.9	2.2
642 Hypertension complicating pregnancy, childbirth, and the puerperium	4.0	3.7	4.0	4.2	3.5	3.3	5.0	5.5	3.9
996 Complications peculiar to certain specified procedures	7.7	6.3	6.6	7.5	5.8	5.8	8.6	7.9	6.9
626 Disorders of menstruation and other abnormal bleeding from female genital tract	1.8	1.6	1.6	1.8	2.1	2.1	2.6	1.5	1.8
<b>Total<sup>(a)</sup></b>	<b>4.7</b>	<b>4.0</b>	<b>4.5</b>	<b>4.2</b>	<b>4.3</b>	<b>4.9</b>	<b>4.3</b>	<b>3.6</b>	<b>4.4</b>

(a) For all separations.

**Table 7.17: Average length of stay (days) for the 30 principal diagnoses in 3-digit ICD-9-CM groupings with the highest number of separations, private hospitals, States and Territories, 1997–98**

Principal diagnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
366 Cataract	1.1	1.1	1.1	1.2	1.1	1.2	1.3	n.a.	1.1
V58 Encounter for other and unspecified procedures and aftercare	2.5	1.3	1.1	1.3	1.6	1.7	1.9	n.a.	1.5
530 Diseases of oesophagus	1.2	1.3	1.3	1.2	1.4	1.2	1.7	n.a.	1.2
V56 Encounter for dialysis and dialysis catheter care	1.0	1.0	1.0	1.0	1.0	n.p.	n.p.	n.a.	1.0
520 Disorders of tooth development and eruption	1.0	1.0	1.0	1.0	1.0	1.0	1.0	n.a.	1.0
717 Internal derangement of knee	1.2	1.3	1.2	1.3	1.3	1.2	1.2	n.a.	1.2
715 Osteoarthritis and allied disorders	7.5	7.7	7.7	7.9	6.5	9.0	6.8	n.a.	7.5
173 Other malignant neoplasm of skin	1.6	1.7	1.7	2.7	1.4	2.1	1.7	n.a.	1.7
V57 Care involving use of rehabilitation procedures	9.7	22.1	4.4	20.7	16.8	n.p.	n.p.	n.a.	11.2
296 Affective psychoses	7.5	6.1	9.0	5.5	16.1	4.8	16.1	n.a.	7.5
535 Gastritis and duodenitis	1.1	1.1	1.3	1.3	1.2	1.3	1.9	n.a.	1.2
789 Other symptoms involving abdomen and pelvis	1.7	1.5	1.8	1.9	2.0	2.2	2.8	n.a.	1.7
V67 Follow-up examination	1.1	1.0	1.1	1.1	1.1	1.1	1.7	n.a.	1.1
569 Other disorders of intestine	1.3	1.8	1.7	1.6	1.7	1.9	3.5	n.a.	1.6
562 Diverticula of intestine	1.8	1.8	2.0	2.7	2.5	2.0	4.4	n.a.	1.9
635 Legally induced abortion	1.0	1.0	1.1	1.0	1.1	1.1	1.3	n.a.	1.0
628 Infertility, female	1.0	1.0	1.0	1.1	1.0	1.0	1.0	n.a.	1.0
780 General symptoms	1.5	2.4	2.5	3.0	2.4	2.6	4.9	n.a.	2.2
211 Benign neoplasm of other parts of digestive system	1.2	1.3	1.4	1.7	1.8	1.5	3.2	n.a.	1.4
550 Inguinal hernia	2.4	2.2	1.9	2.4	2.7	2.1	2.0	n.a.	2.3
724 Other and unspecified disorders of back	4.9	4.9	5.7	3.0	3.2	4.7	8.9	n.a.	4.5
455 Haemorrhoids	1.4	1.6	1.7	2.0	2.0	1.8	2.4	n.a.	1.6
727 Other disorders of synovium, tendon, and bursa	1.8	1.9	1.9	2.0	1.8	1.9	1.9	n.a.	1.9
553 Other hernia of abdominal cavity without mention of obstruction or gangrene	2.0	1.7	2.0	3.2	2.7	2.0	2.9	n.a.	2.0
474 Chronic disease of tonsils and adenoids	1.2	1.3	1.1	1.2	1.3	1.3	1.2	n.a.	1.2
574 Cholelithiasis	3.4	3.7	3.6	3.6	3.5	3.9	3.7	n.a.	3.5
787 Symptoms involving digestive system	1.8	2.0	1.9	2.3	2.1	1.9	6.8	n.a.	2.0
786 Symptoms involving respiratory system and other chest symptoms	1.9	2.2	2.2	2.1	1.7	2.4	3.0	n.a.	2.1
564 Functional digestive disorders, not elsewhere classified	1.4	1.5	2.1	2.2	1.9	1.7	3.4	n.a.	1.7
381 Nonsuppurative otitis media and Eustachian tube disorders	1.0	1.0	1.0	1.0	1.0	1.0	1.0	n.a.	1.0
Other	3.7	4.2	4.7	4.0	4.5	4.2	4.3	n.a.	4.2
<b>Total<sup>(a)</sup></b>	<b>3.0</b>	<b>3.5</b>	<b>3.5</b>	<b>3.3</b>	<b>3.6</b>	<b>3.5</b>	<b>3.7</b>	<b>n.a.</b>	<b>3.3</b>

(a) For all separations.

n.a. not available.

**Table 7.18: Separations for males for the 30 principal diagnoses in 3-digit ICD-9-CM groupings with the highest number of separations, by age group, all hospitals, Australia, 1997–98**

Principal diagnosis	<1	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total <sup>(a)</sup>
V56 Encounter for dialysis and dialysis catheter care	0	40	855	7,454	20,058	31,128	40,693	48,715	65,784	27,385	242,112
V58 Encounter for other and unspecified procedures and aftercare	512	2,256	3,042	2,865	4,023	7,633	17,820	29,035	31,835	13,141	112,162
530 Diseases of oesophagus	1,335	471	610	1,892	5,086	7,862	10,239	8,839	8,801	5,282	50,417
V57 Care involving use of rehabilitation procedures	2	9	199	2,528	3,273	3,943	4,131	6,521	11,162	14,171	45,939
366 Cataract	6	29	48	57	173	543	1,910	4,813	14,221	21,194	42,994
780 General symptoms	4,301	6,360	1,755	1,364	2,580	4,385	5,973	5,220	5,160	4,947	42,045
550 Inguinal hernia	1,795	1,483	1,231	1,775	2,860	4,171	6,179	6,374	6,650	4,726	37,244
411 Other acute and subacute forms of ischaemic heart disease	0	0	1	7	191	1,634	5,506	8,499	11,145	7,943	34,926
786 Symptoms involving respiratory system and other chest symptoms	637	362	298	666	2,113	5,204	7,960	7,125	6,295	4,018	34,678
717 Internal derangement of knee	1	2	306	5,695	7,821	7,218	5,650	3,580	2,037	599	32,909
173 Other malignant neoplasm of skin	1	3	30	68	415	1,544	3,543	5,203	9,382	11,360	31,549
V67 Follow-up examination	85	329	194	332	724	1,748	3,961	6,659	9,344	6,498	29,874
493 Asthma	1,034	9,173	7,103	2,044	1,190	1,036	1,301	1,634	2,261	1,787	28,563
789 Other symptoms involving abdomen and pelvis	215	340	2,473	2,770	3,926	4,570	4,457	3,660	3,507	2,397	28,315
535 Gastritis and duodenitis	35	155	254	1,100	2,782	3,728	4,788	4,752	4,718	2,745	25,057
486 Pneumonia, organism unspecified	823	2,738	1,562	771	1,284	1,469	1,675	2,414	4,608	7,706	25,050
413 Angina pectoris	0	0	0	8	130	1,160	4,127	6,681	8,233	4,642	24,981
715 Osteoarthritis and allied disorders	0	1	16	266	975	2,212	3,773	5,398	7,038	4,706	24,385
414 Other forms of chronic ischaemic heart disease	0	1	1	7	111	1,020	4,142	6,544	7,943	3,129	22,898
427 Cardiac dysrhythmias	85	51	135	358	713	1,324	2,760	4,255	6,600	5,986	22,267
296 Affective psychoses	0	0	569	2,522	3,589	3,975	4,752	2,524	2,200	2,060	22,191
410 Acute myocardial infarction	3	0	0	22	205	1,478	3,971	5,204	6,049	5,132	22,064
600 Hyperplasia of prostate	0	0	0	9	35	183	1,333	5,037	8,754	6,711	22,062
428 Heart failure	19	22	16	39	141	313	960	2,263	6,224	11,065	21,062
569 Other disorders of intestine	27	100	146	322	984	2,233	4,039	4,827	5,024	2,591	20,293
295 Schizophrenic disorders	0	1	93	5,370	6,843	4,419	2,203	700	545	104	20,280
520 Disorders of tooth development and eruption	8	126	1,792	9,801	4,057	1,188	489	202	118	54	17,835
592 Calculus of kidney and ureter	7	14	59	345	1,627	3,316	4,769	3,915	2,747	993	17,792
455 Haemorrhoids	3	10	28	373	1,970	3,933	4,938	3,145	2,097	891	17,388
724 Other and unspecified disorders of back	0	5	50	431	2,233	3,605	3,362	2,607	2,676	2,292	17,261
Other	71,501	85,617	110,623	124,218	140,274	151,899	163,654	162,848	208,837	200,198	1,419,672
Not reported	27	3	13	141	194	119	71	67	100	110	845
<b>Total</b>	<b>82,462</b>	<b>109,701</b>	<b>133,502</b>	<b>175,620</b>	<b>222,580</b>	<b>270,193</b>	<b>335,129</b>	<b>369,260</b>	<b>472,095</b>	<b>386,563</b>	<b>2,557,110</b>

(a) Includes separations for which age was not reported.

**Table 7.19: Separations for females for the 30 principal diagnoses in 3-digit ICD-9-CM groupings with the highest number of separations, by age group, all hospitals, Australia, 1997–98**

Principal diagnosis	<1	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total <sup>(a)</sup>
V56 Encounter for dialysis and dialysis catheter care	3	8	265	3,897	13,473	19,621	27,969	41,525	55,574	18,079	180,414
V58 Encounter for other and unspecified procedures and aftercare	384	1,979	2,533	1,854	4,707	14,073	26,995	26,368	23,310	11,046	113,250
366 Cataract	7	31	26	57	143	435	1,831	5,265	19,996	37,339	65,131
V57 Care involving use of rehabilitation procedures	6	7	108	1,371	1,972	3,011	5,108	5,391	11,320	26,101	54,395
789 Other symptoms involving abdomen and pelvis	160	273	2,867	7,722	8,585	8,469	8,034	5,500	4,673	3,752	50,035
664 Trauma to perineum and vulva during delivery	0	0	15	10,813	31,130	6,856	13	0	0	0	48,827
530 Diseases of oesophagus	1,078	256	366	1,286	2,868	5,346	8,584	8,116	8,003	6,231	42,134
296 Affective psychoses	4	0	300	3,387	6,447	8,493	8,486	4,039	3,647	3,112	37,915
635 Legally induced abortion	1	0	137	16,279	14,252	6,202	118	0	0	0	36,999
574 Cholelithiasis	1	3	79	2,558	6,016	6,173	6,691	5,749	4,788	3,818	35,876
626 Disorders of menstruation and other abnormal bleeding from female genital tract	1	0	51	1,876	6,644	13,981	10,520	712	148	64	33,998
493 Asthma	406	4,768	4,595	3,614	2,653	2,567	3,166	3,027	3,409	3,512	31,717
780 General symptoms	3,452	4,865	1,424	1,543	3,099	2,429	2,505	2,488	3,273	6,166	31,244
786 Symptoms involving respiratory system and other chest symptoms	528	234	278	625	1,381	3,328	6,383	6,440	6,245	5,378	30,820
650 Single spontaneous vaginal delivery	0	0	10	8,921	18,317	3,190	6	0	0	0	30,444
520 Disorders of tooth development and eruption	5	100	2,405	18,086	6,256	1,483	503	188	81	54	29,161
535 Gastritis and duodenitis	39	134	305	1,281	2,406	4,029	5,752	5,604	5,360	4,039	28,949
644 Early or threatened labour	0	0	29	9,589	15,270	3,143	21	0	0	0	28,052
642 Hypertension complicating pregnancy, childbirth, and the puerperium	0	0	16	7,038	16,162	4,113	32	0	0	0	27,361
715 Osteoarthritis and allied disorders	1	2	13	125	427	1,342	3,382	5,395	8,559	7,675	26,921
656 Other foetal and placental problems affecting management of mother	0	0	20	6,389	15,358	3,677	20	1	0	0	25,465
628 Infertility, female	4	0	0	1,068	13,519	10,497	362	8	4	2	25,464
648 Other current conditions in the mother classifiable elsewhere, but complicating pregnancy, childbirth or the puerperium	0	0	13	5,465	14,295	4,390	28	0	0	0	24,192
562 Diverticula of intestine	2	2	3	20	110	812	3,187	4,864	7,049	6,385	22,434
411 Other acute and subacute forms of ischaemic heart disease	0	1	2	6	63	536	1,977	3,802	6,766	8,676	21,829
V67 Follow-up examination	54	251	140	564	1,174	1,851	3,376	4,549	5,774	4,049	21,782
173 Other malignant neoplasm of skin	3	10	24	79	456	1,620	2,865	3,211	5,020	8,387	21,675
486 Pneumonia, organism unspecified	569	2,158	1,178	681	1,295	1,335	1,508	1,901	3,276	7,547	21,448
724 Other and unspecified disorders of back	1	7	78	481	1,809	3,386	4,131	3,081	3,730	4,265	20,969
787 Symptoms involving digestive system	400	635	511	1,444	2,135	2,575	3,378	3,041	3,059	3,567	20,745
Other	51,472	57,321	78,274	176,019	315,546	246,302	217,551	180,400	209,518	283,104	1,815,514
Not reported	11	5	2	47	90	88	70	71	155	170	712
<b>Total</b>	<b>58,592</b>	<b>73,050</b>	<b>96,067</b>	<b>294,185</b>	<b>528,058</b>	<b>395,353</b>	<b>364,552</b>	<b>330,736</b>	<b>402,737</b>	<b>462,518</b>	<b>3,005,872</b>

(a) Includes separations for which age was not reported.

**Table 7.20: Separations, same day separations, patient days and average length of stay statistics by principal diagnosis in ICD-9-CM grouping, public psychiatric hospitals, Australia, 1997-98**

Principal diagnosis		Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)	ALOS (days) excluding same day
001-139	Infectious and parasitic diseases	7	0	0	<0.1	5,311	0.3	758.7	758.7
140-239	Neoplasms	6	0	0	<0.1	290	<0.1	48.3	48.3
240-279	Endocrine, nutritional, metabolic, immunity	3	0	0	<0.1	61	<0.1	20.3	20.3
280-289	Diseases of the blood & blood forming organs	1	0	0	<0.1	8	<0.1	8.0	8.0
290, 294.1, 331.0	Dementia	942	10	1	0.1	106,842	5.7	113.4	114.6
291-294	Other organic psychotic disorders <sup>(a)</sup>	1,061	76	7	0.1	166,871	9.0	157.3	169.3
295	Schizophrenic disorders	6,141	666	11	0.3	605,717	32.5	98.6	110.5
296.2-296.3	Major depressive disorder	1,871	313	17	0.1	43,281	2.3	23.1	27.6
296	Other affective psychoses <sup>(b)</sup>	2,189	39	2	0.1	129,983	7.0	59.4	60.4
297	Paranoid states	261	4	2	<0.1	26,477	1.4	101.4	103.0
298-299	Other psychoses	611	128	21	<0.1	12,622	0.7	20.7	25.9
300	Neurotic disorders	656	177	27	<0.1	11,886	0.6	18.1	24.4
301	Personality disorders	1,353	84	6	0.1	16,993	0.9	12.6	13.3
302	Sexual deviations and disorders	38	24	63	<0.1	242	<0.1	6.4	15.6
303	Alcohol dependence syndrome	1,125	73	6	0.1	15,484	0.8	13.8	14.6
304	Drug dependence	1,524	94	6	0.1	8,539	0.5	5.6	5.9
305	Non-dependent drug use disorder	444	74	17	<0.1	3,242	0.2	7.3	8.6
311	Depressive disorder, nec	266	7	3	<0.1	16,804	0.9	63.2	64.9
306-310,312-316	Other non-psychotic mental disorders	2,252	259	12	0.1	73,168	3.9	32.5	36.6
317-319	Mental retardation	93	3	3	<0.1	64,008	3.4	688.3	711.2
320-389	Nervous system and sense organs <sup>(c)</sup>	44	0	0	<0.1	22,135	1.2	503.1	503.1
390-459	Diseases of the circulatory system	6	0	0	<0.1	67	<0.1	11.2	11.2
460-519	Diseases of the respiratory system	3	0	0	<0.1	328	<0.1	109.3	109.3
520-579	Diseases of the digestive system	3	0	0	<0.1	214	<0.1	71.3	71.3
580-629	Diseases of the genitourinary system	3	1	33	<0.1	47	<0.1	15.7	23.0
630-677	Pregnancy, childbirth, puerperium	30	1	3	<0.1	455	<0.1	15.2	15.7
680-709	Skin and subcutaneous tissue	..	..	..	..	..	..	..	..
710-739	Muscoskeletal system and connective tissue	1	0	0	<0.1	1	<0.1	1.0	1.0
740-759	Congenital anomalies	1	0	0	<0.1	992	0.1	992.0	992.0
760-779	Conditions originating in the perinatal period	..	..	..	<0.1	..	..	..	..
780-799	Symptoms, signs and ill-defined conditions	46	5	11	<0.1	984	0.1	21.4	23.9
800-999	Injury and poisoning	49	3	6	<0.1	295	<0.1	6.0	6.3
V01-V82	Other reasons for contact with health services	844	271	32	<0.1	25,182	1.4	29.8	43.5
	Not reported	692	78	11	<0.1	50,267	2.7	40.1	44.1
<b>Total</b>		<b>22,566</b>	<b>2,390</b>	<b>11</b>	<b>1.2</b>	<b>1,408,796</b>	<b>75.6</b>	<b>62.4</b>	<b>69.7</b>

(a) Excludes *Dementia in conditions classified elsewhere* (294.1).

(b) Excludes *Major depressive disorder* (296.2-296.3).

(c) Excludes *Dementia* (331.0).

.. not applicable.



# 8 Principal and additional procedures for admitted patients

## Introduction

The *National Health Data Dictionary* defines a procedure as an intervention that is surgical in nature, carries a procedural risk, carries an anaesthetic risk, requires specialised training, or requires special facilities or equipment only available in an acute setting. The principal procedure is defined as the most significant procedure that was performed for treatment of the principal diagnosis. However, the *Dictionary* also states that when no procedure was performed for treatment of the principal diagnosis, other procedures can be reported as the principal procedure. In order, these are a procedure performed for treatment of an additional diagnosis, a diagnostic/exploratory procedure related to the principal diagnosis or a diagnostic/exploratory procedure related to an additional diagnosis. Procedures therefore encompass surgical procedures and also non-surgical investigative and therapeutic procedures such as X-rays and *chemotherapy*.

Most States and Territories use this *Dictionary* definition; however, Victoria only designates a procedure as the principal procedure if it was performed for treatment of the principal diagnosis. In order to achieve consistency with other jurisdictions, where a principal procedure was not provided by Victoria, the Institute has reported the first listed procedure as the principal procedure.

Procedures are not undertaken during all hospital admissions so only a proportion of the separation records includes principal (or additional) procedure data. For example, principal procedures were reported for only 40% of separations with a principal diagnosis within the *Infectious and parasitic diseases* chapter.

Principal and additional procedures are classified, coded and reported to the National Hospital Morbidity Database using the *Australian Version of the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)* (National Coding Centre 1996). This classification is hierarchical, with a small number of summary procedure chapters which are divided into 98 more specific procedure groupings (represented by 2-digit codes). These in turn, are divided into a larger number of very specific procedure categories represented by 3- and 4-digit codes. The tables and figures in this chapter use the codes and abbreviated descriptions of the ICD-9-CM procedure classification. Full descriptions of the categories are available in the ICD-9-CM publication.

Most of the information is presented using three methods of grouping records based on the ICD-9-CM procedure classification:

- ICD-9-CM procedure chapters—these 16 groups provide information aggregated at the ICD-9-CM chapter level (Figures 8.1 and 8.2);
- ICD-9-CM procedure groupings—these 65 groups were chosen to provide more detailed information than ICD-9-CM chapters, but still cover the entire procedure

classification at a manageable level (Tables 8.1 to 8.8). Tables 8.18 and 8.19 present counts of all procedures (principal and additional) using these groupings; and

- 3-digit ICD-9-CM groupings—about 900 categories describe procedures at a quite specific level. Detailed information is presented for the 30 of these groups with the highest number of separations (Tables 8.10 to 8.17) and summary information is provided for all of the groups (for which separations were reported) on the Internet at <http://www.aihw.gov.au/publications/health/ahs97-8.html> (Tables S8.1 and S8.2).

In addition, Table 8.9 presents information on the number of procedures reported (principal and additional procedures).

Tables are presented with summary separation, patient day and length of stay statistics for public and private hospitals, nationally and by State and Territory. National information on age group and sex distributions is also presented. The data on relative rankings of the various procedure groups (by numbers of separations or patient days) depend to some extent on the chosen groups of procedure codes.

Some data for private hospitals in Tasmania and the Australian Capital Territory have not been included in Tables 8.4, 8.6, 8.13, 8.15 and 8.19. These data were supplied but are not published, for confidentiality reasons. Western Australia, Victoria and Tasmania were not able to supply data on procedures for their public psychiatric hospitals.

Overall, there were 4.2 million separations for which a principal procedure was reported, 76% of total separations. Sixteen million patient days were reported for separations with a principal procedure, 70% of the total.

## ICD-9-CM chapters

Figures 8.1 and 8.2 provide a summary of the number of separations and patient days, by sector, reported for each of the ICD-9-CM procedure chapters.

The chapter with the highest number of separations in the public sector was *Miscellaneous diagnostic and therapeutic procedures*, followed by *Operations on the cardiovascular system* and *Operations on the digestive system*. In the private sector, *Operations on the digestive system* had the largest number of separations, followed by *Miscellaneous diagnostic and therapeutic procedures* and *Operations on the musculoskeletal system*.

The chapter with the highest number of patient days in the public sector was the *Miscellaneous diagnostic and therapeutic procedures* and *Operations on the digestive system*. In the private sector the highest number of patient days were reported for the *Miscellaneous diagnostic and therapeutic procedures* and *Operations on the digestive system* chapters.

For the public and private sectors combined, the two chapters with the most separations were *Miscellaneous diagnostic and therapeutic procedures* and *Operations on the digestive system*. The largest numbers of patient days were reported for *Miscellaneous diagnostic and therapeutic procedures* and *Operations on the digestive system*.

Principal procedures were reported for varying proportions of separations in the ICD-9-CM chapter principal diagnoses groups. High proportions of separations for the *Neoplasms* (93%, 349,935), *Diseases of the blood and blood-forming organs* (91%, 61,592), *Diseases of the nervous system and sense organs* (87%, 257,096) and *Diseases of the genitourinary system* (88%, 320,814) chapters had principal procedures reported. In contrast, principal procedures were reported for smaller proportions of separations with principal diagnoses in the *Mental disorders* (33%, 77,551), *Infectious and parasitic diseases* (39%, 31,146) and *Diseases of the respiratory system* (50%, 166,284) chapters.

## Broad procedure groupings

### Sector

Public hospitals accounted for 63% of the separations with reported principal procedures (2,673,149), although they accounted for 70% of the separations overall (Tables 8.1 and 8.2). Similarly, although 73% of overall patient days were in public hospitals, only 70% of patient days associated with principal procedures were in public hospitals (10,999,725). This reflected the higher proportion of separations in the private sector that were reported with a principal procedure, compared with the public sector. In public hospitals, 70% of total separations involved a principal procedure (2,673,149), and these separations were associated with 66% of total patient days (10,999,725) (Table 8.2). In contrast, in private hospitals, 87% of total separations involved a principal procedure (1,568,359), and these separations were associated with 79% of total patient days (4,760,435) (Table 8.2).

If *Miscellaneous diagnostic and therapeutic procedures* are not included (that is, procedures that are not 'operations' or obstetrical procedures), there was a total of 3,217,059 separations reported with a principal procedure. Of these, 1,817,732 separations were reported for same day stays and 1,399,327 were reported for overnight stays. The private sector reported a higher proportion of separations for 'same day procedures' than the public sector. The public sector reported 1,042,038 (55%) and 864,241 (45%) same day separations and overnight stay separations with a principal procedure respectively, and the private sector reported 775,694 (59%) and 535,086 (41%) separations respectively (Tables 8.1 and 8.2).

The group of principal procedures which accounted for a large number of separations in public hospitals was *Other operations on vessels* (390–399). The principal procedure which was reported for most of these separations was *Haemodialysis* (39.95); this was reported for 97% (378,466) of this group. *Other non-operative procedures* (990–999) was the second most frequently reported group; *Injection or infusion of cancer chemotherapeutic substance* (99.25) was the most commonly reported individual procedure (144,150, 48%).

In private hospitals the largest group of principal procedures was *Incision, excision and anastomosis of intestine* (450–459). The principal procedures which accounted for most of the separations in this group were diagnostic endoscopies (45.13, 45.16, 45.23, 45.25, 45.42: 258,508, 96%) of the group overall.

### States and Territories

Tables 8.3 to 8.6 contain detail on the pattern of hospital use in the States and Territories for the procedure groups, in both the public and private sector. These tables enable State by State comparisons of overall hospital use for the different procedure groups, and the share of separations between the private and public sector. For example, the proportion of total separations for *Operations on skull, brain and cerebral meninges* (010–029) in public hospitals (rather than private hospitals) was higher in New South Wales (88%, 2,477) than in Queensland (69%, 1,122). The proportion of total patient days for *Operations on appendix* (470–479) that occurred in private hospitals varied markedly by State, from 31% (4,545) in Queensland to 14% (4,040) in New South Wales.

## Age group and sex

In Tables 8.7 and 8.8, information on the number of separations by age group and principal procedure group is presented for males and females. These tables show a number of different patterns in the age distributions of separations for the various procedure groups. For example, patients admitted for *Reconstructive and other operations on middle and inner ear* (190–209) were mostly in the younger age groups, while the opposite was the case for *Operations on heart and pericardium* (370–379). Other groups of procedures had a peak in the middle age groups, for example *Operations on nose and nasal sinuses* (210–229) and *Incision, excision and anastomosis of intestine* (450–459).

These tables also indicate the relative importance of the procedure groups as causes of hospitalisation for each sex and age group. For example, males in the 15 to 24 years age group commonly had procedures in the *Operations on skin and subcutaneous tissue* (860–869) and *Operations on teeth, gums and alveoli* (230–249) groups. For females, the age group with the highest number of separations with a principal procedure was the 25 to 34 years age group. Older females were more frequently reported for principal procedure groups such as *Operations on lens* (130–139) and *Other operations on vessels* (390–399).

## Number of procedure codes

Table 8.9 presents information on the number of procedure codes (principal and additional) reported to the National Hospital Morbidity Database. There were marked differences between the States and Territories in the maximum number of procedures reported (for example, in the public sector, 31 procedures for Queensland and Tasmania and 10 for Northern Territory); however, with the exception of Northern Territory, the average number of procedure codes per separation varied little among the jurisdictions, for both the public and private sectors. The Institute requested a maximum of 31 codes so this may have restricted the number of codes reported by Queensland and Tasmania.

In the public sector 5% of records had five or more procedure codes, but in the private sector only 4% of records fell into this category. This may have been due to more complicated cases being treated in public hospitals, or differences in coding practices between the sectors.

## High volume procedures

Tables 8.10 to 8.17 present information on the most common principal procedures (at the 3-digit level of the ICD-9-CM classification).

Tables 8.10 and 8.11 contain summary separation, patient day and average length of stay statistics for the 30 procedures with the most separations in public and private hospitals. In the public sector, the most common principal procedure groups were *Other operations on vessels* (399) (97% of which, 378,466, were for *haemodialysis*, code 39.95) and *Injection or infusion of other therapeutic or prophylactic substance* (992) (70% of which, 144,150, were for chemotherapy, code 99.25).

For both of those the average length of stay was relatively short; the proportion of separations that were same day separations was 99% (373,889) and 76% (154,183) respectively. The highest numbers of patient days were reported for the *Diagnostic physical*

*therapy* (930) (554,580) for which the average length of stay was 11 days and for *Soft tissue x-ray of face, head, and neck* (870) (458,071) for which the average length of stay was 9 days.

In the private sector, the most frequent principal procedure was *Diagnostic procedure on small intestine* (451) (116,352) with the second most frequent being *Diagnostic procedures on large intestine* (452) (111,776). Diagnostic endoscopies comprised 98% (222,922) of these two groups, combined. The principal procedure with the highest number of patient days (254,375), *Joint replacement of lower extremity* (815), also had the longest average length of stay (14 days).

There was some variation between the States and Territories in the relative number of separations for the most common procedures (Tables 8.12 and 8.13). For example, in the public sector Western Australia had relatively low numbers of separations for *Extracapsular extraction of lens by fragmentation and aspiration technique* (134) (1,958 separations) and *Other physical therapy musculoskeletal manipulation* (932) (1,035 separations). The proportion of total separations for which *Other operations on the vessels* (399) was reported was greatest for the Northern Territory (34%). Information on the average lengths of stay by State and Territory is presented in Tables 8.14 and 8.15.

## Age and sex

There was little difference between males and females in the proportion of separations with principal procedures, with males recording 77% (1,958,092) and females recording 76% (2,283,347) (Tables 8.16 and 8.17). For both males and females, the two groups of principal procedures with the most separations were *Other operations on vessels* (399) and *Injection or infusion of other therapeutic or prophylactic substance* (992).

For males, the age group for which the highest number of separations with principal procedures was reported was the 65 to 74 years age group (390,590) (Table 8.16). However, there was a great variation in the age distribution for the different 3-digit procedure groups, with males under the age of 5 years being the most commonly reported for the *Respiratory therapy* group, for example. For females the age group with the largest number of separations with principal procedures was the 25 to 34 years age group (386,843) (Table 8.17). Older females were more frequently reported for principal procedure groups such as *Other operations on vessels* (399), *Injection or infusion of other therapeutic or prophylactic substance* (992) and *Extracapsular extraction of lens by fragmentation and aspiration technique* (134).

## Additional data

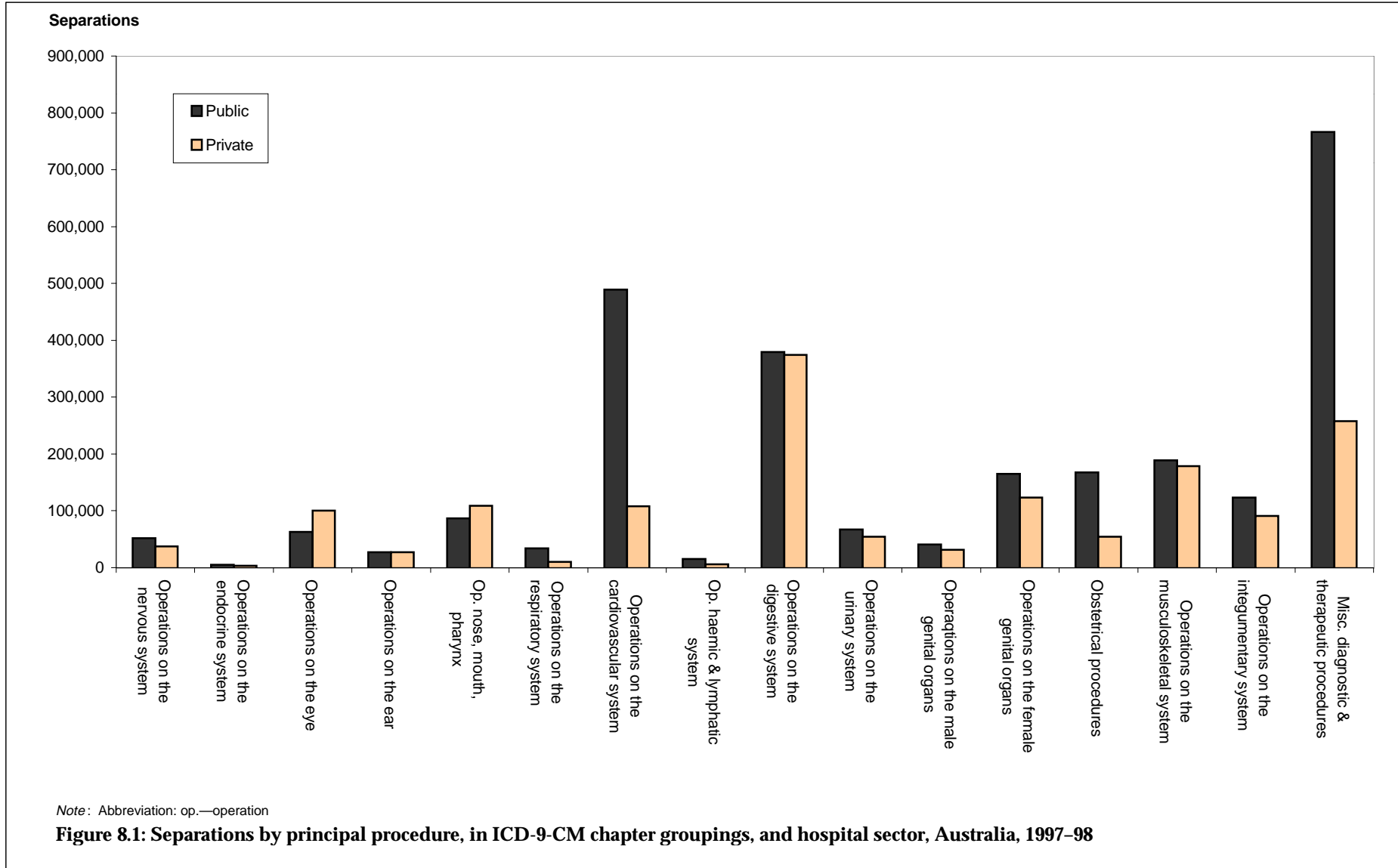
The accompanying tables on the Internet at <http://www.aihw.gov.au/publications/health/ahs97-8.html> provide national summary statistics for public and private hospitals for each 3-digit ICD-9-CM procedure code (as presented for the top 30 procedures in Tables 8.10 and 8.11). For confidentiality, the statistics for some codes in the private sector have been suppressed. The information was suppressed if there were fewer than 50 private hospital separations reported for the code and there were fewer than three reporting units (hospitals, or States or Territories where the hospitals were not individually identified), or there were three reporting units and one contributed more than 85% of the total separations, or two contributed more than 90% of the separations for the code.

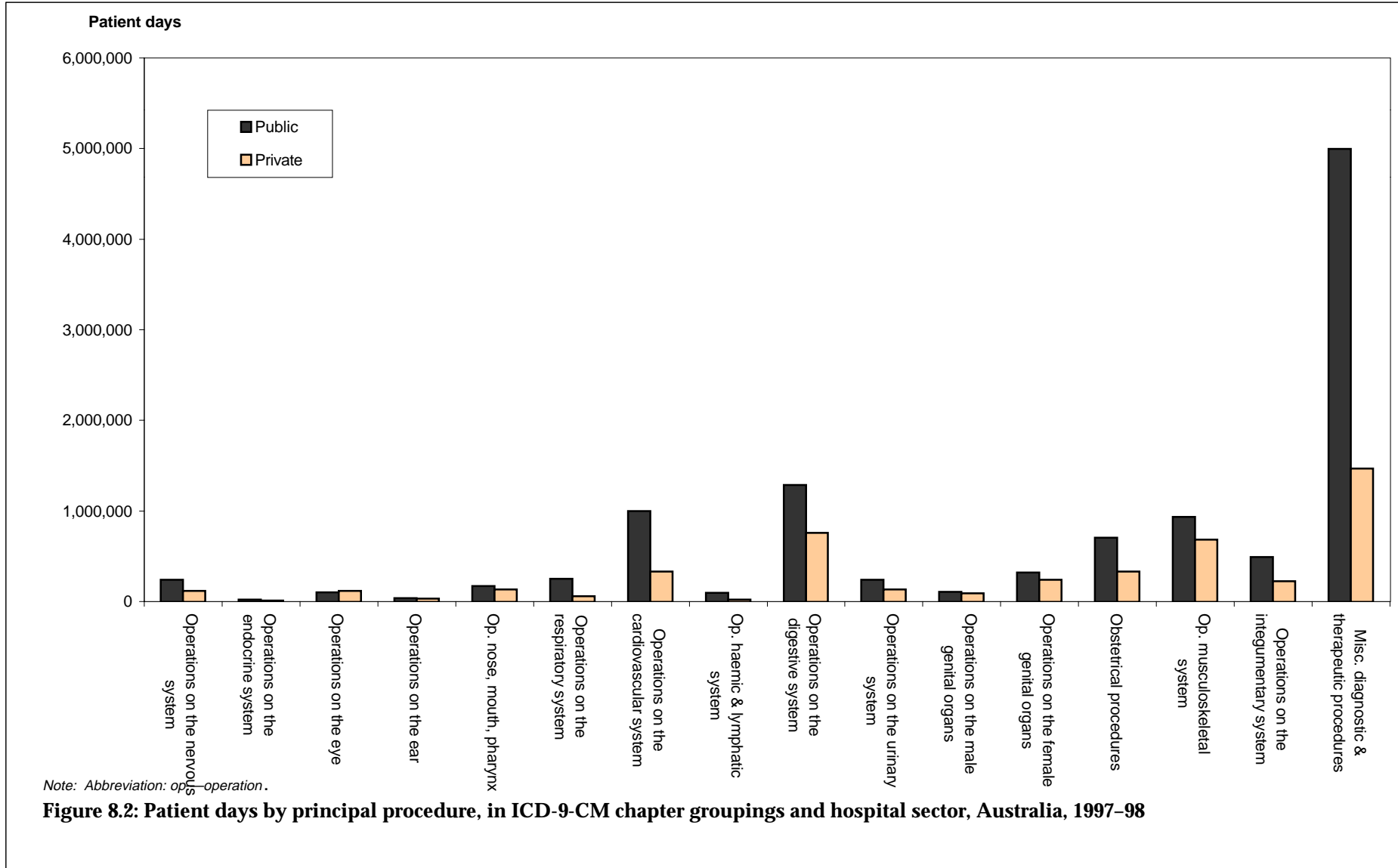
## Total procedures

Tables 8.18 and 8.19 provide counts of all the procedures (principal and additional) reported for 1997–98, by State and Territory for the public and private sectors. The totals are the total number of procedures, rather than the total number of separations or separations for which a procedure was reported. Counts of all procedures for groups such as *Physical and respiratory therapy, rehabilitation and related procedures* (930–939) (860,700), and *Other operations on vessels* (390–399) (436,078) are higher than counts of principal procedures (Table 8.1), indicating that these procedures were commonly reported as additional procedures.

The most commonly reported procedure group in public hospitals and private hospitals combined was *Physical and respiratory therapy, rehabilitation and related procedures* (930–939) (1,163,765). The most frequently reported procedure within this group was *Other diagnostic physical therapy* (93.09), 14% of this group (163,809).

In private hospitals the largest code of procedures was *Incision, excision and anastomosis of intestine* (450–459) (330,676). The procedure which accounted for most of these in private hospitals was *Oesophagogastroduodenoscopy with closed biopsy* (code 45.16), 31% of the group overall (101,264). The second largest group for public and private hospitals combined (619,850) and second in public hospitals (465,680) was *Other nonoperative procedures* (990–999). The single procedure which accounted for most of these was *Injection or infusion of cancer chemotherapeutic substance* (code 99.25), 36% of the group overall (222,602).







**Table 8.1: Separation, same day separation, patient day and average length of stay statistics by principal procedure in ICD-9-CM groupings, public hospitals, Australia, 1997–98**

Principal procedure	Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)	ALOS (days) excluding same day
010–029 Op. on skull, brain & cerebral meninges	7,084	146	2.1	0.4	89,907	4.8	12.7	12.9
030–039 Op. on spinal cord & spinal canal structures	24,213	7,903	32.6	1.3	108,110	5.8	4.5	6.1
040–059 Op. on cranial, peripheral, sympathetic nerves, ganglia	20,280	13,231	65.2	1.1	40,013	2.1	2.0	3.8
060–079 Op. on thyroid, parathyroid & other endocrine glands	5,433	158	2.9	0.3	23,177	1.2	4.3	4.4
080–129, 140–169 Op. on the eye (excluding lens)	26,174	15,078	57.6	1.4	55,929	3.0	2.1	3.7
130–139 Op. on lens	36,879	27,245	73.9	2.0	43,691	2.3	1.2	1.7
180–189 Op. on external ear	6,542	4,386	67.0	0.4	10,371	0.6	1.6	2.8
190–209 Reconstructive & other op. on middle & inner ear	21,024	15,163	72.1	1.1	26,229	1.4	1.2	1.9
210–229 Op. on nose & nasal sinuses	24,095	9,607	39.9	1.3	38,759	2.1	1.6	2.0
230–249 Operations on teeth, gums & alveoli	26,814	23,583	88.0	1.4	67,886	3.6	2.5	13.7
250–269 Op. on tongue, salivary glands & ducts	3,708	1,662	44.8	0.2	9,787	0.5	2.6	4.0
270–279 Other operations on mouth & face	6,760	3,640	53.8	0.4	14,992	0.8	2.2	3.6
280–299 Op. on tonsils, adenoids & pharynx	25,033	2,976	11.9	1.3	39,484	2.1	1.6	1.7
300–319 Op. on larynx & trachea	6,308	2,456	38.9	0.3	75,108	4.0	11.9	18.9
320–339 Op. on lung & bronchus	16,575	8,538	51.5	0.9	86,590	4.6	5.2	9.7
340–349 Op. on chest wall, pleura, mediastinum & diaphragm	11,018	1,355	12.3	0.6	89,348	4.8	8.1	9.1
350–359 Op. on valves & septa of heart	3,695	47	1.3	0.2	42,963	2.3	11.6	11.8
360–369 Op. on vessels of heart	20,312	574	2.8	1.1	145,362	7.8	7.2	7.3
370–379 Other op. on heart & pericardium	45,482	17,383	38.2	2.4	150,224	8.1	3.3	4.7
380–389 Incision, excision & occlusion of vessels	30,148	8,517	28.3	1.6	149,535	8.0	5.0	6.5
390–399 Other op. on vessels	389,643	374,340	96.1	20.9	512,278	27.5	1.3	9.0
400–419 Op. on the haemic & lymphatic system	15,669	7,154	45.7	0.8	98,384	5.3	6.3	10.7
420–429 Op. on oesophagus	8,143	4,694	57.6	0.4	28,292	1.5	3.5	6.8
430–449 Op. on stomach	13,592	5,268	38.8	0.7	111,041	6.0	8.2	12.7
450–459 Incision, excision & anastomosis of intestine	198,679	154,847	77.9	10.7	528,125	28.4	2.7	8.5
460–469 Other op. on intestine	3,703	185	5.0	0.2	45,207	2.4	12.2	12.8
470–479 Op. on appendix	18,933	78	0.4	1.0	66,031	3.5	3.5	3.5
480–499 Op. on rectum, rectosigmoid, perirectal tissue & anus	25,191	9,816	39.0	1.4	80,848	4.3	3.2	4.6
500–529 Op. on liver, gallbladder, biliary tract & pancreas	43,450	7,661	17.6	2.3	196,452	10.5	4.5	5.3
530–539 Repair of hernia	32,472	7,801	24.0	1.7	78,230	4.2	2.4	2.9
540–549 Other op. on abdominal region	35,383	17,182	48.6	1.9	149,913	8.0	4.2	7.3
550–559 Op. on kidney	7,947	970	12.2	0.4	54,641	2.9	6.9	7.7
560–599 Op. on the urinary bladder & other urinary tract	59,381	31,727	53.4	3.2	187,878	10.1	3.2	5.6

(continued)

**Table 8.1 (continued): Separation, same day separation, patient day and average length of stay statistics by principal procedure in ICD-9-CM groupings, public hospitals, Australia, 1997–98**

Principal procedure	Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)	ALOS (days) excluding same day
600–609 Op. on prostate & seminal vesicles	12,237	909	7.4	0.7	67,510	3.6	5.5	5.9
610–629 Op. on scrotum, tunica vaginalis & testes	7,187	2,845	39.6	0.4	13,267	0.7	1.8	2.4
630–639 Op. on spermatic cord, epididymis & vas deferens	9,853	8,306	84.3	0.5	11,065	0.6	1.1	1.8
640–649 Op. on penis	11,581	9,728	84.0	0.6	14,890	0.8	1.3	2.8
650–669 Op. on ovary & fallopian tubes	25,709	13,948	54.3	1.4	53,962	2.9	2.1	3.4
670–676 Op. on cervix	25,436	23,316	91.7	1.4	29,182	1.6	1.1	2.8
680–689 Other incision & excision of uterus	33,319	11,690	35.1	1.8	120,672	6.5	3.6	5.0
690–699 Other op. on uterus & supporting structures	66,909	52,028	77.8	3.6	77,280	4.1	1.2	1.7
700–719 Op. on vagina, cul-de-sac, vulva & perineum	13,815	5,524	40.0	0.7	41,012	2.2	3.0	4.3
720–729 Forceps, vacuum & breech delivery	16,999	210	1.2	0.9	80,677	4.3	4.7	4.8
730–739 Other procedures inducing or assisting delivery	59,207	2,913	4.9	3.2	213,203	11.4	3.6	3.7
740–749 Caesarean section & removal of foetus	35,430	106	0.3	1.9	229,806	12.3	6.5	6.5
750–759 Other obstetric operations	56,092	7,205	12.8	3.0	179,745	9.7	3.2	3.5
760–769 Op. on facial bones & joints	5,388	874	16.2	0.3	18,572	1.0	3.4	3.9
770–789 Op. on bones, except facial bone	26,505	10,294	38.8	1.4	104,083	5.6	3.9	5.8
790–799 Reduction of fracture & dislocation	60,738	9,733	16.0	3.3	290,798	15.6	4.8	5.5
800–809 Incision & excision of joint structures	29,260	17,243	58.9	1.6	80,534	4.3	2.8	5.3
810–819 Repair & plastic op. on joint structures	37,432	5,087	13.6	2.0	306,540	16.5	8.2	9.3
820–839 Op. on muscle, tendon, fascia & bursa	24,020	10,338	43.0	1.3	56,512	3.0	2.4	3.4
840–849 Other procedures on musculoskeletal system	5,813	572	9.8	0.3	78,818	4.2	13.6	14.9
850–859 Op. on the breast	21,285	10,142	47.6	1.1	57,727	3.1	2.7	4.3
860–869 Op. on skin & subcutaneous tissue	102,301	53,656	52.4	5.5	431,701	23.2	4.2	7.8
870–889 Diagnostic radiology & related techniques	129,224	23,832	18.4	6.9	900,680	48.4	7.0	8.3
890–919 Interview, evaluation, consultation & other examination	19,368	3,620	18.7	1.0	120,756	6.5	6.2	7.4
920–929 Diagnostic & therapeutic intervention	57,357	3,512	6.1	3.1	546,618	29.4	9.5	10.1
930–939 Physical & respiratory therapy, rehabilitation & related	159,725	26,225	16.4	8.6	1,691,002	90.8	10.6	12.5
940–949 Procedures related to the psyche	58,843	11,318	19.2	3.2	623,587	33.5	10.6	12.9
950–954 Ophthalmologic & otologic diagnosis & treatment	1,601	1,405	87.8	0.1	3,081	0.2	1.9	8.6
960–967 Nonoperative intubation & irrigation	29,566	9,096	30.8	1.6	339,913	18.3	11.5	16.2
970–978 Replacement & removal of therapeutic appliances	8,229	5,611	68.2	0.4	25,235	1.4	3.1	7.5
980–985 Nonoperative removal of foreign body or calculus	5,269	3,594	68.2	0.3	6,942	0.4	1.3	2.0
990–999 Other nonoperative procedures	297,688	203,714	68.4	16.0	739,570	39.7	2.5	5.7
No principal procedure or not reported	1,096,949	290,764	26.5	58.9	5,560,704	298.6	5.1	6.5
<b>Total</b>	<b>3,770,098</b>	<b>1,624,729</b>	<b>43.1</b>	<b>202.4</b>	<b>16,560,429</b>	<b>889.2</b>	<b>4.4</b>	<b>7.0</b>

Note: Abbreviations: ALOS—average length of stay, op.—operation.

**Table 8.2: Separation, same day separation, patient day and average length of stay statistics by principal procedure in ICD-9-CM groupings, private hospitals, Australia, 1997–98**

Principal procedure	Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)	ALOS (days) excluding same day
010–029 Op. on skull, brain & cerebral meninges	1,703	33	1.9	0.1	19,272	1.0	11.3	11.5
030–039 Op. on spinal cord & spinal canal structures	15,632	7,130	45.6	0.8	63,825	3.5	4.1	6.7
040–059 Op. on cranial, peripheral, sympathetic nerves, ganglia	20,138	13,266	65.9	1.1	32,265	1.8	1.6	2.8
060–079 Op. on thyroid, parathyroid & other endocrine glands	3,414	53	1.6	0.2	12,987	0.7	3.8	3.8
080–129, 140–169 Op. on the eye (excluding lens)	28,159	19,995	71.0	1.5	35,518	1.9	1.3	1.9
130–139 Op. on lens	72,595	51,044	70.3	3.9	81,956	4.4	1.1	1.4
180–189 Op. on external ear	6,681	4,664	69.8	0.4	8,267	0.4	1.2	1.8
190–209 Reconstructive & other op. on middle & inner ear	20,708	16,722	80.8	1.1	23,335	1.3	1.1	1.7
210–229 Op. on nose & nasal sinuses	30,440	11,679	38.4	1.7	41,917	2.3	1.4	1.6
230–249 Operations on teeth, gums & alveoli	53,390	43,310	81.1	2.9	56,290	3.1	1.1	1.3
250–269 Op. on tongue, salivary glands & ducts	2,398	1,003	41.8	0.1	5,599	0.3	2.3	3.3
270–279 Other operations on mouth & face	4,581	3,461	75.6	0.2	6,035	0.3	1.3	2.3
280–299 Op. on tonsils, adenoids & pharynx	18,095	2,615	14.5	1.0	23,105	1.3	1.3	1.3
300–319 Op. on larynx & trachea	2,722	1,872	68.8	0.1	7,846	0.4	2.9	7.0
320–339 Op. on lung & bronchus	4,997	2,515	50.3	0.3	28,735	1.6	5.8	10.6
340–349 Op. on chest wall, pleura, mediastinum & diaphragm	2,780	398	14.3	0.2	22,132	1.2	8.0	9.1
350–359 Op. on valves & septa of heart	1,480	41	2.8	0.1	19,045	1.0	12.9	13.2
360–369 Op. on vessels of heart	12,615	791	6.3	0.7	94,644	5.1	7.5	7.9
370–379 Other op. on heart & pericardium	26,443	7,801	29.5	1.4	63,083	3.4	2.4	3.0
380–389 Incision, excision & occlusion of vessels	17,624	3,068	17.4	1.0	69,087	3.7	3.9	4.5
390–399 Other op. on vessels	50,058	44,792	89.5	2.7	86,938	4.7	1.7	8.0
400–419 Op. on the haemic & lymphatic system	5,868	2,815	48.0	0.3	23,887	1.3	4.1	6.9
420–429 Op. on oesophagus	4,980	3,966	79.6	0.3	10,907	0.6	2.2	6.8
430–449 Op. on stomach	14,679	10,863	74.0	0.8	42,331	2.3	2.9	8.2
450–459 Incision, excision & anastomosis of intestine	269,335	246,471	91.5	14.6	410,658	22.3	1.5	7.2
460–469 Other op. on intestine	1,610	142	8.8	0.1	15,918	0.9	9.9	10.7
470–479 Op. on appendix	5,264	34	0.6	0.3	18,104	1.0	3.4	3.5
480–499 Op. on rectum, rectosigmoid, perirectal tissue & anus	19,089	8,272	43.3	1.0	64,721	3.5	3.4	5.2
500–529 Op. on liver, gallbladder, biliary tract & pancreas	20,235	1,804	8.9	1.1	80,966	4.4	4.0	4.3
530–539 Repair of hernia	26,454	3,158	11.9	1.4	67,277	3.6	2.5	2.8
540–549 Other op. on abdominal region	12,668	6,242	49.3	0.7	47,185	2.6	3.7	6.4
550–559 Op. on kidney	2,313	137	5.9	0.1	15,805	0.9	6.8	7.2
560–599 Op. on the urinary bladder & other urinary tract	52,375	32,540	62.1	2.8	118,873	6.4	2.3	4.4

(continued)

**Table 8.2 (continued): Separation, same day separation, patient day and average length of stay statistics by principal procedure in ICD-9-CM groupings, private hospitals, Australia, 1997-98**

Principal procedure	Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)	ALOS (days) excluding same day
600-609 Op. on prostate & seminal vesicles	14,036	2,279	16.2	0.8	64,779	3.5	4.6	5.3
610-629 Op. on scrotum, tunica vaginalis & testes	3,091	1,263	40.9	0.2	5,582	0.3	1.8	2.4
630-639 Op. on spermatic cord, epididymis & vas deferens	9,071	7,333	80.8	0.5	9,988	0.5	1.1	1.5
640-649 Op. on penis	5,634	4,247	75.4	0.3	8,979	0.5	1.6	3.4
650-669 Op. on ovary & fallopian tubes	13,385	7,103	53.1	0.7	27,959	1.5	2.1	3.3
670-676 Op. on cervix	8,278	7,450	90.0	0.4	9,256	0.5	1.1	2.2
680-689 Other incision & excision of uterus	26,167	10,080	38.5	1.4	100,965	5.5	3.9	5.6
690-699 Other op. on uterus & supporting structures	65,856	61,209	92.9	3.6	69,833	3.8	1.1	1.9
700-719 Op. on vagina, cul-de-sac, vulva & perineum	9,320	3,369	36.1	0.5	34,025	1.8	3.7	5.2
720-729 Forceps, vacuum & breech delivery	8,761	18	0.2	0.5	54,718	3.0	6.2	6.3
730-739 Other procedures inducing or assisting delivery	16,789	144	0.9	0.9	89,527	4.9	5.3	5.4
740-749 Caesarean section & removal of foetus	15,738	32	0.2	0.9	120,270	6.5	7.6	7.7
750-759 Other obstetric operations	13,538	435	3.2	0.7	68,121	3.7	5.0	5.2
760-769 Op. on facial bones & joints	2,827	618	21.9	0.2	6,640	0.4	2.3	2.7
770-789 Op. on bones, except facial bone	24,036	8,516	35.4	1.3	66,808	3.6	2.8	3.8
790-799 Reduction of fracture & dislocation	15,146	2,905	19.2	0.8	73,961	4.0	4.9	5.8
800-809 Incision & excision of joint structures	52,603	29,868	56.8	2.9	109,866	6.0	2.1	3.5
810-819 Repair & plastic op. on joint structures	60,026	12,806	21.3	3.3	366,574	19.9	6.1	7.5
820-839 Op. on muscle, tendon, fascia & bursa	22,083	9,967	45.1	1.2	41,037	2.2	1.9	2.6
840-849 Other procedures on musculoskeletal system	1,950	342	17.5	0.1	20,021	1.1	10.3	12.2
850-859 Op. on the breast	23,662	9,448	39.9	1.3	56,645	3.1	2.4	3.3
860-869 Op. on skin & subcutaneous tissue	67,260	43,565	64.8	3.6	168,347	9.1	2.5	5.3
870-889 Diagnostic radiology & related techniques	34,547	4,813	13.9	1.9	216,129	11.7	6.3	7.1
890-919 Interview, evaluation, consultation & other examination	14,635	3,023	20.7	0.8	30,899	1.7	2.1	2.4
920-929 Diagnostic & therapeutic intervention	10,544	130	1.2	0.6	125,368	6.8	11.9	12.0
930-939 Physical & respiratory therapy, rehabilitation & related	53,483	13,419	25.1	2.9	575,620	31.2	10.8	14.0
940-949 Procedures related to the psyche	31,559	17,622	55.8	1.7	268,309	14.6	8.5	18.0
950-954 Ophthalmologic & otologic diagnosis & treatment	145	114	78.6	<0.1	339	<0.1	2.3	7.3
960-967 Nonoperative intubation & irrigation	5,407	2,708	50.1	0.3	35,713	1.9	6.6	12.2
970-978 Replacement & removal of therapeutic appliances	3,495	2,502	71.6	0.2	7,374	0.4	2.1	4.9
980-985 Nonoperative removal of foreign body or calculus	3,952	2,751	69.6	0.2	4,600	0.2	1.2	1.5
990-999 Other nonoperative procedures	99,812	74,614	74.8	5.4	203,670	11.0	2.0	5.1
No principal procedure or not reported	224,617	55,533	24.7	12.2	1,244,492	67.5	5.5	7.0
<b>Total</b>	<b>1,792,976</b>	<b>952,923</b>	<b>53.1</b>	<b>97.3</b>	<b>6,004,927</b>	<b>325.7</b>	<b>3.3</b>	<b>6.0</b>

Note: Abbreviations: ALOS—average length of stay, op.—operation.

**Table 8.3: Separations by principal procedure in ICD-9-CM groupings, public hospitals, States and Territories, 1997-98**

Principal procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
010-029 Op. on skull, brain & cerebral meninges	2,477	1,929	1,122	722	507	151	135	41	7,084
030-039 Op. on spinal cord & spinal canal structures	7,876	5,160	4,479	2,714	2,552	643	414	375	24,213
040-059 Op. on cranial, peripheral, sympathetic nerves, ganglia	6,441	4,995	3,494	2,176	2,278	510	235	151	20,280
060-079 Op. on thyroid, parathyroid & other endocrine glands	2,134	1,363	977	339	378	133	73	36	5,433
080-129, 140-169 Op. on the eye (excluding lens)	8,273	7,214	4,740	2,393	2,799	337	212	206	26,174
130-139 Op. on lens	12,357	11,196	5,174	3,130	4,151	191	373	307	36,879
180-189 Op. on external ear	1,752	1,524	1,827	563	628	137	76	35	6,542
190-209 Reconstructive & other op. on middle & inner ear	5,934	6,339	2,926	2,025	2,722	331	467	280	21,024
210-229 Op. on nose & nasal sinuses	6,599	7,185	4,458	1,923	2,987	393	419	131	24,095
230-249 Operations on teeth, gums & alveoli	6,536	7,392	5,632	2,638	2,838	878	503	397	26,814
250-269 Op. on tongue, salivary glands & ducts	1,312	901	691	327	314	73	65	25	3,708
270-279 Other operations on mouth & face	1,996	1,697	1,498	666	616	121	105	61	6,760
280-299 Op. on tonsils, adenoids & pharynx	7,342	7,515	4,603	1,777	2,822	416	434	124	25,033
300-319 Op. on larynx & trachea	2,178	1,471	1,355	408	684	86	87	39	6,308
320-339 Op. on lung & bronchus	5,389	4,075	3,253	1,438	1,589	514	200	117	16,575
340-349 Op. on chest wall, pleura, mediastinum & diaphragm	3,690	2,685	2,087	1,047	955	234	204	116	11,018
350-359 Op. on valves & septa of heart	1,204	1,038	867	255	222	101	8	0	3,695
360-369 Op. on vessels of heart	7,682	5,535	2,426	2,069	1,822	709	69	0	20,312
370-379 Other op. on heart & pericardium	17,485	9,693	6,545	4,558	4,815	789	1,570	27	45,482
380-389 Incision, excision & occlusion of vessels	8,254	8,387	6,299	2,490	3,257	787	490	184	30,148
390-399 Other op. on vessels	115,291	108,503	60,381	38,957	28,007	9,564	11,265	17,675	389,643
400-419 Op. on the haemic & lymphatic system	4,756	3,932	3,311	1,595	1,070	451	464	90	15,669
420-429 Op. on oesophagus	2,796	2,115	1,220	674	896	257	127	58	8,143
430-449 Op. on stomach	6,240	3,035	2,142	797	947	200	149	82	13,592
450-459 Incision, excision & anastomosis of intestine	66,511	47,525	33,296	22,569	18,995	4,539	3,600	1,644	198,679
460-469 Other op. on intestine	1,436	818	695	288	294	94	52	26	3,703
470-479 Op. on appendix	6,597	4,934	3,168	1,995	1,266	361	409	203	18,933
480-499 Op. on rectum, rectosigmoid, perirectal tissue & anus	9,146	6,169	4,041	2,328	2,460	484	382	181	25,191
500-529 Op. on liver, gallbladder, biliary tract & pancreas	15,884	10,967	7,170	3,620	3,790	926	831	262	43,450
530-539 Repair of hernia	10,870	8,352	6,167	2,751	3,011	603	479	239	32,472
540-549 Other op. on abdominal region	12,226	8,486	6,922	3,353	2,555	679	737	425	35,383
550-559 Op. on kidney	2,851	1,955	1,189	694	801	170	170	117	7,947
560-599 Op. on the urinary bladder & other urinary tract	20,238	13,395	9,748	6,748	6,362	1,758	620	512	59,381

*(continued)*

**Table 8.3 (continued): Separations by principal procedure in ICD-9-CM groupings, public hospitals, States and Territories, 1997–98**

Principal procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
600–609 Op. on prostate & seminal vesicles	4,089	3,860	1,487	843	1,262	410	251	35	12,237
610–629 Op. on scrotum, tunica vaginalis & testes	2,303	1,866	1,245	689	649	225	145	65	7,187
630–639 Op. on spermatic cord, epididymis & vas deferens	3,499	2,797	929	1,099	1,320	127	30	52	9,853
640–649 Op. on penis	4,510	3,348	1,062	1,015	1,210	158	85	193	11,581
650–669 Op. on ovary & fallopian tubes	7,879	7,422	3,777	2,998	2,404	523	387	319	25,709
670–676 Op. on cervix	5,645	6,414	6,958	1,357	4,082	377	237	366	25,436
680–689 Other incision & excision of uterus	11,439	8,280	5,655	2,781	3,701	708	518	237	33,319
690–699 Other op. on uterus & supporting structures	18,866	20,660	7,911	6,231	9,488	1,324	830	1,599	66,909
700–719 Op. on vagina, cul-de-sac, vulva & perineum	4,727	3,673	2,137	1,354	1,375	271	163	115	13,815
720–729 Forceps, vacuum & breech delivery	6,005	4,496	2,138	1,977	1,486	393	361	143	16,999
730–739 Other procedures inducing or assisting delivery	20,675	14,262	11,386	4,677	5,516	1,103	1,005	583	59,207
740–749 Caesarean section & removal of foetus	12,006	8,507	6,710	3,409	2,949	687	586	576	35,430
750–759 Other obstetric operations	18,860	11,421	12,971	4,933	5,570	907	745	685	56,092
760–769 Op. on facial bones & joints	1,522	1,076	1,206	539	655	117	136	137	5,388
770–789 Op. on bones, except facial bone	8,734	6,779	5,037	2,145	2,260	664	604	282	26,505
790–799 Reduction of fracture & dislocation	22,042	14,281	10,735	5,800	4,761	1,225	1,065	829	60,738
800–809 Incision & excision of joint structures	8,400	7,740	5,391	2,501	3,627	636	615	350	29,260
810–819 Repair & plastic op. on joint structures	11,945	9,233	6,368	3,752	4,168	813	814	339	37,432
820–839 Op. on muscle, tendon, fascia & bursa	7,649	6,167	4,447	2,255	2,297	518	396	291	24,020
840–849 Other procedures on musculoskeletal system	1,807	1,279	1,130	679	582	141	104	91	5,813
850–859 Op. on the breast	7,027	6,183	3,228	2,065	1,815	432	331	204	21,285
860–869 Op. on skin & subcutaneous tissue	29,560	21,789	26,734	9,972	9,917	1,921	1,140	1,268	102,301
870–889 Diagnostic radiology & related techniques	46,259	30,906	23,731	12,264	10,311	3,243	1,364	1,146	129,224
890–919 Interview, evaluation, consultation & other examination	6,168	3,828	3,764	2,625	2,622	309	21	31	19,368
920–929 Diagnostic & therapeutic intervention	23,379	16,665	7,784	3,664	3,320	1,001	1,083	461	57,357
930–939 Physical & respiratory therapy, rehabilitation & related	61,534	35,875	30,410	13,355	11,843	3,970	1,558	1,180	159,725
940–949 Procedures related to the psyche	21,147	10,978	12,043	6,807	5,365	1,510	658	335	58,843
950–954 Ophthalmologic & otologic diagnosis & treatment	403	272	258	89	559	4	1	15	1,601
960–967 Nonoperative intubation & irrigation	7,496	6,871	7,926	2,885	2,941	663	451	333	29,566
970–978 Replacement & removal of therapeutic appliances	2,353	2,280	1,638	928	708	156	107	59	8,229
980–985 Nonoperative removal of foreign body or calculus	1,779	1,260	1,028	655	422	42	34	49	5,269
990–999 Other nonoperative procedures	90,956	81,596	47,942	30,590	31,469	8,324	6,163	648	297,688
No principal procedure or not reported	400,381	249,303	216,276	89,403	96,738	19,867	9,763	15,218	1,096,949
<b>Total</b>	<b>1,272,797</b>	<b>928,847</b>	<b>685,345</b>	<b>346,363</b>	<b>346,782</b>	<b>80,389</b>	<b>57,175</b>	<b>52,400</b>	<b>3,770,098</b>

Note: Abbreviation: op.—operation.

**Table 8.4: Separations by principal procedure in ICD-9-CM groupings, private hospitals, States and Territories, 1997-98**

Principal procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
010-029 Op. on skull, brain & cerebral meninges	343	509	507	97	142	n.p.	n.p.	n.a.	1,703
030-039 Op. on spinal cord & spinal canal structures	3,769	4,630	2,032	2,555	2,035	n.p.	n.p.	n.a.	15,632
040-059 Op. on cranial, peripheral, sympathetic nerves, ganglia	6,194	5,147	3,389	2,651	1,938	n.p.	n.p.	n.a.	20,138
060-079 Op. on thyroid, parathyroid & other endocrine glands	1,084	846	697	341	273	n.p.	n.p.	n.a.	3,414
080-129, 140-169 Op. on the eye (excluding lens)	10,179	5,889	6,829	2,457	1,499	n.p.	n.p.	n.a.	28,159
130-139 Op. on lens	26,646	15,820	18,592	5,402	3,856	n.p.	n.p.	n.a.	72,595
180-189 Op. on external ear	2,324	1,471	1,474	528	669	n.p.	n.p.	n.a.	6,681
190-209 Reconstructive & other op. on middle & inner ear	5,760	5,664	3,731	1,900	2,748	n.p.	n.p.	n.a.	20,708
210-229 Op. on nose & nasal sinuses	9,849	7,050	6,322	2,517	3,633	n.p.	n.p.	n.a.	30,440
230-249 Operations on teeth, gums & alveoli	14,735	15,086	10,191	6,371	5,218	n.p.	n.p.	n.a.	53,390
250-269 Op. on tongue, salivary glands & ducts	771	608	444	265	212	n.p.	n.p.	n.a.	2,398
270-279 Other operations on mouth & face	1,581	1,065	958	328	466	n.p.	n.p.	n.a.	4,581
280-299 Op. on tonsils, adenoids & pharynx	5,441	3,982	4,134	1,898	1,806	n.p.	n.p.	n.a.	18,095
300-319 Op. on larynx & trachea	855	698	579	255	243	n.p.	n.p.	n.a.	2,722
320-339 Op. on lung & bronchus	905	1,222	1,688	443	470	n.p.	n.p.	n.a.	4,997
340-349 Op. on chest wall, pleura, mediastinum & diaphragm	568	805	716	273	258	n.p.	n.p.	n.a.	2,780
350-359 Op. on valves & septa of heart	479	453	354	69	125	n.p.	n.p.	n.a.	1,480
360-369 Op. on vessels of heart	4,545	4,079	2,406	622	929	n.p.	n.p.	n.a.	12,615
370-379 Other op. on heart & pericardium	10,294	6,311	5,925	1,959	1,460	n.p.	n.p.	n.a.	26,443
380-389 Incision, excision & occlusion of vessels	4,913	5,439	3,770	1,269	1,324	n.p.	n.p.	n.a.	17,624
390-399 Other op. on vessels	12,400	17,854	8,906	2,115	8,632	n.p.	n.p.	n.a.	50,058
400-419 Op. on the haemic & lymphatic system	1,253	1,331	2,141	488	344	n.p.	n.p.	n.a.	5,868
420-429 Op. on oesophagus	1,374	1,393	1,201	248	541	n.p.	n.p.	n.a.	4,980
430-449 Op. on stomach	7,149	4,166	2,219	440	526	n.p.	n.p.	n.a.	14,679
450-459 Incision, excision & anastomosis of intestine	91,985	75,335	60,281	18,908	15,825	n.p.	n.p.	n.a.	269,335
460-469 Other op. on intestine	430	431	434	118	115	n.p.	n.p.	n.a.	1,610
470-479 Op. on appendix	1,203	1,353	1,358	639	416	n.p.	n.p.	n.a.	5,264
480-499 Op. on rectum, rectosigmoid, perirectal tissue & anus	6,957	4,674	3,666	1,571	1,431	n.p.	n.p.	n.a.	19,089
500-529 Op. on liver, gallbladder, biliary tract & pancreas	6,524	5,033	4,393	1,733	1,695	n.p.	n.p.	n.a.	20,235
530-539 Repair of hernia	8,810	6,597	5,488	2,234	2,016	n.p.	n.p.	n.a.	26,454
540-549 Other op. on abdominal region	3,895	2,900	3,085	1,142	841	n.p.	n.p.	n.a.	12,668
550-559 Op. on kidney	623	679	436	234	176	n.p.	n.p.	n.a.	2,313
560-599 Op. on the urinary bladder & other urinary tract	18,250	14,179	9,776	4,315	3,649	n.p.	n.p.	n.a.	52,375

*(continued)*

**Table 8.4 (continued): Separations by principal procedure in ICD-9-CM groupings, private hospitals, States and Territories, 1997–98**

Principal procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
600–609 Op. on prostate & seminal vesicles	4,186	4,638	2,363	1,027	919	n.p.	n.p.	n.a.	14,036
610–629 Op. on scrotum, tunica vaginalis & testes	909	796	647	286	228	n.p.	n.p.	n.a.	3,091
630–639 Op. on spermatic cord, epididymis & vas deferens	3,547	2,397	1,280	755	654	n.p.	n.p.	n.a.	9,071
640–649 Op. on penis	2,065	1,313	1,005	589	347	n.p.	n.p.	n.a.	5,634
650–669 Op. on ovary & fallopian tubes	4,336	3,244	2,775	1,318	962	n.p.	n.p.	n.a.	13,385
670–676 Op. on cervix	2,936	2,205	1,541	692	448	n.p.	n.p.	n.a.	8,278
680–689 Other incision & excision of uterus	8,969	5,605	5,458	2,403	2,510	n.p.	n.p.	n.a.	26,167
690–699 Other op. on uterus & supporting structures	28,497	15,536	10,001	7,145	2,584	n.p.	n.p.	n.a.	65,856
700–719 Op. on vagina, cul-de-sac, vulva & perineum	3,195	2,204	1,828	855	808	n.p.	n.p.	n.a.	9,320
720–729 Forceps, vacuum & breech delivery	2,220	2,378	1,901	1,057	790	n.p.	n.p.	n.a.	8,761
730–739 Other procedures inducing or assisting delivery	4,434	4,163	3,768	2,202	1,186	n.p.	n.p.	n.a.	16,789
740–749 Caesarean section & removal of foetus	3,925	3,910	3,965	1,780	1,336	n.p.	n.p.	n.a.	15,738
750–759 Other obstetric operations	3,825	3,735	2,747	1,362	1,170	n.p.	n.p.	n.a.	13,538
760–769 Op. on facial bones & joints	652	938	499	185	401	n.p.	n.p.	n.a.	2,827
770–789 Op. on bones, except facial bone	7,543	6,720	3,516	2,880	2,210	n.p.	n.p.	n.a.	24,036
790–799 Reduction of fracture & dislocation	3,738	3,734	3,673	1,837	1,382	n.p.	n.p.	n.a.	15,146
800–809 Incision & excision of joint structures	16,534	13,545	8,315	5,710	6,129	n.p.	n.p.	n.a.	52,603
810–819 Repair & plastic op. on joint structures	18,800	14,637	9,008	7,894	6,946	n.p.	n.p.	n.a.	60,026
820–839 Op. on muscle, tendon, fascia & bursa	6,254	5,997	4,009	2,280	2,650	n.p.	n.p.	n.a.	22,083
840–849 Other procedures on musculoskeletal system	470	465	511	201	183	n.p.	n.p.	n.a.	1,950
850–859 Op. on the breast	7,008	6,569	4,729	2,401	1,948	n.p.	n.p.	n.a.	23,662
860–869 Op. on skin & subcutaneous tissue	22,547	16,130	14,155	5,196	7,037	n.p.	n.p.	n.a.	67,260
870–889 Diagnostic radiology & related techniques	5,943	8,865	9,935	3,908	3,813	n.p.	n.p.	n.a.	34,547
890–919 Interview, evaluation, consultation & other examination	5,383	3,986	4,162	385	326	n.p.	n.p.	n.a.	14,635
920–929 Diagnostic & therapeutic intervention	2,861	3,693	2,121	585	789	n.p.	n.p.	n.a.	10,544
930–939 Physical & respiratory therapy, rehabilitation & related	16,588	13,418	16,355	2,058	3,970	n.p.	n.p.	n.a.	53,483
940–949 Procedures related to the psyche	17,575	4,414	7,293	1,221	926	n.p.	n.p.	n.a.	31,559
950–954 Ophthalmologic & otologic diagnosis & treatment	54	14	49	15	5	n.p.	n.p.	n.a.	145
960–967 Nonoperative intubation & irrigation	862	2,171	1,294	517	319	n.p.	n.p.	n.a.	5,407
970–978 Replacement & removal of therapeutic appliances	847	1,090	853	346	201	n.p.	n.p.	n.a.	3,495
980–985 Nonoperative removal of foreign body or calculus	1,379	708	1,172	237	366	n.p.	n.p.	n.a.	3,952
990–999 Other nonoperative procedures	14,741	35,594	28,091	9,534	8,914	n.p.	n.p.	n.a.	99,812
No principal procedure or not reported	49,440	66,690	50,937	25,112	19,452	n.p.	n.p.	n.a.	224,617
<b>Total</b>	<b>544,351</b>	<b>484,201</b>	<b>388,078</b>	<b>160,358</b>	<b>147,420</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.a.</b>	<b>1,792,976</b>

Note: Abbreviation: op.—operation.

n.a. not available.

n.p. not published.



**Table 8.5: Patient days by principal procedure in ICD-9-CM groupings, public hospitals, States and Territories, 1997-98**

Principal procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
010-029 Op. on skull, brain & cerebral meninges	29,846	21,787	15,613	10,860	6,935	1,832	2,542	492	89,907
030-039 Op. on spinal cord & spinal canal structures	36,480	21,355	19,329	12,704	10,580	2,625	2,414	2,623	108,110
040-059 Op. on cranial, peripheral, sympathetic nerves, ganglia	13,150	9,301	6,560	4,998	4,172	990	583	259	40,013
060-079 Op. on thyroid, parathyroid & other endocrine glands	9,332	5,821	3,680	1,487	1,587	588	447	235	23,177
080-129, 140-169 Op. on the eye (excluding lens)	19,521	11,040	10,014	5,429	5,126	594	3,787	418	55,929
130-139 Op. on lens	14,820	12,646	6,255	4,012	4,840	275	394	449	43,691
180-189 Op. on external ear	3,090	2,239	2,757	907	984	187	116	91	10,371
190-209 Reconstructive & other op. on middle & inner ear	7,854	7,448	3,385	2,540	3,599	398	570	435	26,229
210-229 Op. on nose & nasal sinuses	12,141	10,864	6,473	3,266	4,403	645	788	179	38,759
230-249 Operations on teeth, gums & alveoli	8,797	8,487	39,899	3,168	5,337	1,020	584	594	67,886
250-269 Op. on tongue, salivary glands & ducts	3,025	2,434	1,665	821	988	195	581	78	9,787
270-279 Other operations on mouth & face	5,282	3,406	2,773	1,451	1,381	269	264	166	14,992
280-299 Op. on tonsils, adenoids & pharynx	14,079	10,344	6,083	2,682	4,596	642	791	267	39,484
300-319 Op. on larynx & trachea	29,349	16,561	13,524	5,157	7,441	1,083	1,305	688	75,108
320-339 Op. on lung & bronchus	28,609	20,059	16,074	8,439	8,341	2,314	1,679	1,075	86,590
340-349 Op. on chest wall, pleura, mediastinum & diaphragm	29,241	22,065	15,790	9,159	7,733	2,243	2,170	947	89,348
350-359 Op. on valves & septa of heart	13,991	11,315	9,683	3,981	2,656	1,232	105	0	42,963
360-369 Op. on vessels of heart	54,773	40,232	17,094	14,950	12,802	4,537	974	0	145,362
370-379 Other op. on heart & pericardium	61,391	29,785	21,537	14,694	14,965	3,250	4,366	236	150,224
380-389 Incision, excision & occlusion of vessels	51,687	32,654	30,981	12,946	13,446	2,845	3,510	1,466	149,535
390-399 Other op. on vessels	161,186	139,778	80,707	46,996	37,395	12,087	14,110	20,019	512,278
400-419 Op. on the haemic & lymphatic system	38,414	18,732	17,845	10,263	7,961	1,758	2,714	697	98,384
420-429 Op. on oesophagus	10,607	7,240	4,050	2,389	2,583	745	477	201	28,292
430-449 Op. on stomach	45,018	29,745	14,492	8,700	8,151	2,141	1,580	1,214	111,041
450-459 Incision, excision & anastomosis of intestine	194,009	121,588	85,272	51,874	49,201	11,737	10,080	4,364	528,125
460-469 Other op. on intestine	18,098	9,856	7,645	3,596	3,718	1,089	844	361	45,207
470-479 Op. on appendix	24,007	16,711	10,213	6,694	4,810	1,329	1,449	818	66,031
480-499 Op. on rectum, rectosigmoid, perirectal tissue & anus	27,594	20,373	12,071	8,815	7,994	1,885	1,414	702	80,848
500-529 Op. on liver, gallbladder, biliary tract & pancreas	76,453	48,310	28,782	17,671	15,707	4,189	3,953	1,387	196,452
530-539 Repair of hernia	28,706	18,933	12,267	7,416	7,669	1,397	1,215	627	78,230
540-549 Other op. on abdominal region	56,845	32,660	27,704	13,223	11,359	3,003	3,580	1,539	149,913
550-559 Op. on kidney	20,361	12,820	8,476	4,607	4,877	1,260	1,477	763	54,641
560-599 Op. on the urinary bladder & other urinary tract	65,502	36,509	33,288	22,592	18,593	5,029	2,894	3,471	187,878

*(continued)*

**Table 8.5 (continued): Patient days by principal procedure in ICD-9-CM groupings, public hospitals, States and Territories, 1997–98**

Principal procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
600–609 Op. on prostate & seminal vesicles	24,977	20,359	6,808	4,923	6,406	1,776	1,852	409	67,510
610–629 Op. on scrotum, tunica vaginalis & testes	4,509	3,237	2,121	1,257	1,096	386	372	289	13,267
630–639 Op. on spermatic cord, epididymis & vas deferens	4,149	3,029	1,049	1,192	1,395	162	37	52	11,065
640–649 Op. on penis	5,702	4,154	1,467	1,364	1,542	232	136	293	14,890
650–669 Op. on ovary & fallopian tubes	18,046	13,811	8,089	6,458	4,801	1,027	1,047	683	53,962
670–676 Op. on cervix	6,979	7,260	7,580	1,816	4,279	482	325	461	29,182
680–689 Other incision & excision of uterus	42,102	30,319	18,672	11,147	12,361	2,903	2,401	767	120,672
690–699 Other op. on uterus & supporting structures	22,689	22,938	9,758	7,288	10,167	1,471	1,111	1,858	77,280
700–719 Op. on vagina, cul-de-sac, vulva & perineum	15,222	10,185	5,705	4,204	3,987	769	701	239	41,012
720–729 Forceps, vacuum & breech delivery	28,567	21,341	9,467	9,837	6,809	2,160	1,668	828	80,677
730–739 Other procedures inducing or assisting delivery	75,084	52,771	37,069	18,018	19,198	4,659	3,604	2,800	213,203
740–749 Caesarean section & removal of foetus	79,907	55,328	39,403	22,440	19,548	4,620	3,914	4,646	229,806
750–759 Other obstetric operations	66,211	38,051	35,357	17,260	13,860	3,572	2,512	2,922	179,745
760–769 Op. on facial bones & joints	5,474	3,528	3,651	1,639	2,869	418	497	496	18,572
770–789 Op. on bones, except facial bone	39,470	22,760	17,595	10,152	7,496	2,345	2,626	1,639	104,083
790–799 Reduction of fracture & dislocation	101,285	68,041	48,888	31,015	23,397	5,935	6,063	6,174	290,798
800–809 Incision & excision of joint structures	28,280	19,328	14,200	6,839	7,313	1,684	1,774	1,116	80,534
810–819 Repair & plastic op. on joint structures	107,155	73,187	54,620	30,334	26,060	6,786	6,590	1,808	306,540
820–839 Op. on muscle, tendon, fascia & bursa	18,974	12,491	10,034	6,980	4,391	1,054	1,082	1,506	56,512
840–849 Other procedures on musculoskeletal system	23,988	15,899	15,732	10,023	7,257	1,672	1,964	2,283	78,818
850–859 Op. on the breast	22,279	15,137	7,755	5,522	4,579	1,118	846	491	57,727
860–869 Op. on skin & subcutaneous tissue	133,358	91,150	104,593	46,328	34,113	6,298	7,043	8,818	431,701
870–889 Diagnostic radiology & related techniques	345,305	168,650	158,316	93,358	92,488	22,189	11,036	9,338	900,680
890–919 Interview, evaluation, consultation & other examination	26,876	11,692	57,508	10,807	12,738	830	100	205	120,756
920–929 Diagnostic & therapeutic intervention	218,563	176,874	64,923	29,287	32,702	9,284	10,649	4,336	546,618
930–939 Physical & respiratory therapy, rehabilitation & related	655,213	457,021	251,925	138,439	127,416	33,437	16,124	11,427	1,691,002
940–949 Procedures related to the psyche	233,813	153,451	117,408	25,746	76,301	8,706	5,189	2,973	623,587
950–954 Ophthalmologic & otologic diagnosis & treatment	736	675	599	146	870	14	1	40	3,081
960–967 Nonoperative intubation & irrigation	107,494	81,101	64,761	28,857	38,619	4,949	7,649	6,483	339,913
970–978 Replacement & removal of therapeutic appliances	8,037	6,221	4,846	2,546	2,438	291	760	96	25,235
980–985 Nonoperative removal of foreign body or calculus	2,278	1,555	1,437	893	603	60	41	75	6,942
990–999 Other nonoperative procedures	225,352	218,412	116,080	74,132	74,171	15,886	11,992	3,545	739,570
No principal procedure or not reported	2,055,751	1,035,408	1,200,682	471,943	503,672	174,408	57,781	61,059	5,560,704
<b>Total</b>	<b>5,967,083</b>	<b>3,728,462</b>	<b>3,090,079</b>	<b>1,460,677</b>	<b>1,486,872</b>	<b>396,996</b>	<b>243,244</b>	<b>187,016</b>	<b>16,560,429</b>

Note: Abbreviation: op.—operation.

**Table 8.6: Patient days by principal procedure in ICD-9-CM groupings, private hospitals, States and Territories, 1997-98**

Principal procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
010-029 Op. on skull, brain & cerebral meninges	3,353	5,980	6,170	936	1,769	n.p.	n.p.	n.a.	19,272
030-039 Op. on spinal cord & spinal canal structures	16,246	18,261	12,112	7,958	5,960	n.p.	n.p.	n.a.	63,825
040-059 Op. on cranial, peripheral, sympathetic nerves, ganglia	9,072	8,436	5,739	4,805	2,925	n.p.	n.p.	n.a.	32,265
060-079 Op. on thyroid, parathyroid & other endocrine glands	3,704	3,361	3,039	1,018	1,076	n.p.	n.p.	n.a.	12,987
080-129, 140-169 Op. on the eye (excluding lens)	12,176	7,961	8,460	3,341	1,972	n.p.	n.p.	n.a.	35,518
130-139 Op. on lens	29,459	17,381	21,654	6,538	4,168	n.p.	n.p.	n.a.	81,956
180-189 Op. on external ear	2,829	1,755	1,825	775	786	n.p.	n.p.	n.a.	8,267
190-209 Reconstructive & other op. on middle & inner ear	6,540	6,323	4,148	2,073	3,256	n.p.	n.p.	n.a.	23,335
210-229 Op. on nose & nasal sinuses	12,601	10,590	7,997	3,685	5,467	n.p.	n.p.	n.a.	41,917
230-249 Operations on teeth, gums & alveoli	15,141	16,309	10,460	7,064	5,380	n.p.	n.p.	n.a.	56,290
250-269 Op. on tongue, salivary glands & ducts	1,519	1,468	1,187	617	540	n.p.	n.p.	n.a.	5,599
270-279 Other operations on mouth & face	1,825	1,407	1,324	537	664	n.p.	n.p.	n.a.	6,035
280-299 Op. on tonsils, adenoids & pharynx	6,788	5,526	4,647	2,464	2,566	n.p.	n.p.	n.a.	23,105
300-319 Op. on larynx & trachea	1,393	2,026	3,150	364	772	n.p.	n.p.	n.a.	7,846
320-339 Op. on lung & bronchus	4,409	6,335	12,107	2,348	2,068	n.p.	n.p.	n.a.	28,735
340-349 Op. on chest wall, pleura, mediastinum & diaphragm	4,249	6,352	6,213	2,114	1,829	n.p.	n.p.	n.a.	22,132
350-359 Op. on valves & septa of heart	6,233	5,690	4,445	831	1,846	n.p.	n.p.	n.a.	19,045
360-369 Op. on vessels of heart	32,060	29,332	20,484	4,120	8,507	n.p.	n.p.	n.a.	94,644
370-379 Other op. on heart & pericardium	19,635	17,988	16,042	3,669	4,118	n.p.	n.p.	n.a.	63,083
380-389 Incision, excision & occlusion of vessels	16,413	19,079	18,603	5,855	6,205	n.p.	n.p.	n.a.	69,087
390-399 Other op. on vessels	20,671	29,688	17,359	6,000	11,645	n.p.	n.p.	n.a.	86,938
400-419 Op. on the haemic & lymphatic system	5,257	4,688	8,510	2,355	1,719	n.p.	n.p.	n.a.	23,887
420-429 Op. on oesophagus	2,462	3,178	3,239	686	986	n.p.	n.p.	n.a.	10,907
430-449 Op. on stomach	13,147	13,201	8,354	2,894	3,462	n.p.	n.p.	n.a.	42,331
450-459 Incision, excision & anastomosis of intestine	122,621	110,907	102,236	33,063	28,418	n.p.	n.p.	n.a.	410,658
460-469 Other op. on intestine	4,239	4,441	4,236	1,219	1,012	n.p.	n.p.	n.a.	15,918
470-479 Op. on appendix	4,040	4,725	4,545	2,185	1,499	n.p.	n.p.	n.a.	18,104
480-499 Op. on rectum, rectosigmoid, perirectal tissue & anus	18,052	17,681	13,337	6,922	5,914	n.p.	n.p.	n.a.	64,721
500-529 Op. on liver, gallbladder, biliary tract & pancreas	23,019	20,983	18,996	7,107	7,192	n.p.	n.p.	n.a.	80,966
530-539 Repair of hernia	22,921	16,647	12,481	6,213	5,945	n.p.	n.p.	n.a.	67,277
540-549 Other op. on abdominal region	11,167	12,426	12,028	5,271	3,930	n.p.	n.p.	n.a.	47,185
550-559 Op. on kidney	4,468	4,344	3,075	1,529	1,318	n.p.	n.p.	n.a.	15,805
560-599 Op. on the urinary bladder & other urinary tract	32,767	27,491	25,102	15,247	11,594	n.p.	n.p.	n.a.	118,873

*(continued)*

**Table 8.6 (continued): Patient days by principal procedure in ICD-9-CM groupings, private hospitals, States and Territories, 1997–98**

Principal procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
600–609 Op. on prostate & seminal vesicles	19,166	19,002	11,238	5,483	5,070	n.p.	n.p.	n.a.	64,779
610–629 Op. on scrotum, tunica vaginalis & testes	1,449	1,353	1,369	460	504	n.p.	n.p.	n.a.	5,582
630–639 Op. on spermatic cord, epididymis & vas deferens	3,887	2,510	1,451	900	702	n.p.	n.p.	n.a.	9,988
640–649 Op. on penis	3,171	1,879	1,904	940	516	n.p.	n.p.	n.a.	8,979
650–669 Op. on ovary & fallopian tubes	8,223	7,041	5,810	3,082	2,180	n.p.	n.p.	n.a.	27,959
670–676 Op. on cervix	3,198	2,435	1,818	834	492	n.p.	n.p.	n.a.	9,256
680–689 Other incision & excision of uterus	30,798	23,222	20,169	9,869	10,444	n.p.	n.p.	n.a.	100,965
690–699 Other op. on uterus & supporting structures	29,383	16,376	11,069	7,739	2,983	n.p.	n.p.	n.a.	69,833
700–719 Op. on vagina, cul-de-sac, vulva & perineum	11,052	7,981	6,614	3,158	3,415	n.p.	n.p.	n.a.	34,025
720–729 Forceps, vacuum & breech delivery	13,995	14,730	11,969	6,916	4,367	n.p.	n.p.	n.a.	54,718
730–739 Other procedures inducing or assisting delivery	23,658	23,325	19,898	11,591	5,941	n.p.	n.p.	n.a.	89,527
740–749 Caesarean section & removal of foetus	29,824	30,354	29,535	15,193	9,435	n.p.	n.p.	n.a.	120,270
750–759 Other obstetric operations	19,318	19,772	13,472	6,442	5,669	n.p.	n.p.	n.a.	68,121
760–769 Op. on facial bones & joints	1,746	2,053	903	474	1,091	n.p.	n.p.	n.a.	6,640
770–789 Op. on bones, except facial bone	19,440	19,118	11,278	7,644	6,129	n.p.	n.p.	n.a.	66,808
790–799 Reduction of fracture & dislocation	15,026	17,851	23,137	7,636	6,502	n.p.	n.p.	n.a.	73,961
800–809 Incision & excision of joint structures	33,989	26,070	19,696	13,286	11,875	n.p.	n.p.	n.a.	109,866
810–819 Repair & plastic op. on joint structures	109,231	95,287	61,906	44,167	35,996	n.p.	n.p.	n.a.	366,574
820–839 Op. on muscle, tendon, fascia & bursa	10,994	11,074	7,673	4,533	5,050	n.p.	n.p.	n.a.	41,037
840–849 Other procedures on musculoskeletal system	3,746	5,016	5,704	2,344	2,255	n.p.	n.p.	n.a.	20,021
850–859 Op. on the breast	17,584	15,302	9,852	5,963	5,389	n.p.	n.p.	n.a.	56,645
860–869 Op. on skin & subcutaneous tissue	45,089	46,050	37,739	16,933	16,029	n.p.	n.p.	n.a.	168,347
870–889 Diagnostic radiology & related techniques	37,988	49,363	72,527	25,137	17,702	n.p.	n.p.	n.a.	216,129
890–919 Interview, evaluation, consultation & other examination	9,250	6,517	10,362	2,209	1,307	n.p.	n.p.	n.a.	30,899
920–929 Diagnostic & therapeutic intervention	44,559	35,344	26,645	5,928	7,099	n.p.	n.p.	n.a.	125,368
930–939 Physical & respiratory therapy, rehabilitation & related	192,535	190,586	115,552	22,446	42,988	n.p.	n.p.	n.a.	575,620
940–949 Procedures related to the psyche	119,853	49,328	69,477	12,371	15,686	n.p.	n.p.	n.a.	268,309
950–954 Ophthalmologic & otologic diagnosis & treatment	138	32	105	38	6	n.p.	n.p.	n.a.	339
960–967 Nonoperative intubation & irrigation	5,324	11,213	12,630	2,928	2,681	n.p.	n.p.	n.a.	35,713
970–978 Replacement & removal of therapeutic appliances	1,950	2,401	1,573	660	475	n.p.	n.p.	n.a.	7,374
980–985 Nonoperative removal of foreign body or calculus	1,620	842	1,298	276	433	n.p.	n.p.	n.a.	4,600
990–999 Other nonoperative procedures	33,868	73,336	50,068	21,983	16,721	n.p.	n.p.	n.a.	203,670
No principal procedure or not reported	249,608	395,462	296,616	101,270	143,119	n.p.	n.p.	n.a.	1,244,492
<b>Total</b>	<b>1,641,136</b>	<b>1,684,185</b>	<b>1,374,361</b>	<b>522,636</b>	<b>536,759</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.a.</b>	<b>6,004,927</b>

Note: Abbreviation: op.—operation.

n.a. not available.

n.p. not published.

**Table 8.7: Separations for males by age group and principal procedure in ICD-9-CM groupings, all hospitals, Australia, 1997-98**

Principal procedure	<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total <sup>(a)</sup>
010-029 Op. on skull, brain & cerebral meninges	292	211	372	518	531	508	582	677	723	580	4,994
030-039 Op. on spinal cord & spinal canal structures	1,087	892	903	962	1,899	2,647	2,656	2,245	2,385	1,686	17,362
040-059 Op. on cranial, peripheral, sympathetic nerves, ganglia	4	49	205	1,371	2,455	3,231	3,363	2,716	2,565	2,145	18,104
060-079 Op. on thyroid, parathyroid & other endocrine glands	6	50	83	110	206	340	468	386	344	143	2,136
080-129, 140-169 Op. on the eye (excluding lens)	472	1,903	1,517	1,329	1,978	2,569	3,212	3,668	5,398	5,625	27,671
130-139 Op. on lens	33	48	85	102	232	633	2,028	4,944	14,360	21,328	43,793
180-189 Op. on external ear	57	245	912	649	549	703	968	1,200	1,887	2,066	9,236
190-209 Reconstructive & other op. on middle & inner ear	743	9,839	8,417	637	656	859	955	697	556	269	23,628
210-229 Op. on nose & nasal sinuses	38	401	2,000	4,697	4,546	4,441	4,501	3,480	3,537	2,677	30,318
230-249 Operations on teeth, gums & alveoli	15	4,223	5,740	11,632	5,749	2,581	1,664	1,023	714	392	33,733
250-269 Op. on tongue, salivary glands & ducts	120	502	277	189	264	373	473	433	451	270	3,352
270-279 Other operations on mouth & face	286	515	600	531	600	679	796	775	782	630	6,194
280-299 Op. on tonsils, adenoids & pharynx	108	6,123	8,927	2,274	1,366	954	689	480	326	150	21,397
300-319 Op. on larynx & trachea	130	182	254	184	388	566	951	1,157	1,392	615	5,819
320-339 Op. on lung & bronchus	150	168	136	307	492	845	1,572	2,800	4,263	2,395	13,128
340-349 Op. on chest wall, pleura, mediastinum & diaphragm	55	34	73	897	667	655	879	1,273	2,043	1,850	8,426
350-359 Op. on valves & septa of heart	198	141	116	86	86	148	316	512	844	497	2,944
360-369 Op. on vessels of heart	2	1	1	5	99	1,197	4,762	7,413	8,475	3,006	24,961
370-379 Other op. on heart & pericardium	100	147	212	376	696	2,893	8,544	12,520	14,171	7,066	46,725
380-389 Incision, excision & occlusion of vessels	491	180	279	649	1,188	2,158	3,343	4,299	6,062	3,950	22,599
390-399 Other op. on vessels	88	76	931	7,799	20,586	31,794	41,406	50,616	69,165	29,891	252,352
400-419 Op. on the haemic & lymphatic system	61	371	567	778	868	1,159	1,692	1,910	2,152	1,721	11,279
420-429 Op. on oesophagus	55	220	205	147	279	592	1,076	1,404	2,096	1,612	7,686
430-449 Op. on stomach	542	151	168	439	1,050	1,707	2,271	2,215	2,787	2,410	13,740
450-459 Incision, excision & anastomosis of intestine	343	642	1,550	6,333	16,644	29,286	43,860	44,850	47,045	29,650	220,203
460-469 Other op. on intestine	153	57	58	99	135	218	381	586	761	478	2,926
470-479 Op. on appendix	10	113	3,324	3,537	2,493	1,447	848	397	260	155	12,584
480-499 Op. on rectum, rectosigmoid, perirectal tissue & anus	355	251	247	871	3,248	5,070	5,529	4,292	3,417	1,664	24,944
500-529 Op. on liver, gallbladder, biliary tract & pancreas	37	41	108	404	1,542	3,198	4,020	4,157	5,088	3,425	22,020
530-539 Repair of hernia	1,821	2,680	1,857	1,962	3,566	5,663	8,385	8,014	7,935	5,098	46,981
540-549 Other op. on abdominal region	104	261	246	469	754	1,302	2,264	2,364	3,120	1,662	12,546
550-559 Op. on kidney	167	125	175	355	563	765	997	1,069	1,121	557	5,894
560-599 Op. on the urinary bladder & other urinary tract	709	1,326	938	1,191	2,604	4,819	8,315	12,011	19,791	18,870	70,574

(continued)

**Table 8.7 (continued): Separations for males by age group and principal procedure in ICD-9-CM groupings, all hospitals, Australia, 1997-98**

Principal procedure	<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total <sup>(a)</sup>
600-609 Op. on prostate & seminal vesicles	0	2	3	2	30	101	1,274	5,894	10,313	8,653	26,272
610-629 Op. on scrotum, tunica vaginalis & testes	365	1,657	2,650	1,177	998	848	572	443	752	813	10,275
630-639 Op. on spermatic cord, epididymis & vas deferens	16	222	296	653	4,799	9,019	2,373	779	553	212	18,922
640-649 Op. on penis	5,132	4,040	3,600	1,025	844	573	569	573	520	339	17,215
650-759 Op. on female genital organs; obstetrical procedures	0	0	0	0	0	1	1	0	0	0	2
760-769 Op. on facial bones & joints	3	25	249	2,178	1,510	778	386	212	130	66	5,537
770-789 Op. on bones, except facial bone	43	364	2,655	5,695	5,052	4,041	3,440	2,377	1,736	1,107	26,510
790-799 Reduction of fracture & dislocation	36	1,620	11,352	9,510	6,473	4,217	2,944	1,946	1,804	2,686	42,588
800-809 Incision & excision of joint structures	46	86	850	7,150	10,137	10,534	9,279	6,310	4,234	1,766	50,392
810-819 Repair & plastic op. on joint structures	13	89	515	6,111	7,182	6,570	6,493	7,164	8,893	6,750	49,780
820-839 Op. on muscle, tendon, fascia & bursa	212	665	1,247	3,626	4,099	4,035	4,290	3,987	3,439	1,540	27,140
840-849 Other procedures on musculoskeletal system	37	79	97	365	501	562	695	714	1,119	1,111	5,280
850-859 Op. on the breast	10	2	79	531	438	238	227	187	188	145	2,045
860-869 Op. on skin & subcutaneous tissue	540	3,263	7,189	12,078	11,330	10,527	11,115	10,282	12,863	13,017	92,204
870-889 Diagnostic radiology & related techniques	1,505	2,886	3,263	5,159	6,792	8,302	10,596	12,039	17,652	18,928	87,122
890-919 Interview, evaluation, consultation & other examination	426	597	627	626	1,463	3,183	4,619	3,843	3,498	2,316	21,198
920-929 Diagnostic & therapeutic intervention	703	957	905	868	1,288	2,048	3,536	4,980	7,779	8,212	31,276
930-939 Physical & respiratory therapy, rehabilitation & related	5,670	3,360	3,456	4,207	5,423	6,963	8,649	11,493	20,978	29,390	99,590
940-949 Procedures related to the psyche	695	395	325	3,464	6,015	7,042	7,277	3,874	4,171	6,195	39,453
950-954 Ophthalmologic & otologic diagnosis & treatment	140	420	99	18	19	29	34	37	93	55	944
960-967 Nonoperative intubation & irrigation	4,874	948	946	1,013	1,191	1,251	1,495	1,855	2,599	2,104	18,276
970-978 Replacement & removal of therapeutic appliances	258	507	488	378	419	588	797	1,014	1,099	1,094	6,642
980-985 Nonoperative removal of foreign body or calculus	24	424	402	273	500	951	1,228	1,150	829	333	6,114
990-999 Other nonoperative procedures	7,743	6,185	8,580	8,077	9,541	15,067	27,721	41,428	49,332	29,392	203,066
No principal procedure or not reported	45,139	48,740	42,146	49,547	57,557	56,725	61,753	60,096	81,505	95,806	599,018
<b>Total</b>	<b>82,462</b>	<b>109,701</b>	<b>133,502</b>	<b>175,620</b>	<b>222,580</b>	<b>270,193</b>	<b>335,129</b>	<b>369,260</b>	<b>472,095</b>	<b>386,563</b>	<b>2,557,110</b>

(a) Total includes separations for which age was not reported.

Note: Abbreviation: op.—operation.

**Table 8.8: Separations for females by age group and principal procedure in ICD-9-CM groupings, all hospitals, Australia, 1997-98**

Principal procedure	<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total <sup>(a)</sup>
010-029 Op. on skull, brain & cerebral meninges	177	121	242	307	342	442	587	532	561	482	3,793
030-039 Op. on spinal cord & spinal canal structures	847	713	696	2,208	4,119	2,886	3,113	2,472	2,926	2,503	22,483
040-059 Op. on cranial, peripheral, sympathetic nerves, ganglia	1	22	145	783	2,334	4,201	5,542	3,477	2,911	2,897	22,313
060-079 Op. on thyroid, parathyroid & other endocrine glands	4	28	98	303	942	1,393	1,659	1,037	812	435	6,711
080-129, 140-169 Op. on the eye (excluding lens)	435	1,831	1,457	988	1,616	2,470	3,233	3,353	4,864	6,413	26,660
130-139 Op. on lens	21	51	48	79	179	503	1,932	5,375	20,066	37,425	65,679
180-189 Op. on external ear	59	184	836	632	431	350	369	271	343	512	3,987
190-209 Reconstructive & other op. on middle & inner ear	447	6,125	6,060	637	800	1,036	1,117	841	634	407	18,104
210-229 Op. on nose & nasal sinuses	20	253	1,202	2,701	3,645	3,713	3,922	3,102	2,851	2,807	24,216
230-249 Operations on teeth, gums & alveoli	6	3,617	6,241	20,919	8,453	3,267	1,936	942	583	507	46,471
250-269 Op. on tongue, salivary glands & ducts	72	190	198	146	269	355	433	388	400	303	2,754
270-279 Other operations on mouth & face	247	367	571	367	398	566	705	580	662	684	5,147
280-299 Op. on tonsils, adenoids & pharynx	60	3,979	9,325	5,265	1,548	636	359	224	193	142	21,731
300-319 Op. on larynx & trachea	119	142	141	145	256	446	563	505	567	327	3,211
320-339 Op. on lung & bronchus	77	114	108	229	468	710	1,416	1,819	2,155	1,348	8,444
340-349 Op. on chest wall, pleura, mediastinum & diaphragm	29	30	57	259	387	445	763	869	1,162	1,371	5,372
350-359 Op. on valves & septa of heart	143	162	105	69	92	115	204	316	570	455	2,231
360-369 Op. on vessels of heart	1	2	3	0	38	204	791	1,867	3,369	1,691	7,966
370-379 Other op. on heart & pericardium	85	134	160	297	470	1,202	3,530	5,674	8,238	5,410	25,200
380-389 Incision, excision & occlusion of vessels	420	149	209	640	2,358	4,338	4,879	4,309	4,631	3,239	25,172
390-399 Other op. on vessels	53	48	296	3,994	13,692	20,103	28,694	42,505	57,789	20,175	187,349
400-419 Op. on the haemic & lymphatic system	42	299	407	628	890	1,354	1,826	1,597	1,685	1,529	10,257
420-429 Op. on oesophagus	48	104	85	74	198	366	687	748	1,283	1,844	5,437
430-449 Op. on stomach	154	100	133	483	1,199	2,004	2,663	2,380	2,543	2,865	14,524
450-459 Incision, excision & anastomosis of intestine	297	470	1,387	8,457	17,832	33,223	50,406	48,633	49,293	37,789	247,787
460-469 Other op. on intestine	89	25	31	71	181	221	317	385	541	526	2,387
470-479 Op. on appendix	8	80	2,644	3,951	2,252	1,321	687	320	202	148	11,613
480-499 Op. on rectum, rectosigmoid, perirectal tissue & anus	91	173	167	880	2,802	3,740	3,933	2,795	2,565	2,190	19,336
500-529 Op. on liver, gallbladder, biliary tract & pancreas	31	29	142	2,367	6,016	7,111	7,908	7,080	6,230	4,750	41,664
530-539 Repair of hernia	426	954	623	240	823	1,550	1,804	1,738	2,058	1,729	11,945
540-549 Other op. on abdominal region	74	73	419	5,256	9,919	7,578	4,173	2,982	3,024	2,007	35,505
550-559 Op. on kidney	64	76	134	277	520	677	701	731	730	456	4,366
560-599 Op. on the urinary bladder & other urinary tract	299	447	612	1,248	2,645	4,599	6,845	7,190	8,771	8,522	41,178

(continued)

**Table 8.8 (continued): Separations for females by age group and principal procedure in ICD-9-CM groupings, all hospitals, Australia, 1997-98**

Principal procedure	<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total <sup>(a)</sup>
600-649 Op. on male genital organs	1	1	0	0	0	0	3	0	1	0	6
650-669 Op. on ovary & fallopian tubes	10	3	177	3,744	16,185	14,229	3,089	822	523	311	39,094
670-677 Op. on cervix	0	4	16	7,204	11,566	7,505	4,471	1,770	874	304	33,714
680-689 Other incision & excision of uterus	0	1	14	1,103	6,901	19,005	19,246	6,628	4,421	2,165	59,484
690-699 Other op. on uterus & supporting structures	8	2	181	26,151	51,917	35,449	11,659	4,259	2,185	941	132,762
700-719 Op. on vagina, cul-de-sac, vulva & perineum	38	149	322	2,650	3,751	3,660	3,972	3,543	3,219	1,831	23,135
720-729 Forceps, vacuum & breech delivery	0	0	10	4,896	17,206	3,631	17	0	0	0	25,760
730-739 Other procedures inducing or assisting delivery	0	0	38	18,722	46,829	10,365	39	0	0	1	75,996
740-749 Caesarean section & removal of foetus	0	0	23	7,585	32,679	10,798	81	0	0	0	51,168
750-759 Other obstetric operations	1	0	45	16,704	42,851	9,975	51	0	0	1	69,630
760-769 Op. on facial bones & joints	0	20	178	880	527	417	286	153	132	85	2,678
770-789 Op. on bones, except facial bone	32	315	1,858	2,171	2,106	2,866	3,895	3,817	3,548	3,423	24,031
790-799 Reduction of fracture & dislocation	79	1,249	6,269	1,843	1,963	1,988	2,414	2,884	4,446	10,161	33,296
800-809 Incision & excision of joint structures	15	57	713	3,245	3,854	5,197	6,381	5,250	4,517	2,241	31,470
810-819 Repair & plastic op. on joint structures	8	85	566	2,707	3,187	4,324	6,062	7,214	11,184	12,341	47,678
820-839 Op. on muscle, tendon, fascia & bursa	143	484	917	1,771	2,363	2,715	3,460	2,938	2,620	1,550	18,961
840-849 Other procedures on musculoskeletal system	14	50	43	57	72	138	197	280	545	1,086	2,482
850-859 Op. on the breast	28	9	89	2,634	6,050	9,526	10,832	6,606	4,631	2,496	42,901
860-869 Op. on skin & subcutaneous tissue	461	2,547	5,256	6,620	8,251	10,593	11,783	8,822	9,626	13,391	77,350
870-889 Diagnostic radiology & related techniques	1,109	2,175	2,238	4,420	6,434	6,879	8,051	8,392	13,533	23,414	76,647
890-919 Interview, evaluation, consultation & other examination	365	397	482	563	848	1,409	2,188	2,166	2,139	2,248	12,805
920-929 Diagnostic & therapeutic intervention	576	751	907	1,706	2,976	2,875	3,544	4,475	7,111	11,703	36,624
930-939 Physical & respiratory therapy, rehabilitation & related	3,941	2,141	2,346	3,754	6,701	6,069	8,695	10,115	20,032	49,822	113,617
940-949 Procedures related to the psyche	542	258	393	5,384	9,464	9,170	6,666	3,995	4,734	10,343	50,949
950-954 Ophthalmologic & otologic diagnosis & treatment	123	292	83	11	17	22	21	41	75	117	802
960-967 Nonoperative intubation & irrigation	3,953	819	752	1,013	1,166	1,392	1,892	1,718	1,850	2,141	16,696
970-978 Replacement & removal of therapeutic appliances	205	310	343	266	505	700	765	559	610	819	5,082
980-985 Nonoperative removal of foreign body or calculus	17	391	276	136	332	439	480	463	348	225	3,107
990-999 Other nonoperative procedures	5,861	4,852	6,752	7,709	12,028	21,674	36,648	36,406	35,592	26,907	194,429
No principal procedure or not reported	36,116	34,596	29,798	93,636	141,215	79,218	59,967	50,383	69,029	128,563	722,525
<b>Total</b>	<b>58,592</b>	<b>73,050</b>	<b>96,067</b>	<b>294,185</b>	<b>528,058</b>	<b>395,353</b>	<b>364,552</b>	<b>330,736</b>	<b>402,737</b>	<b>462,518</b>	<b>3,005,872</b>

(a) Total includes separations for which age was not reported.

Note: Abbreviation: op.—operation.



**Table 8.9: Separations by number of procedures reported and hospital sector, States and Territories, 1997–98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Hospital sector</b>	<b>Number</b>								
<b>Public hospitals</b>									
Separations <sup>(a)</sup>	1,272,797	928,847	685,345	346,363	346,782	80,389	57,175	52,400	3,770,098
No procedure reported	400,381	249,303	216,276	89,403	96,738	19,867	9,763	15,218	1,096,949
One procedure code only	499,588	407,434	276,716	157,595	151,958	39,453	29,966	29,041	1,591,751
Two procedure codes only	175,287	129,473	88,314	49,122	52,762	9,979	7,802	4,714	517,453
Three porcedure codes only	88,779	58,138	40,640	23,697	22,333	4,237	4,766	1,640	244,230
Four procedure codes only	43,857	29,268	21,419	11,600	10,154	2,318	2,243	727	121,586
Five or more procedure codes	64,905	55,232	41,980	14,947	12,837	4,535	2,639	1,060	198,135
Mean procedure codes per separation <sup>(b)</sup>	2.0	2.0	2.1	1.8	1.8	1.9	1.8	1.4	1.9
Maximum number of procedure codes	10	12	31	9	10	31	15	10	..
<b>Private hospitals</b>									
Separations <sup>(a)</sup>	544,351	484,201	388,078	160,358	147,420	50,997	17,571	n.a.	1,792,976
No procedure reported	49,440	66,690	50,937	25,112	19,452	10,445	2,541	n.a.	224,617
One procedure code only	250,227	239,868	185,632	76,370	66,865	22,950	6,720	n.a.	848,632
Two procedure codes only	137,638	96,759	91,555	34,091	31,626	11,438	4,413	n.a.	407,520
Three porcedure codes only	59,319	38,831	31,254	14,066	13,769	3,568	2,134	n.a.	162,941
Four procedure codes only	22,721	18,058	13,870	5,715	6,950	1,614	1,005	n.a.	69,933
Five or more procedure codes	25,006	23,997	14,830	5,005	8,758	982	758	n.a.	79,336
Mean procedure codes per separation <sup>(b)</sup>	1.9	1.9	1.8	1.8	2.0	1.7	2.0	n.a.	1.9
Maximum number of procedure codes	10	12	31	9	10	14	15	n.a.	..
	<b>Per cent</b>								
<b>Public hospitals</b>									
No procedure reported	31.5	26.8	31.6	25.8	27.9	24.7	17.1	29.0	29.1
One procedure code only	39.3	43.9	40.4	45.5	43.8	49.1	52.4	55.4	42.2
Two procedure codes only	13.8	13.9	12.9	14.2	15.2	12.4	13.6	9.0	13.7
Three porcedure codes only	7.0	6.3	5.9	6.8	6.4	5.3	8.3	3.1	6.5
Four procedure codes only	3.4	3.2	3.1	3.3	2.9	2.9	3.9	1.4	3.2
Five or more procedure codes	5.1	5.9	6.1	4.3	3.7	5.6	4.6	2.0	5.3
<b>Private hospitals</b>									
No procedure reported	9.1	13.8	13.1	15.7	13.2	20.5	14.5	n.a.	12.5
One procedure code only	46.0	49.5	47.8	47.6	45.4	45.0	38.2	n.a.	47.3
Two procedure codes only	25.3	20.0	23.6	21.3	21.5	22.4	25.1	n.a.	22.7
Three porcedure codes only	10.9	8.0	8.1	8.8	9.3	7.0	12.1	n.a.	9.1
Four procedure codes only	4.2	3.7	3.6	3.6	4.7	3.2	5.7	n.a.	3.9
Five or more procedure codes	4.6	5.0	3.8	3.1	5.9	1.9	4.3	n.a.	4.4

(a) Includes separations for which no procedure codes were reported.

(b) Means are for separations with one or more procedures.

.. not applicable.

Note: The Institute requested up to 31 procedure codes to be reported.

**Table 8.10: Separation, same day separation, patient day and average length of stay statistics for the 30 principal procedures in 3-digit ICD-9-CM groupings with the highest number of separations, public hospitals, Australia, 1997–98**

Principal procedure	Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	Average length of stay (days)	Rank by patient days
399 Other operations on vessels	379,039	373,889	98.6	20.4	404,720	21.7	1.1	5
992 Injection or infusion of other therapeutic or prophylactic substance	203,110	154,183	75.9	10.9	414,114	22.2	2.0	4
451 Diagnostic procedures on small intestine	107,495	84,588	78.7	5.8	255,047	13.7	2.4	9
452 Diagnostic procedures on large intestine	66,293	56,271	84.9	3.6	118,519	6.4	1.8	19
870 Soft tissue x-ray of face, head, and neck	53,785	8,130	15.1	2.9	458,071	24.6	8.5	2
930 Diagnostic physical therapy	49,579	5,380	10.9	2.7	554,580	29.8	11.2	1
990 Transfusion of blood and blood components	48,623	26,046	53.6	2.6	162,769	8.7	3.3	14
756 Repair of other current obstetric laceration	40,387	977	2.4	2.2	143,348	7.7	3.5	16
372 Diagnostic procedures on heart and pericardium	37,976	16,709	44.0	2.0	110,192	5.9	2.9	22
741 Lower segment caesarean section	34,977	99	0.3	1.9	225,865	12.1	6.5	10
863 Other local excision or destruction of lesion or tissue of skin and sub. tissue	34,676	28,624	82.5	1.9	88,758	4.8	2.6	29
947 Social work assessment and management	34,155	1,349	3.9	1.8	421,832	22.7	12.4	3
929 Nutritional assessment and management	31,649	975	3.1	1.7	332,921	17.9	10.5	7
690 Dilation and curettage of uterus	31,557	23,910	75.8	1.7	37,458	2.0	1.2	63
695 Aspiration curettage of uterus	29,883	23,568	78.9	1.6	32,323	1.7	1.1	73
134 Extracapsular extraction of lens by fragmentation and aspiration technique	29,128	22,147	76.0	1.6	33,156	1.8	1.1	72
573 Diagnostic procedures on bladder	27,935	22,192	79.4	1.5	47,189	2.5	1.7	55
730 Artificial rupture of membranes	26,651	726	2.7	1.4	91,696	4.9	3.4	27
932 Other physical therapy musculoskeletal manipulation	26,513	3,686	13.9	1.4	311,518	16.7	11.7	8
793 Open reduction of fracture with internal fixation	25,552	1,020	4.0	1.4	189,736	10.2	7.4	13
512 Cholecystectomy	25,446	173	0.7	1.4	97,251	5.2	3.8	25
991 Injection or infusion of therapeutic or prophylactic substance	25,114	13,395	53.3	1.3	71,075	3.8	2.8	31
939 Respiratory therapy	24,993	7,273	29.1	1.3	143,178	7.7	5.7	17
938 Other rehabilitation therapy	22,886	2,313	10.1	1.2	355,619	19.1	15.5	6
790 Closed reduction of fracture without internal fixation	22,011	5,700	25.9	1.2	43,172	2.3	2.0	56
862 Excision or destruction of lesion or tissue of skin and sub. tissue	19,028	6,258	32.9	1.0	113,082	6.1	5.9	21
470 Appendectomy	18,770	75	0.4	1.0	65,033	3.5	3.5	34
815 Joint replacement of lower extremity	18,504	16	0.1	1.0	218,809	11.7	11.8	11
530 Unilateral repair of inguinal hernia	18,017	4,200	23.3	1.0	35,491	1.9	2.0	69
860 Incision of skin and subcutaneous tissue	16,834	4,799	28.5	0.9	76,839	4.1	4.6	30
Other	1,142,583	435,294	38.1	61.4	5,346,364	287.1	4.7	..
No principal procedure or not reported	1,096,949	290,764	26.5	58.9	5,560,704	298.6	5.1	..
<b>Total</b>	<b>3,770,098</b>	<b>1,624,729</b>	<b>43.1</b>	<b>202.4</b>	<b>16,560,429</b>	<b>889.2</b>	<b>4.4</b>	<b>..</b>

Note:

1. Abbreviation: sub.—subcutaneous.

2. A similar listing of all principal procedures in 3-digit ICD-9-CM groupings is provided on the internet at <http://www.aihw.gov.au/publications/health/ahs97-8.html>

.. Not applicable.

**Table 8.11: Separation, same day separation, patient day and average length of stay statistics for the 30 principal procedures in 3-digit ICD-9-CM groupings with the highest number of separations, private hospitals, Australia, 1997–98**

Principal procedure	Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	Average	Rank by patient days
							length of stay (days)	
451 Diagnostic procedures on small intestine	116,352	108,061	92.9	6.3	165,455	9.0	1.4	3
452 Diagnostic procedures on large intestine	111,776	104,636	93.6	6.1	136,597	7.4	1.2	4
992 Injection or infusion of other therapeutic or prophylactic substance	77,888	65,234	83.8	4.2	124,740	6.8	1.6	5
134 Extracapsular extraction of lens by fragmentation and aspiration technique	61,102	43,143	70.6	3.3	68,256	3.7	1.1	13
399 Other operations on vessels	44,890	44,432	99.0	2.4	47,503	2.6	1.1	26
231 Surgical removal of tooth	44,080	35,099	79.6	2.4	46,233	2.5	1.0	27
454 Local excision or destruction of lesion or tissue of large intestine	36,146	33,629	93.0	2.0	41,454	2.2	1.1	30
863 Other local excision or destruction of lesion or tissue of skin and sub. tissue	32,939	27,051	82.1	1.8	52,026	2.8	1.6	20
573 Diagnostic procedures on bladder	27,144	22,677	83.5	1.5	37,571	2.0	1.4	32
690 Dilatation and curettage of uterus	25,091	22,537	89.8	1.4	26,774	1.5	1.1	43
806 Excision of semilunar cartilage of knee	23,724	16,755	70.6	1.3	26,807	1.5	1.1	42
372 Diagnostic procedures on heart and pericardium	23,244	7,522	32.4	1.3	48,591	2.6	2.1	25
815 Joint replacement of lower extremity	19,873	16	0.1	1.1	254,375	13.8	12.8	1
814 Other repair of joint of lower extremity	19,839	8,698	43.8	1.1	32,249	1.7	1.6	38
698 Reproductive medicine procedures	19,779	19,426	98.2	1.1	20,104	1.1	1.0	58
695 Aspiration curettage of uterus	19,193	18,103	94.3	1.0	19,682	1.1	1.0	63
530 Unilateral repair of inguinal hernia	16,243	1,631	10.0	0.9	36,195	2.0	2.2	34
200 Myringotomy	15,749	14,833	94.2	0.9	16,137	0.9	1.0	77
741 Lower segment caesarean section	15,612	21	0.1	0.8	119,275	6.5	7.6	6
512 Cholecystectomy	15,358	65	0.4	0.8	56,803	3.1	3.7	18
990 Transfusion of blood and blood components	12,669	4,881	38.5	0.7	50,167	2.7	4.0	24
944 Other psychotherapy and counselling	12,590	10,406	82.7	0.7	56,277	3.1	4.5	19
044 Lysis of adhesions and decompression of cranial and peripheral nerves	12,475	8,797	70.5	0.7	15,311	0.8	1.2	81
930 Diagnostic physical therapy	11,987	625	5.2	0.7	171,639	9.3	14.3	2
756 Repair of other current obstetric laceration	11,869	38	0.3	0.6	62,372	3.4	5.3	15
933 Other physical therapy therapeutic procedures	11,760	7,958	67.7	0.6	81,984	4.4	7.0	9
039 Other operations on spinal cord and spinal canal structures	11,516	6,795	59.0	0.6	31,370	1.7	2.7	39
218 Repair and plastic operations on the nose	11,386	2,074	18.2	0.6	16,377	0.9	1.4	75
602 Transurethral prostatectomy	10,340	151	1.5	0.6	51,669	2.8	5.0	22
852 Excision or destruction of breast tissue	10,243	5,956	58.1	0.6	20,017	1.1	2.0	60
Other	685,502	256,140	37.4	37.2	2,826,425	153.3	4.1	..
No principal procedure or not reported	224,617	55,533	24.7	12.2	1,244,492	67.5	5.5	..
<b>Total</b>	<b>1,792,976</b>	<b>952,923</b>	<b>53.1</b>	<b>97.3</b>	<b>6,004,927</b>	<b>325.7</b>	<b>3.3</b>	<b>..</b>

Note:

1. Abbreviation: sub.—subcutaneous.

2. A similar listing of all principal procedures in 3-digit ICD-9-CM groupings is provided on the internet at <http://www.aihw.gov.au/publications/health/ahs97-8.html>

.. not applicable.

**Table 8.12: Separations for the 30 principal procedures in 3-digit ICD-9-CM groupings with the highest number of separations, public hospitals, States and Territories, 1997–98**

Principal procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
399 Other operations on vessels	111,714	105,519	58,786	38,158	27,061	9,340	10,919	17,542	379,039
992 Injection or infusion of other therapeutic or prophylactic substance	59,666	55,958	34,060	21,917	20,943	5,894	4,480	192	203,110
451 Diagnostic procedures on small intestine	35,219	26,978	17,840	11,574	10,609	2,432	1,860	983	107,495
452 Diagnostic procedures on large intestine	22,353	14,883	11,715	7,707	6,254	1,608	1,252	521	66,293
870 Soft tissue x-ray of face, head, and neck	18,434	13,429	9,976	4,885	4,774	1,293	456	538	53,785
930 Diagnostic physical therapy	16,745	14,280	11,613	2,603	2,358	1,421	246	313	49,579
990 Transfusion of blood and blood components	17,032	14,655	6,219	3,390	5,096	1,402	638	191	48,623
756 Repair of other current obstetric laceration	15,931	9,418	7,260	3,369	2,325	777	694	613	40,387
372 Diagnostic procedures on heart and pericardium	14,688	7,738	5,587	3,778	4,133	629	1,417	6	37,976
741 Lower segment caesarean section	11,856	8,388	6,609	3,361	2,927	685	577	574	34,977
863 Other local excision or destruction of lesion or tissue of skin and sub. tissue	9,609	7,569	9,354	3,084	3,677	703	541	139	34,676
947 Social work assessment and management	13,801	7,354	6,234	1,586	3,940	368	562	310	34,155
929 Nutritional assessment and management	13,164	9,291	5,105	1,699	1,184	275	528	403	31,649
690 Dilatation and curettage of uterus	9,348	9,056	6,328	3,318	2,137	398	506	466	31,557
695 Aspiration curettage of uterus	7,591	9,673	1,366	2,363	6,568	899	300	1,123	29,883
134 Extracapsular extraction of lens by fragmentation and aspiration technique	9,985	9,593	3,880	1,958	3,289	23	302	98	29,128
573 Diagnostic procedures on bladder	9,314	6,256	4,419	3,214	3,399	1,012	176	145	27,935
730 Artificial rupture of membranes	9,203	6,838	5,108	2,638	1,473	521	595	275	26,651
932 Other physical therapy musculoskeletal manipulation	15,676	3,646	2,334	1,035	3,206	252	293	71	26,513
793 Open reduction of fracture with internal fixation	8,989	6,341	4,391	2,641	1,756	592	497	345	25,552
512 Cholecystectomy	9,051	6,731	4,473	1,869	2,326	462	371	163	25,446
991 Injection or infusion of therapeutic or prophylactic substance	7,247	6,024	4,607	3,398	2,802	430	503	103	25,114
939 Respiratory therapy	7,209	4,645	5,428	3,673	2,502	1,022	169	345	24,993
938 Other rehabilitation therapy	9,315	6,115	3,576	2,001	1,145	342	204	188	22,886
790 Closed reduction of fracture without internal fixation	8,515	5,014	3,976	2,016	1,388	423	359	320	22,011
862 Excision or destruction of lesion or tissue of skin and sub. tissue	6,124	4,833	3,563	1,545	2,024	381	180	378	19,028
470 Appendectomy	6,530	4,905	3,134	1,977	1,256	358	407	203	18,770
815 Joint replacement of lower extremity	6,835	4,452	3,029	1,334	1,978	446	394	36	18,504
530 Unilateral repair of inguinal hernia	6,236	4,576	3,293	1,533	1,625	359	256	139	18,017
860 Incision of skin and subcutaneous tissue	4,959	3,224	4,092	2,015	1,384	385	182	593	16,834
Other	370,077	282,162	211,714	111,321	114,505	25,390	17,548	9,866	1,142,583
No principal procedure or not reported	400,381	249,303	216,276	89,403	96,738	19,867	9,763	15,218	1,096,949
<b>Total</b>	<b>1,272,797</b>	<b>928,847</b>	<b>685,345</b>	<b>346,363</b>	<b>346,782</b>	<b>80,389</b>	<b>57,175</b>	<b>52,400</b>	<b>3,770,098</b>

Note: Abbreviation: sub.—subcutaneous.

**Table 8.13: Separations for the 30 principal procedures in 3-digit ICD-9-CM groupings with the highest number of separations, private hospitals, States and Territories, 1997–98**

Principal procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
451 Diagnostic procedures on small intestine	37,281	33,331	26,809	8,264	7,427	n.p.	n.p.	n.a.	116,352
452 Diagnostic procedures on large intestine	39,060	32,819	23,906	7,069	6,063	n.p.	n.p.	n.a.	111,776
992 Injection or infusion of other therapeutic or prophylactic substance	10,756	29,353	20,524	7,751	7,359	n.p.	n.p.	n.a.	77,888
134 Extracapsular extraction of lens by fragmentation and aspiration technique	22,997	13,201	15,962	3,371	3,399	n.p.	n.p.	n.a.	61,102
399 Other operations on vessels	11,077	15,953	8,070	1,645	8,138	n.p.	n.p.	n.a.	44,890
231 Surgical removal of tooth	12,536	12,179	8,892	4,751	4,387	n.p.	n.p.	n.a.	44,080
454 Local excision or destruction of lesion or tissue of large intestine	14,293	7,849	8,344	3,112	1,874	n.p.	n.p.	n.a.	36,146
863 Other local excision or destruction of lesion or tissue of skin and subcutaneous tissue	11,380	7,616	7,661	1,926	3,233	n.p.	n.p.	n.a.	32,939
573 Diagnostic procedures on bladder	9,578	8,719	5,167	1,519	1,145	n.p.	n.p.	n.a.	27,144
690 Dilatation and curettage of uterus	11,214	6,352	3,642	1,609	1,419	n.p.	n.p.	n.a.	25,091
806 Excision of semilunar cartilage of knee	7,698	6,225	3,656	2,235	3,000	n.p.	n.p.	n.a.	23,724
372 Diagnostic procedures on heart and pericardium	9,236	5,305	5,185	1,861	1,181	n.p.	n.p.	n.a.	23,244
815 Joint replacement of lower extremity	6,232	5,131	3,418	1,962	1,987	n.p.	n.p.	n.a.	19,873
814 Other repair of joint of lower extremity	6,541	4,925	2,666	2,490	2,582	n.p.	n.p.	n.a.	19,839
698 Reproductive medicine procedures	6,867	5,367	4,783	1,442	471	n.p.	n.p.	n.a.	19,779
695 Aspiration curettage of uterus	9,749	3,268	1,221	4,019	610	n.p.	n.p.	n.a.	19,193
530 Unilateral repair of inguinal hernia	5,507	4,122	3,148	1,380	1,200	n.p.	n.p.	n.a.	16,243
200 Myringotomy	4,356	4,527	2,510	1,473	2,169	n.p.	n.p.	n.a.	15,749
741 Lower segment caesarean section	3,893	3,875	3,925	1,773	1,334	n.p.	n.p.	n.a.	15,612
512 Cholecystectomy	5,332	3,655	3,221	1,182	1,235	n.p.	n.p.	n.a.	15,358
990 Transfusion of blood and blood components	2,317	3,965	4,126	880	914	n.p.	n.p.	n.a.	12,669
944 Other psychotherapy and counselling	7,749	918	3,445	460	17	n.p.	n.p.	n.a.	12,590
044 Lysis of adhesions and decompression of cranial and peripheral nerves	3,629	3,444	2,450	1,278	1,218	n.p.	n.p.	n.a.	12,475
930 Diagnostic physical therapy	4,861	3,917	1,470	312	1,324	n.p.	n.p.	n.a.	11,987
756 Repair of other current obstetric laceration	3,344	3,453	2,330	999	1,091	n.p.	n.p.	n.a.	11,869
933 Other physical therapy therapeutic procedures	1,050	2,204	8,099	103	218	n.p.	n.p.	n.a.	11,760
039 Other operations on spinal cord and spinal canal structures	2,504	3,610	1,159	2,083	1,730	n.p.	n.p.	n.a.	11,516
218 Repair and plastic operations on the nose	3,899	3,060	1,837	926	1,315	n.p.	n.p.	n.a.	11,386
602 Transurethral prostatectomy	3,277	3,074	1,889	743	805	n.p.	n.p.	n.a.	10,340
852 Excision or destruction of breast tissue	3,212	2,947	1,802	902	844	n.p.	n.p.	n.a.	10,243
Other	213,486	173,147	145,824	65,726	58,279	n.p.	n.p.	n.a.	685,502
No principal procedure or not reported	49,440	66,690	50,937	25,112	19,452	n.p.	n.p.	n.a.	224,617
<b>Total</b>	<b>544,351</b>	<b>484,201</b>	<b>388,078</b>	<b>160,358</b>	<b>147,420</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.a.</b>	<b>1,792,976</b>

Note: Abbreviation: sub.—subcutaneous.

n.a. not available.

n.p. not published.

**Table 8.14: Average length of stay (days) for the 30 principal procedures in 3-digit ICD-9-CM groupings with the highest number of separations, public hospitals, States and Territories, 1997–98**

Principal procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
399 Other operations on vessels	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
992 Injection or infusion of other therapeutic or prophylactic substance	1.9	2.3	1.9	2.2	2.2	1.5	1.5	2.7	2.0
451 Diagnostic procedures on small intestine	2.7	2.1	2.4	2.1	2.3	2.3	2.2	2.4	2.4
452 Diagnostic procedures on large intestine	1.9	1.7	1.8	1.5	1.9	1.7	1.8	1.5	1.8
870 Soft tissue x-ray of face, head, and neck	8.0	6.8	8.5	11.4	12.1	8.6	9.9	9.8	8.5
930 Diagnostic physical therapy	11.3	13.0	8.5	12.4	11.5	11.3	8.5	12.6	11.2
990 Transfusion of blood and blood components	3.4	3.4	3.6	3.3	2.9	2.7	3.6	5.7	3.3
756 Repair of other current obstetric laceration	3.6	3.6	3.3	3.8	3.5	4.2	3.3	4.3	3.5
372 Diagnostic procedures on heart and pericardium	3.0	2.8	2.9	2.8	2.8	3.9	2.6	4.2	2.9
741 Lower segment caesarean section	6.7	6.5	5.8	6.5	6.6	6.7	6.7	8.1	6.5
863 Other local excision or destruction of lesion or tissue of skin and sub. tissue	2.3	2.0	3.6	2.0	1.8	1.5	6.4	3.2	2.6
947 Social work assessment and management	11.8	16.0	9.7	6.9	15.1	9.6	7.1	9.0	12.4
929 Nutritional assessment and management	9.7	13.2	8.1	8.1	13.8	10.8	8.6	10.2	10.5
690 Dilatation and curettage of uterus	1.2	1.1	1.2	1.2	1.1	1.2	1.4	1.5	1.2
695 Aspiration curettage of uterus	1.2	1.0	1.2	1.1	1.0	1.1	1.1	1.0	1.1
134 Extracapsular extraction of lens by fragmentation and aspiration technique	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1.3	1.1
573 Diagnostic procedures on bladder	1.8	1.4	1.9	1.7	1.7	1.5	2.4	4.2	1.7
730 Artificial rupture of membranes	3.3	3.8	3.0	3.7	3.4	4.0	3.3	4.2	3.4
932 Other physical therapy musculoskeletal manipulation	10.0	16.5	11.9	12.0	14.7	12.7	12.0	6.9	11.7
793 Open reduction of fracture with internal fixation	7.2	7.3	7.4	8.4	7.1	6.9	7.4	10.5	7.4
512 Cholecystectomy	4.1	3.9	3.2	4.3	3.4	3.8	4.1	5.3	3.8
991 Injection or infusion of therapeutic or prophylactic substance	2.8	3.1	3.1	2.2	2.4	3.5	3.5	3.4	2.8
939 Respiratory therapy	6.7	6.9	5.5	4.2	4.3	2.4	11.0	5.5	5.7
938 Other rehabilitation therapy	14.7	18.5	11.9	17.0	17.6	8.9	17.2	10.7	15.5
790 Closed reduction of fracture without internal fixation	1.9	1.9	1.8	2.2	2.1	2.3	2.4	3.5	2.0
862 Excision or destruction of lesion or tissue of skin and sub. tissue	6.2	6.1	5.3	6.6	5.0	4.5	6.3	9.4	5.9
470 Appendectomy	3.6	3.4	3.2	3.3	3.8	3.7	3.5	4.0	3.5
815 Joint replacement of lower extremity	12.0	12.0	11.8	13.2	9.3	11.8	12.3	28.0	11.8
530 Unilateral repair of inguinal hernia	2.2	1.9	1.6	2.0	2.1	2.1	1.8	2.2	2.0
860 Incision of skin and subcutaneous tissue	4.6	5.2	4.0	4.5	4.2	4.0	6.9	5.7	4.6
<b>Total<sup>(a)</sup></b>	<b>4.7</b>	<b>4.0</b>	<b>4.5</b>	<b>4.2</b>	<b>4.3</b>	<b>4.9</b>	<b>4.3</b>	<b>3.6</b>	<b>4.4</b>

(a) For all separations.

Note: Abbreviation: sub.—subcutaneous.

**Table 8.15: Average length of stay (days) for the 30 principal procedures in 3-digit ICD-9-CM groupings with the highest number of separations, private hospitals, States and Territories, 1997–98**

Principal procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
451 Diagnostic procedures on small intestine	1.2	1.3	1.6	1.7	1.6	n.p.	n.p.	n.a.	1.4
452 Diagnostic procedures on large intestine	1.1	1.2	1.3	1.3	1.4	n.p.	n.p.	n.a.	1.2
992 Injection or infusion of other therapeutic or prophylactic substance	1.6	1.7	1.4	1.9	1.5	n.p.	n.p.	n.a.	1.6
134 Extracapsular extraction of lens by fragmentation and aspiration technique	1.1	1.1	1.2	1.3	1.1	n.p.	n.p.	n.a.	1.1
399 Other operations on vessels	1.1	1.0	1.1	1.0	1.0	n.p.	n.p.	n.a.	1.1
231 Surgical removal of tooth	1.0	1.1	1.0	1.1	1.0	n.p.	n.p.	n.a.	1.0
454 Local excision or destruction of lesion or tissue of large intestine	1.1	1.2	1.2	1.2	1.2	n.p.	n.p.	n.a.	1.1
863 Other local excision or destruction of lesion or tissue of skin and sub. tissue	1.4	1.6	1.7	1.9	1.4	n.p.	n.p.	n.a.	1.6
573 Diagnostic procedures on bladder	1.3	1.2	1.7	1.9	1.5	n.p.	n.p.	n.a.	1.4
690 Dilation and curettage of uterus	1.0	1.1	1.2	1.1	1.1	n.p.	n.p.	n.a.	1.1
806 Excision of semilunar cartilage of knee	1.1	1.1	1.1	1.2	1.2	n.p.	n.p.	n.a.	1.1
372 Diagnostic procedures on heart and pericardium	1.7	2.5	2.4	1.7	2.3	n.p.	n.p.	n.a.	2.1
815 Joint replacement of lower extremity	12.5	12.8	13.4	14.1	11.7	n.p.	n.p.	n.a.	12.8
814 Other repair of joint of lower extremity	1.4	1.8	1.8	1.6	1.7	n.p.	n.p.	n.a.	1.6
698 Reproductive medicine procedures	1.0	1.0	1.0	1.2	1.0	n.p.	n.p.	n.a.	1.0
695 Aspiration curettage of uterus	1.0	1.0	1.1	1.0	1.1	n.p.	n.p.	n.a.	1.0
530 Unilateral repair of inguinal hernia	2.4	2.2	1.9	2.4	2.6	n.p.	n.p.	n.a.	2.2
200 Myringotomy	1.0	1.0	1.0	1.0	1.0	n.p.	n.p.	n.a.	1.0
741 Lower segment caesarean section	7.6	7.8	7.4	8.5	7.1	n.p.	n.p.	n.a.	7.6
512 Cholecystectomy	3.4	4.0	3.8	4.0	3.7	n.p.	n.p.	n.a.	3.7
990 Transfusion of blood and blood components	4.2	4.4	3.1	5.2	4.1	n.p.	n.p.	n.a.	4.0
944 Other psychotherapy and counselling	4.6	2.1	4.9	3.0	25.9	n.p.	n.p.	n.a.	4.5
044 Lysis of adhesions and decompression of cranial and peripheral nerves	1.2	1.3	1.2	1.3	1.2	n.p.	n.p.	n.a.	1.2
930 Diagnostic physical therapy	15.0	14.5	11.4	13.2	14.9	n.p.	n.p.	n.a.	14.3
756 Repair of other current obstetric laceration	5.3	5.4	5.3	5.3	5.0	n.p.	n.p.	n.a.	5.3
933 Other physical therapy therapeutic procedures	8.4	24.0	1.9	9.7	13.0	n.p.	n.p.	n.a.	7.0
039 Other operations on spinal cord and spinal canal structures	2.8	2.8	3.9	2.3	2.0	n.p.	n.p.	n.a.	2.7
218 Repair and plastic operations on the nose	1.4	1.6	1.2	1.4	1.7	n.p.	n.p.	n.a.	1.4
602 Transurethral prostatectomy	4.6	4.8	5.0	5.8	5.3	n.p.	n.p.	n.a.	5.0
852 Excision or destruction of breast tissue	2.0	1.9	1.9	2.0	2.5	n.p.	n.p.	n.a.	2.0
<b>Total<sup>(a)</sup></b>	<b>3.0</b>	<b>3.5</b>	<b>3.5</b>	<b>3.3</b>	<b>3.6</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.a.</b>	<b>3.3</b>

(a) For all separations.

n.a. not available.

n.p. not published.

Note: Abbreviation: sub.—subcutaneous.

**Table 8.16: Separations for males for the 30 principal procedures in 3-digit ICD-9-CM groupings with the highest number of separations, by age group, all hospitals, Australia, 1997–98**

Principal procedure	<1	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total <sup>(a)</sup>
399 Other operations on vessels	16	38	864	7,537	20,201	31,300	40,574	48,898	66,039	27,555	243,022
992 Injection or infusion of other therapeutic or prophylactic substance	2,224	3,997	5,264	4,994	6,405	10,687	21,266	33,027	36,211	15,855	139,930
451 Diagnostic procedures on small intestine	236	536	1,198	4,259	10,482	15,700	20,307	19,457	20,519	13,873	106,567
452 Diagnostic procedures on large intestine	23	80	278	1,789	5,336	10,901	16,919	16,085	16,187	9,875	77,473
372 Diagnostic procedures on heart and pericardium	82	121	128	221	540	2,641	8,096	11,692	12,531	4,624	40,676
134 Extracapsular extraction of lens by fragmentation and aspiration technique	5	12	17	45	145	459	1,580	3,973	11,889	17,568	35,693
573 Diagnostic procedures on bladder	121	188	285	590	1,336	2,634	4,496	6,465	10,302	8,723	35,140
863 Other local excision or destruction of lesion or tissue of skin and subcutane	199	698	1,791	1,666	2,456	3,612	4,799	4,981	6,902	7,323	34,427
870 Soft tissue x-ray of face, head, and neck	635	1,410	1,596	2,825	2,741	2,480	2,875	3,520	6,103	8,937	33,122
990 Transfusion of blood and blood components	209	1,210	1,424	1,855	1,668	1,732	2,752	3,989	7,793	10,422	33,054
530 Unilateral repair of inguinal hernia	599	1,863	1,401	1,628	2,521	3,473	5,106	5,258	5,579	3,952	31,380
454 Local excision or destruction of lesion or tissue of large intestine	1	3	25	89	557	2,255	5,766	8,005	8,340	4,278	29,319
930 Diagnostic physical therapy	244	368	543	922	1,218	1,635	1,924	2,974	6,452	9,942	26,222
231 Surgical removal of tooth	0	798	2,576	10,924	5,021	1,919	1,053	627	451	268	23,637
806 Excision of semilunar cartilage of knee	1	1	138	2,607	4,039	4,871	4,645	3,302	2,022	663	22,289
602 Transurethral prostatectomy	0	0	0	0	4	44	676	3,900	8,222	7,692	20,538
939 Respiratory therapy	4,865	1,553	1,142	577	681	1,334	1,790	2,029	2,817	2,148	18,936
862 Excision or destruction of lesion or tissue of skin and subcutaneous tissue	81	648	2,166	4,898	3,341	2,229	1,799	1,309	1,117	991	18,579
793 Open reduction of fracture with internal fixation	1	146	1,526	4,922	3,947	2,535	1,733	1,065	1,002	1,692	18,569
200 Myringotomy	715	9,281	6,531	213	170	185	277	247	240	155	18,014
929 Nutritional assessment and management	496	526	558	600	703	1,068	1,892	2,592	3,932	4,619	16,986
947 Social work assessment and management	693	390	285	1,101	1,533	1,412	1,412	1,515	2,714	5,562	16,617
815 Joint replacement of lower extremity	0	0	1	26	103	325	1,149	3,322	6,043	5,135	16,104
814 Other repair of joint of lower extremity	0	2	193	3,733	4,492	3,284	2,117	1,109	599	209	15,738
991 Injection or infusion of therapeutic or prophylactic substance	379	709	1,725	916	954	1,627	1,901	2,259	2,653	1,607	14,730
932 Other physical therapy musculoskeletal manipulation	82	132	292	591	754	897	1,082	1,628	3,454	5,734	14,647
790 Closed reduction of fracture without internal fixation	14	1,296	8,563	2,032	727	579	463	297	233	194	14,398
640 Circumcision	5,022	3,722	3,257	603	397	295	255	230	239	215	14,235
786 Removal of implanted devices from bone	30	222	1,455	3,519	3,011	2,067	1,461	886	500	268	13,419
637 Vasectomy and ligation of vas deferens	1	2	1	80	3,974	7,687	1,388	123	16	8	13,280
Other	20,349	31,009	46,133	60,311	75,566	91,601	111,823	114,400	139,489	110,670	801,351
No principal procedure or not reported	45,139	48,740	42,146	49,547	57,557	56,725	61,753	60,096	81,505	95,806	599,018
<b>Total</b>	<b>82,462</b>	<b>109,701</b>	<b>133,502</b>	<b>175,620</b>	<b>222,580</b>	<b>270,193</b>	<b>335,129</b>	<b>369,260</b>	<b>472,095</b>	<b>386,563</b>	<b>2,557,110</b>

(a) Includes separations for which age was not reported.

Note: Abbreviation: sub.—subcutaneous.



**Table 8.17: Separations for females for the 30 principal procedures in 3-digit ICD-9-CM groupings with the highest number of separations, by age group, all hospitals, Australia, 1997–98**

Principal procedure	<1	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total <sup>(a)</sup>
399 Other operations on vessels	4	13	248	3,877	13,428	19,673	28,055	41,602	55,894	18,113	180,907
992 Injection or infusion of other therapeutic or prophylactic substance	1,659	3,543	4,524	4,352	7,686	17,262	30,957	30,388	27,058	13,635	141,064
451 Diagnostic procedures on small intestine	210	384	1,075	5,174	9,808	16,284	23,098	21,424	21,593	18,215	117,265
452 Diagnostic procedures on large intestine	15	64	254	3,002	7,236	14,559	22,140	20,162	19,626	13,530	100,588
690 Dilation and curettage of uterus	0	0	43	8,125	16,888	13,669	10,869	4,139	2,049	862	56,648
134 Extracapsular extraction of lens by fragmentation and aspiration technique	7	8	14	49	119	359	1,560	4,463	16,899	31,057	54,535
756 Repair of other current obstetric laceration	0	0	24	11,034	33,517	7,659	19	0	0	1	52,256
741 Lower segment caesarean section	0	0	23	7,506	32,339	10,639	80	0	0	0	50,589
695 Aspiration curettage of uterus	2	0	132	16,776	21,736	10,158	246	7	5	5	49,073
231 Surgical removal of tooth	2	655	3,127	19,981	7,507	2,317	1,162	566	359	351	36,027
930 Diagnostic physical therapy	235	267	456	1,128	2,116	1,758	2,216	2,942	6,571	17,654	35,343
863 Other local excision or destruction of lesion or tissue of skin and sub. tissue	168	787	2,102	2,215	3,183	4,386	4,966	4,111	4,825	6,441	33,184
730 Artificial rupture of membranes	0	0	19	8,797	20,002	4,302	12	0	0	1	33,133
512 Cholecystectomy	0	1	70	1,924	4,924	5,510	5,983	5,003	3,974	2,267	29,656
870 Soft tissue x-ray of face, head, and neck	446	925	914	1,616	1,874	1,995	2,267	2,491	4,962	12,070	29,562
990 Transfusion of blood and blood components	172	467	977	1,766	1,664	1,894	2,641	3,118	5,354	10,185	28,238
698 Reproductive medicine procedures	5	0	0	444	11,523	10,636	305	3	2	0	22,918
454 Local excision or destruction of lesion or tissue of large intestine	2	13	25	98	466	1,903	4,315	5,831	6,186	3,816	22,655
815 Joint replacement of lower extremity	0	0	3	27	110	338	1,223	3,286	7,551	9,735	22,273
947 Social work assessment and management	534	255	297	2,164	2,973	1,978	1,238	1,200	2,666	8,794	22,099
852 Excision or destruction of breast tissue	0	2	43	1,121	2,567	4,945	5,847	3,607	2,633	1,273	22,038
734 Medical induction of labour	0	0	7	5,144	13,369	3,120	20	0	0	0	21,661
673 Other excision or destruction of lesion or tissue of cervix	0	1	6	4,522	7,135	4,602	2,856	1,078	427	105	20,732
932 Other physical therapy musculoskeletal manipulation	80	105	196	516	901	845	1,201	1,611	3,899	11,368	20,722
372 Diagnostic procedures on heart and pericardium	80	118	90	162	284	978	3,157	5,232	7,136	3,307	20,544
573 Diagnostic procedures on bladder	54	172	283	628	1,297	2,152	3,228	3,625	4,585	3,913	19,937
929 Nutritional assessment and management	435	444	653	1,311	2,012	1,459	1,404	1,996	3,654	6,534	19,902
542 Diagnostic procedures of abdominal region	7	13	154	4,206	7,294	4,737	1,590	434	330	212	18,977
684 Total abdominal hysterectomy	0	0	1	42	1,472	6,219	6,577	1,506	903	454	17,174
681 Diagnostic procedures on uterus and supporting structures	0	1	11	678	2,457	4,135	5,142	2,174	1,089	412	16,099
Other	18,359	30,216	50,498	82,164	148,956	135,664	130,211	108,354	123,478	139,645	967,548
No principal procedure or not reported	36,116	34,596	29,798	93,636	141,215	79,218	59,967	50,383	69,029	128,563	722,525
<b>Total</b>	<b>58,592</b>	<b>73,050</b>	<b>96,067</b>	<b>294,185</b>	<b>528,058</b>	<b>395,353</b>	<b>364,552</b>	<b>330,736</b>	<b>402,737</b>	<b>462,518</b>	<b>3,005,872</b>

(a) Includes separations for which age was not reported.

Note: Abbreviation: sub.—subcutaneous.

**Table 8.18: Principal and additional procedures in ICD-9-CM groupings, public hospitals, States and Territories, 1997-98**

Principal procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
010-029 Op. on skull, brain & cerebral meninges	4,198	2,922	1,770	1,257	786	303	216	69	11,521
030-039 Op. on spinal cord & spinal canal structures	23,388	17,954	14,184	10,160	7,242	1,766	1,729	701	77,124
040-059 Op. on cranial, peripheral, sympathetic nerves, ganglia	8,164	6,238	4,642	2,892	2,857	609	334	197	25,933
060-079 Op. on thyroid, parathyroid & other endocrine glands	2,531	1,544	1,149	460	463	163	85	39	6,434
080-129, 140-169 Op. on the eye (excluding lens)	13,233	11,149	7,714	3,714	3,920	468	328	274	40,800
130-139 Op. on lens	25,820	22,696	10,905	6,326	8,286	388	754	610	75,785
180-189 Op. on external ear	3,040	2,622	3,173	909	1,130	209	145	69	11,297
190-209 Reconstructive & other op. on middle & inner ear	13,485	13,426	7,816	4,239	6,335	646	1,005	490	47,442
210-229 Op. on nose & nasal sinuses	14,585	14,787	9,351	4,304	7,287	724	972	262	52,272
230-249 Operations on teeth, gums & alveoli	9,567	10,049	8,713	3,865	4,326	1,102	663	678	38,963
250-269 Op. on tongue, salivary glands & ducts	1,814	1,163	971	399	406	89	86	26	4,954
270-279 Other operations on mouth & face	2,864	2,494	2,174	960	970	165	150	90	9,867
280-299 Op. on tonsils, adenoids & pharynx	8,335	8,495	5,598	2,044	3,372	459	514	152	28,969
300-319 Op. on larynx & trachea	3,956	2,970	2,546	852	1,234	193	190	79	12,020
320-339 Op. on lung & bronchus	7,551	5,941	4,729	1,939	2,316	654	306	151	23,587
340-349 Op. on chest wall, pleura, mediastinum & diaphragm	7,655	5,903	4,634	2,463	2,006	501	648	232	24,042
350-359 Op. on valves & septa of heart	1,627	1,714	1,206	330	292	124	10	0	5,303
360-369 Op. on vessels of heart	13,464	8,858	4,099	2,961	2,716	1,203	133	0	33,434
370-379 Other op. on heart & pericardium	24,465	15,980	8,592	7,007	6,393	1,091	1,790	33	65,351
380-389 Incision, excision & occlusion of vessels	18,263	17,195	15,871	4,508	6,851	1,203	1,269	420	65,580
390-399 Other op. on vessels	126,298	124,837	70,023	42,030	31,741	11,434	11,804	17,911	436,078
400-419 Op. on the haemic & lymphatic system	8,914	7,302	5,102	2,850	2,219	693	694	135	27,909
420-429 Op. on oesophagus	6,481	4,368	3,197	1,434	1,796	631	369	91	18,367
430-449 Op. on stomach	8,737	4,441	3,037	1,248	1,438	293	225	133	19,552
450-459 Incision, excision & anastomosis of intestine	85,841	59,752	40,321	27,985	23,326	5,367	4,416	1,974	248,982
460-469 Other op. on intestine	3,190	2,278	1,627	812	823	233	180	70	9,213
470-479 Op. on appendix	7,378	5,620	3,716	2,266	1,497	391	464	223	21,555
480-499 Op. on rectum, rectosigmoid, perirectal tissue & anus	15,520	8,927	5,943	3,478	3,699	666	571	288	39,092
500-529 Op. on liver, gallbladder, biliary tract & pancreas	21,088	13,892	9,146	4,854	4,999	1,254	1,125	349	56,707
530-539 Repair of hernia	12,448	9,387	6,906	3,135	3,443	661	561	262	36,803
540-549 Other op. on abdominal region	29,272	24,286	15,455	9,517	8,100	1,600	1,709	922	90,861
550-559 Op. on kidney	3,541	2,478	1,456	873	1,039	196	244	143	9,970
560-599 Op. on the urinary bladder & other urinary tract	42,963	23,548	18,069	12,357	14,469	3,086	1,452	804	116,748

*(continued)*

**Table 8.18 (continued): Principal and additional procedures in ICD-9-CM groupings, public hospitals, States and Territories, 1997–98**

Principal procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
600–609 Op. on prostate & seminal vesicles	4,773	4,295	1,630	951	1,471	454	383	42	13,999
610–629 Op. on scrotum, tunica vaginalis & testes	3,414	2,649	1,789	1,103	889	301	227	98	10,470
630–639 Op. on spermatic cord, epididymis & vas deferens	4,312	3,489	1,378	1,292	1,519	174	60	71	12,295
640–649 Op. on penis	5,012	3,725	1,260	1,136	1,345	185	104	216	12,983
650–669 Op. on ovary & fallopian tubes	15,798	14,468	7,513	5,830	4,614	987	799	694	50,703
670–676 Op. on cervix	10,654	11,466	11,376	2,274	6,351	565	527	462	43,675
680–689 Other incision & excision of uterus	20,385	17,991	10,220	4,934	6,244	1,024	916	513	62,227
690–699 Other op. on uterus & supporting structures	34,013	33,635	13,361	9,803	13,350	1,770	1,655	1,835	109,422
700–719 Op. on vagina, cul-de-sac, vulva & perineum	8,174	6,669	4,097	2,811	2,489	447	282	193	25,162
720–729 Forceps, vacuum & breech delivery	7,948	6,236	2,789	2,292	1,918	500	474	169	22,326
730–739 Other procedures inducing or assisting delivery	46,242	30,411	28,017	12,246	12,814	2,685	2,205	1,305	135,925
740–749 Caesarean section & removal of foetus	12,059	8,623	6,761	3,569	3,010	690	588	577	35,877
750–759 Other obstetric operations	30,070	20,517	21,035	8,591	13,835	1,373	1,202	879	97,502
760–769 Op. on facial bones & joints	2,211	1,564	1,689	759	1,232	153	239	200	8,047
770–789 Op. on bones, except facial bone	13,804	11,086	8,202	3,609	3,846	969	1,058	472	43,046
790–799 Reduction of fracture & dislocation	25,627	16,822	12,826	7,019	5,592	1,432	1,240	1,058	71,616
800–809 Incision & excision of joint structures	16,448	16,737	10,467	5,299	8,213	1,175	1,420	793	60,552
810–819 Repair & plastic op. on joint structures	15,135	11,895	8,287	5,368	5,692	1,004	1,311	471	49,163
820–839 Op. on muscle, tendon, fascia & bursa	11,175	9,434	6,758	3,785	3,516	753	668	504	36,593
840–849 Other procedures on musculoskeletal system	2,480	1,852	1,535	890	788	179	137	131	7,992
850–859 Op. on the breast	7,962	7,068	3,742	2,524	2,081	483	407	231	24,498
860–869 Op. on skin & subcutaneous tissue	50,691	40,067	42,419	17,723	16,266	3,318	2,092	2,381	174,957
870–889 Diagnostic radiology & related techniques	145,545	88,860	65,749	36,487	29,524	7,618	6,978	2,181	382,942
890–919 Interview, evaluation, consultation & other examination	12,033	9,352	7,116	5,430	4,262	631	90	97	39,011
920–929 Diagnostic & therapeutic intervention	83,446	64,051	35,401	16,722	9,619	3,627	3,675	2,158	218,699
930–939 Physical & respiratory therapy, rehabilitation & related	279,422	243,236	203,915	50,683	45,877	25,481	7,896	4,190	860,700
940–949 Procedures related to the psyche	81,500	57,354	39,072	18,115	15,024	3,843	3,410	1,210	219,528
950–954 Ophthalmologic & otologic diagnosis & treatment	1,299	434	1,265	286	770	9	9	46	4,118
960–967 Nonoperative intubation & irrigation	22,181	20,715	21,299	7,125	7,828	1,853	1,193	913	83,107
970–978 Replacement & removal of therapeutic appliances	7,541	4,459	4,568	2,860	1,565	347	361	172	21,873
980–985 Nonoperative removal of foreign body or calculus	2,412	1,540	1,415	801	574	82	60	64	6,948
990–999 Other nonoperative procedures	142,550	120,449	80,681	52,467	47,540	11,712	8,963	1,318	465,680
<b>Total procedures</b>	<b>1,705,992</b>	<b>1,356,365</b>	<b>971,467</b>	<b>469,212</b>	<b>447,435</b>	<b>114,389</b>	<b>85,770</b>	<b>53,521</b>	<b>5,204,151</b>

Note: Abbreviation: op.—operation.

**Table 8.19: Principal and additional procedures in ICD-9-CM groupings, private hospitals, States and Territories, 1997-98**

Principal procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
010-029 Op. on skull, brain & cerebral meninges	531	681	752	132	195	n.p.	n.p.	n.a.	2,427
030-039 Op. on spinal cord & spinal canal structures	11,359	13,408	9,968	7,344	5,024	n.p.	n.p.	n.a.	49,101
040-059 Op. on cranial, peripheral, sympathetic nerves, ganglia	7,856	6,813	4,357	3,502	3,078	n.p.	n.p.	n.a.	26,705
060-079 Op. on thyroid, parathyroid & other endocrine glands	1,257	949	788	427	317	n.p.	n.p.	n.a.	3,931
080-129, 140-169 Op. on the eye (excluding lens)	17,242	10,234	11,366	4,151	2,596	n.p.	n.p.	n.a.	47,586
130-139 Op. on lens	54,865	32,172	37,303	10,837	7,392	n.p.	n.p.	n.a.	147,221
180-189 Op. on external ear	3,966	2,695	2,786	944	1,361	n.p.	n.p.	n.a.	12,155
190-209 Reconstructive & other op. on middle & inner ear	12,079	10,844	7,096	4,139	5,487	n.p.	n.p.	n.a.	41,352
210-229 Op. on nose & nasal sinuses	24,274	14,633	15,323	5,335	9,461	n.p.	n.p.	n.a.	71,659
230-249 Operations on teeth, gums & alveoli	17,504	18,368	12,132	8,385	6,528	n.p.	n.p.	n.a.	65,162
250-269 Op. on tongue, salivary glands & ducts	947	711	554	333	271	n.p.	n.p.	n.a.	2,936
270-279 Other operations on mouth & face	2,370	1,822	1,699	558	940	n.p.	n.p.	n.a.	7,660
280-299 Op. on tonsils, adenoids & pharynx	6,595	4,901	4,952	2,070	2,196	n.p.	n.p.	n.a.	21,720
300-319 Op. on larynx & trachea	1,502	1,376	1,060	376	470	n.p.	n.p.	n.a.	4,956
320-339 Op. on lung & bronchus	1,253	1,740	2,318	541	662	n.p.	n.p.	n.a.	6,847
340-349 Op. on chest wall, pleura, mediastinum & diaphragm	1,408	1,824	1,790	487	559	n.p.	n.p.	n.a.	6,373
350-359 Op. on valves & septa of heart	639	641	502	81	152	n.p.	n.p.	n.a.	2,015
360-369 Op. on vessels of heart	7,761	6,563	3,971	957	1,376	n.p.	n.p.	n.a.	20,674
370-379 Other op. on heart & pericardium	14,303	10,710	8,112	2,205	2,926	n.p.	n.p.	n.a.	38,795
380-389 Incision, excision & occlusion of vessels	7,593	8,339	5,861	1,849	2,366	n.p.	n.p.	n.a.	27,410
390-399 Other op. on vessels	17,144	26,106	13,671	3,082	10,265	n.p.	n.p.	n.a.	70,623
400-419 Op. on the haemic & lymphatic system	2,969	3,068	3,490	1,112	919	n.p.	n.p.	n.a.	12,194
420-429 Op. on oesophagus	3,087	2,642	2,759	485	904	n.p.	n.p.	n.a.	10,370
430-449 Op. on stomach	8,895	5,474	2,894	550	688	n.p.	n.p.	n.a.	18,744
450-459 Incision, excision & anastomosis of intestine	117,977	88,747	73,285	22,799	19,482	n.p.	n.p.	n.a.	330,676
460-469 Other op. on intestine	969	1,048	1,090	311	352	n.p.	n.p.	n.a.	3,966
470-479 Op. on appendix	1,457	1,650	1,768	767	505	n.p.	n.p.	n.a.	6,506
480-499 Op. on rectum, rectosigmoid, perirectal tissue & anus	13,210	6,554	5,487	2,293	2,129	n.p.	n.p.	n.a.	30,795
500-529 Op. on liver, gallbladder, biliary tract & pancreas	8,024	6,266	5,581	2,155	2,241	n.p.	n.p.	n.a.	25,313
530-539 Repair of hernia	9,905	7,335	6,370	2,558	2,285	n.p.	n.p.	n.a.	29,898
540-549 Other op. on abdominal region	16,059	13,211	12,299	3,881	4,179	n.p.	n.p.	n.a.	51,955
550-559 Op. on kidney	791	839	555	291	227	n.p.	n.p.	n.a.	2,887
560-599 Op. on the urinary bladder & other urinary tract	35,606	22,522	18,237	7,649	11,056	n.p.	n.p.	n.a.	99,721

(continued)

**Table 8.19 (continued): Principal and additional procedures in ICD-9-CM groupings, private hospitals, States and Territories, 1997-98**

Principal procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
600-609 Op. on prostate & seminal vesicles	4,911	5,052	2,669	1,134	1,038	n.p.	n.p.	n.a.	15,881
610-629 Op. on scrotum, tunica vaginalis & testes	1,453	1,192	908	429	313	n.p.	n.p.	n.a.	4,616
630-639 Op. on spermatic cord, epididymis & vas deferens	4,621	2,871	1,672	908	857	n.p.	n.p.	n.a.	11,520
640-649 Op. on penis	2,332	1,489	1,135	669	379	n.p.	n.p.	n.a.	6,368
650-669 Op. on ovary & fallopian tubes	9,905	7,913	6,691	2,801	2,374	n.p.	n.p.	n.a.	31,367
670-676 Op. on cervix	6,552	4,458	2,779	1,199	778	n.p.	n.p.	n.a.	16,864
680-689 Other incision & excision of uterus	16,999	14,412	10,031	4,321	4,223	n.p.	n.p.	n.a.	52,309
690-699 Other op. on uterus & supporting structures	43,747	22,070	14,655	9,300	4,352	n.p.	n.p.	n.a.	97,464
700-719 Op. on vagina, cul-de-sac, vulva & perineum	6,817	4,555	4,022	1,936	1,674	n.p.	n.p.	n.a.	19,877
720-729 Forceps, vacuum & breech delivery	2,941	3,174	2,288	1,201	973	n.p.	n.p.	n.a.	11,106
730-739 Other procedures inducing or assisting delivery	11,743	10,577	11,068	5,953	4,229	n.p.	n.p.	n.a.	45,940
740-749 Caesarean section & removal of foetus	3,972	3,952	3,996	1,822	1,340	n.p.	n.p.	n.a.	15,922
750-759 Other obstetric operations	7,813	6,792	5,696	3,204	2,068	n.p.	n.p.	n.a.	26,651
760-769 Op. on facial bones & joints	1,186	1,629	812	307	785	n.p.	n.p.	n.a.	5,015
770-789 Op. on bones, except facial bone	13,256	12,872	5,987	5,075	5,181	n.p.	n.p.	n.a.	44,381
790-799 Reduction of fracture & dislocation	4,176	4,204	4,099	2,037	1,573	n.p.	n.p.	n.a.	16,998
800-809 Incision & excision of joint structures	44,826	38,035	20,258	14,865	20,056	n.p.	n.p.	n.a.	143,836
810-819 Repair & plastic op. on joint structures	29,471	19,931	12,883	10,398	11,020	n.p.	n.p.	n.a.	87,680
820-839 Op. on muscle, tendon, fascia & bursa	10,980	9,945	5,827	3,466	4,418	n.p.	n.p.	n.a.	36,015
840-849 Other procedures on musculoskeletal system	592	619	638	277	224	n.p.	n.p.	n.a.	2,504
850-859 Op. on the breast	8,964	8,043	6,055	3,046	2,438	n.p.	n.p.	n.a.	29,766
860-869 Op. on skin & subcutaneous tissue	36,771	29,338	25,025	9,666	13,687	n.p.	n.p.	n.a.	118,200
870-889 Diagnostic radiology & related techniques	45,734	41,742	39,691	14,149	11,944	n.p.	n.p.	n.a.	158,846
890-919 Interview, evaluation, consultation & other examination	9,973	6,085	6,551	1,685	1,203	n.p.	n.p.	n.a.	26,133
920-929 Diagnostic & therapeutic intervention	14,896	19,436	11,367	2,175	2,321	n.p.	n.p.	n.a.	51,553
930-939 Physical & respiratory therapy, rehabilitation & related	96,930	100,673	53,761	11,578	33,145	n.p.	n.p.	n.a.	303,065
940-949 Procedures related to the psyche	49,849	12,302	11,437	3,691	1,361	n.p.	n.p.	n.a.	78,998
950-954 Ophthalmologic & otologic diagnosis & treatment	93	18	194	37	9	n.p.	n.p.	n.a.	360
960-967 Nonoperative intubation & irrigation	3,771	5,216	7,744	2,037	1,667	n.p.	n.p.	n.a.	21,159
970-978 Replacement & removal of therapeutic appliances	2,718	1,884	2,523	1,228	918	n.p.	n.p.	n.a.	9,728
980-985 Nonoperative removal of foreign body or calculus	1,557	811	1,314	272	481	n.p.	n.p.	n.a.	4,577
990-999 Other nonoperative procedures	23,765	46,588	51,770	15,837	11,662	n.p.	n.p.	n.a.	154,170
<b>Total</b>	<b>954,711</b>	<b>782,764</b>	<b>615,722</b>	<b>239,289</b>	<b>257,280</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.a.</b>	<b>2,949,202</b>

Note: Abbreviation: op.- operation.

# 9 External causes for admitted patients

## Introduction

An external cause is defined in the *National Health Data Dictionary* as the event, circumstance or condition associated with the occurrence of an injury, poisoning or violence. Whenever a patient has a principal or additional diagnosis of an injury or poisoning, an external cause should be recorded and, with it, a place of occurrence code.

External causes are classified, coded and reported to the National Hospital Morbidity Database using the *Australian Version of the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)* (National Coding Centre 1996). The external cause classification is hierarchical, consisting of 192 3-digit categories, mostly divided into a larger number of very specific categories represented by 4-digit codes. The tables and figures in this chapter use the codes and abbreviated descriptions of the ICD-9-CM external cause classification. Full descriptions of the categories are available in the ICD-9-CM publication.

The information in this chapter is presented by grouping records into 10 groups based on the ICD-9-CM external cause classification to provide an overview of the reported external causes. The information in Table 9.6 is also presented according to the place of occurrence classification, common to the *National Health Data Dictionary* and the ICD-9-CM publication.

The tables in this chapter include separations for which an external cause was reported and for which the principal diagnosis was an injury or poisoning for which an external cause must be reported, according to the Australian Coding Standards (diagnosis codes 800–999, V71.3–V71.6). External causes were also reported for other separations and are likely to have related to other principal diagnoses or to additional diagnoses of injury or poisoning; these are not reported here.

The tables exclude separations for which only supplementary codes were reported rather than codes for external causes. These included separations for which a type of sporting injury (E889, for example, hockey) was reported as the external cause but the nature of the external cause (a fall or being struck, for example) was not reported. In contrast with Tables 7.1 and 7.2, also excluded are separations for which an injury or poisoning diagnosis was reported, but an external cause was not.

Tables are presented with summary national separation, patient day and length of stay statistics for public and private hospitals. Also provided are summary separation and patient days data by State and Territory, national information on age group and sex distributions and summary information on reported places of occurrence. The data on relative rankings of the various external cause groups (by numbers of separations or patient days) depend to some extent on the chosen groups of external cause codes.

## Sector

There were 383,728 separations in 1997–98 with an external cause and an injury or poisoning principal diagnosis and these separations accounted for 1,661,437 patient days (Table 9.1). This represented 7% of all separations (21 separations per 1,000 population) and 7% of all patient days. The majority of separations (315,012, 82%) and patient days (1,304,687, 79%) were reported for the public sector. Overall, the average length of stay was longer in the private sector (5.2 days) than the public sector (4.1 days).

The most frequently reported external cause group in both the public and private sectors was *Accidental falls* (E880–E888). Second most frequently reported in both sectors was *Other accidents, late effects of accidental injury* (E900–E929), mainly accidents caused by cutting or piercing instruments or objects, striking against or struck accidentally by objects or persons, and other and unspecified environmental and accidental causes. Together, these groups accounted for 55% of separations (207,719) and 52% of patient days (860,836) for which an external cause and an injury and poisoning diagnosis was reported.

*Transport accidents* (E800–E848) accounted for a further 14% of external cause separations from public hospitals (43,944), but only 6% from private hospitals (4,180). *Suicide and self-inflicted injury* (E950–E959) and *Homicide, injury purposely inflicted by others* (E960–E969) each accounted for 6% of external cause separations from public hospitals (19,507 and 17,857, respectively) but less than 1% each of external cause separations from private hospitals (624 and 479, respectively).

Average length of stay was highest for *Accidents caused by fire or flames* (E890–E899) in the public sector (8.0 days) and for *Accidental falls* in the private sector (6.9 days).

## States and Territories

External causes were recorded for between 5.7 and 8.3% of separations for all States and Territories, with proportions above the average reported for those which reported high proportions of injury and poisoning principal diagnoses (see Table 7.2)— Queensland (74,086, 6.9%), Western Australia (39,852, 7.9%) and the Northern Territory (4,338, 8.3%).

The distributions of separations amongst the external cause groups were similar amongst the States and Territories (Table 9.2). Notable exceptions were the high proportions of separations for *Transport accidents* (E800–E848) and *Homicide, injury purposely inflicted by others* (E960–E969) in the Northern Territory (16%, 684, and 22%, 959, compared with the national averages of 13% and 5%). For *Misadventure during or due to medical care* (E870–E879), the Northern Territory reported a lower proportion (10%, 445) than the national average (17%).

The distributions of patient days amongst the external cause groups were similar among the States and Territories (Table 9.3). However, as for separations, the Northern Territory reported higher than average proportions for *Transport accidents* (24%, 5,793) and *Homicide, injury purposely inflicted by others* (17%, 3,947) than the national averages (13% and 3%, respectively). The Australian Capital Territory reported a greater proportion of patient days for *Suicide and self-inflicted injury* (E950–E959) (7%, 1,760) than the national average (3%).

## Age group and sex

For females, 5% of separations overall were reported with external causes (163,263) whereas 9% of separations for males had external causes recorded (220,467).

The numbers of separations with an external cause varied by age group and sex (Tables 9.4 and 9.5). The most common external cause group for females was *Accidental falls* (E880–E888) (37% of the total for females, 60,991), followed by *Misadventure during or due to medical care* (E870–E879) (19%, 32,106). For males, *Other accidents, late effects of accidental injury* (E900–E929) was the most commonly reported group (31% of the total for males, 69,253), followed by *Accidental falls* (E880–E888) (24%, 51,858). *Misadventure during or due to medical care* (E870–E879) accounted for 15% of male external cause separations (34,094) and 20% of female separations (32,106).

Overall, the highest number of separations for external causes were for the 75 years and over age group for females, whereas for males highest numbers were reported for the 15 to 24 and 25 to 34 years age groups.

In the under 14 years age groups, *Accidental falls* (E880–E888) and *Other accidents, late effects of accidental injury* (E900–E929) were the most commonly reported external causes. The *Other accidents* group also dominated in most adult age groups. However, in the 15 to 24 years age group, *Transport accidents* were also a common external cause for both sexes; in the 35 to 64 years age groups, *Misadventure during or due to medical care* was common; and in the over 65 years age groups, *Accidental falls* were reported for large proportions of external cause separations, especially for females.

## Place of occurrence

A place of occurrence (other than *Unspecified place*) was reported for 55% of separations with an external cause (210,482, Table 9.6), *Home* and *Street and highway* accounting for the majority. *Home* was the most commonly reported place of occurrence for all but two of the external cause groups. The exceptions were *Transport accidents*, for which *Street and highway* was most frequently reported, and *Misadventure during or due to medical care* for which *Residential institute* (which includes hospitals) was the most common place of occurrence. *Home* was the most frequently reported place of occurrence for *Accidental poisoning* (53% of those for which a place of occurrence was reported, 7,875) and for *Suicide and self-inflicted injury* (57%, 11,511).

*Accidental falls* was the most common external cause group in the *Home* category, accounting for 45% of these separations (39,233), while *Misadventure during or due to medical care* was reported for 53% of separations in the *Residential institute* category (12,543).



**Table 9.1: Separation, same day separation, patient day and average length of stay statistics by external cause in ICD-9-CM groupings and hospital sector, Australia, 1997-98**

External cause		Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)	ALOS (days) excluding same day
E800–E848	Transport accidents	43,944	11,385	25.9	2.4	199,326	10.8	4.5	5.8
E850–E869	Accidental poisoning	14,127	5,209	36.9	0.8	25,412	1.4	1.8	2.3
E870–E879	Misadventure during or due to medical care	47,134	8,635	18.3	2.6	295,690	16.1	6.3	7.5
E880–E888	Accidental falls	90,573	21,770	24.0	4.9	485,784	26.4	5.4	6.7
E890–E899	Accidents caused by fire or flames	1,940	466	24.0	0.1	15,577	0.8	8.0	10.3
E900–E929	Other accidents, late effects of accidental injury	76,210	28,303	37.1	4.1	174,272	9.5	2.3	3.0
E930–E949	Adverse effects of therapeutic drugs, biologicals	3,015	649	21.5	0.2	10,466	0.6	3.5	4.1
E950–E959	Suicide & self-inflicted injury	19,507	5,535	28.4	1.1	52,302	2.8	2.7	3.3
E960–E969	Homicide, injury purposely inflicted by others	17,857	6,711	37.6	1.0	43,726	2.4	2.4	3.3
E970–E999	Other injuries	705	250	35.5	<0.1	2,132	0.1	3.0	4.1
<b>Total</b>		<b>315,012</b>	<b>88,913</b>	<b>28.2</b>	<b>17.1</b>	<b>1,304,687</b>	<b>70.8</b>	<b>4.1</b>	<b>5.4</b>
Private hospitals									
E800–E848	Transport accidents	4,180	673	16.1	0.2	19,323	1.1	4.6	5.3
E850–E869	Accidental poisoning	641	94	14.7	<0.1	1,988	0.1	3.1	3.5
E870–E879	Misadventure during or due to medical care	19,066	2,881	15.1	1.0	126,892	7.0	6.7	7.7
E880–E888	Accidental falls	22,277	4,019	18.0	1.2	153,379	8.4	6.9	8.2
E890–E899	Accidents caused by fire or flames	118	21	17.8	<0.1	784	<0.1	6.6	7.9
E900–E929	Other accidents, late effects of accidental injury	20,659	7,824	37.9	1.1	47,401	2.6	2.3	3.1
E930–E949	Adverse effects of therapeutic drugs, biologicals	600	50	8.3	<0.1	3,352	0.2	5.6	6.0
E950–E959	Suicide & self-inflicted injury	624	82	13.1	<0.1	2,248	0.1	3.6	4.0
E960–E969	Homicide, injury purposely inflicted by others	479	134	28.0	<0.1	1,154	0.1	2.4	3.0
E970–E999	Other injuries	72	22	30.6	<0.1	229	<0.1	3.2	4.1
<b>Total</b>		<b>68,716</b>	<b>15,800</b>	<b>23.0</b>	<b>3.8</b>	<b>356,750</b>	<b>19.6</b>	<b>5.2</b>	<b>6.4</b>

Note: Abbreviation: ALOS—average length of stay.

**Table 9.2: Separations by external cause in ICD-9-CM groupings and hospital sector, States and Territories, 1997–98**

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>External cause</b>		<b>Public hospitals</b>								
E800–E848	Transport accidents	15,936	9,673	7,904	4,653	3,643	882	569	684	43,944
E850–E869	Accidental poisoning	4,391	3,012	3,669	1,102	1,417	333	82	121	14,127
E870–E879	Misadventure during or due to medical care	15,556	12,563	7,111	5,109	4,471	1,136	743	445	47,134
E880–E888	Accidental falls	35,403	20,736	15,650	8,049	7,359	1,529	1,026	821	90,573
E890–E899	Accidents caused by fire or flames	657	338	327	345	166	35	9	63	1,940
E900–E929	Other accidents, late effects of accidental injury	23,896	15,458	19,469	8,096	6,119	1,422	720	1,030	76,210
E930–E949	Adverse effects of therapeutic drugs, biologicals	986	689	582	304	306	68	55	25	3,015
E950–E959	Suicide & self-inflicted injury	6,708	5,239	3,090	2,052	1,473	453	317	175	19,507
E960–E969	Homicide, injury purposely inflicted by others	5,877	2,903	3,731	2,619	1,394	272	102	959	17,857
E970–E999	Other injuries	132	187	143	125	64	29	10	15	705
<b>Total</b>		<b>109,542</b>	<b>70,798</b>	<b>61,676</b>	<b>32,454</b>	<b>26,412</b>	<b>6,159</b>	<b>3,633</b>	<b>4,338</b>	<b>315,012</b>
		<b>Private hospitals</b>								
E800–E848	Transport accidents	1,074	1,249	694	468	343	330	22	n.a.	4,180
E850–E869	Accidental poisoning	135	131	173	58	52	90	2	n.a.	641
E870–E879	Misadventure during or due to medical care	5,378	5,756	3,078	2,145	1,792	672	245	n.a.	19,066
E880–E888	Accidental falls	5,179	6,573	4,649	2,239	2,398	1,036	203	n.a.	22,277
E890–E899	Accidents caused by fire or flames	49	31	5	13	16	3	1	n.a.	118
E900–E929	Other accidents, late effects of accidental injury	5,507	5,469	3,453	2,226	3,028	848	128	n.a.	20,659
E930–E949	Adverse effects of therapeutic drugs, biologicals	96	197	151	53	69	25	9	n.a.	600
E950–E959	Suicide & self-inflicted injury	131	164	108	122	59	37	3	n.a.	624
E960–E969	Homicide, injury purposely inflicted by others	146	94	76	65	45	48	5	n.a.	479
E970–E999	Other injuries	14	16	23	9	4	2	4	n.a.	72
<b>Total</b>		<b>17,709</b>	<b>19,680</b>	<b>12,410</b>	<b>7,398</b>	<b>7,806</b>	<b>3,091</b>	<b>622</b>	<b>n.a.</b>	<b>68,716</b>

n.a. not available.

**Table 9.3: Patient days by external cause in ICD-9-CM groupings and hospital sector, States and Territories, 1997–98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>External cause</b>	<b>Public hospitals</b>								
E800–E848 Transport accidents	79,192	40,463	27,242	21,069	16,043	5,448	4,076	5,793	199,326
E850–E869 Accidental poisoning	8,561	4,910	6,277	1,730	2,806	627	181	320	25,412
E870–E879 Misadventure during or due to medical care	105,753	75,391	39,942	33,320	25,871	6,306	5,849	3,258	295,690
E880–E888 Accidental falls	192,493	117,446	69,450	48,101	35,996	9,250	8,294	4,754	485,784
E890–E899 Accidents caused by fire or flames	5,070	2,799	2,271	3,354	1,170	216	81	616	15,577
E900–E929 Other accidents, late effects of accidental injury	57,712	37,450	33,602	20,686	14,803	4,201	2,044	3,774	174,272
E930–E949 Adverse effects of therapeutic drugs, biologicals	3,476	2,237	1,533	1,106	1,237	272	473	132	10,466
E950–E959 Suicide & self-inflicted injury	20,381	11,166	8,414	4,837	3,866	1,252	1,739	647	52,302
E960–E969 Homicide, injury purposely inflicted by others	14,673	6,269	7,331	6,658	3,597	682	542	3,974	43,726
E970–E999 Other injuries	628	371	338	237	347	61	25	125	2,132
<b>Total</b>	<b>487,939</b>	<b>298,502</b>	<b>196,400</b>	<b>141,098</b>	<b>105,736</b>	<b>28,315</b>	<b>23,304</b>	<b>23,393</b>	<b>1,304,687</b>
	<b>Private hospitals</b>								
E800–E848 Transport accidents	5,239	6,533	3,020	1,935	1,088	1,359	149	n.a.	19,323
E850–E869 Accidental poisoning	526	454	556	135	129	156	32	n.a.	1,988
E870–E879 Misadventure during or due to medical care	34,960	39,899	18,289	15,598	12,127	4,371	1,648	n.a.	126,892
E880–E888 Accidental falls	34,992	45,335	37,083	13,070	14,704	7,073	1,122	n.a.	153,379
E890–E899 Accidents caused by fire or flames	407	220	10	72	70	4	1	n.a.	784
E900–E929 Other accidents, late effects of accidental injury	13,241	13,045	7,353	4,611	6,758	2,134	259	n.a.	47,401
E930–E949 Adverse effects of therapeutic drugs, biologicals	651	1,082	618	269	519	85	128	n.a.	3,352
E950–E959 Suicide & self-inflicted injury	698	572	362	292	170	133	21	n.a.	2,248
E960–E969 Homicide, injury purposely inflicted by others	329	229	163	235	91	91	16	n.a.	1,154
E970–E999 Other injuries	33	64	73	29	6	2	22	n.a.	229
<b>Total</b>	<b>91,076</b>	<b>107,433</b>	<b>67,527</b>	<b>36,246</b>	<b>35,662</b>	<b>15,408</b>	<b>3,398</b>	<b>n.a.</b>	<b>356,750</b>

n.a. not available.

**Table 9.4: Separations for males by external cause in ICD-9-CM groupings and age group, all hospitals, Australia, 1997–98**

External cause	<1	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total <sup>(a)</sup>
E800–E848 Transport accidents	67	798	5,598	9,788	6,263	3,961	2,551	1,333	1,089	906	32,356
E850–E869 Accidental poisoning	139	1,837	362	1,453	1,406	1,017	527	250	174	178	7,344
E870–E879 Misadventure during or due to medical care	346	880	1,337	2,233	2,937	3,217	3,835	5,373	7,601	6,335	34,094
E880–E888 Accidental falls	428	3,686	11,108	7,368	5,256	4,380	3,808	3,264	4,151	8,410	51,859
E890–E899 Accidents caused by fire or flames	11	70	213	400	313	190	142	79	55	64	1,538
E900–E929 Other accidents, late effects of accidental injury	537	4,574	7,932	15,502	14,032	10,341	7,524	4,484	2,684	1,643	69,254
E930–E949 Adverse effects of therapeutic drugs, biologicals	65	91	79	114	158	177	174	195	243	235	1,531
E950–E959 Suicide & self-inflicted injury	0	6	96	1,972	2,647	1,938	1,096	395	204	152	8,508
E960–E969 Homicide, injury purposely inflicted by others	101	132	315	4,882	4,091	2,410	1,021	350	150	67	13,519
E970–E999 Other injuries	3	7	20	130	134	90	43	14	11	12	464
<b>Total</b>	<b>1,697</b>	<b>12,081</b>	<b>27,060</b>	<b>43,842</b>	<b>37,237</b>	<b>27,721</b>	<b>20,721</b>	<b>15,737</b>	<b>16,362</b>	<b>18,002</b>	<b>220,467</b>

(a) Includes separations for which age was not reported.

**Table 9.5: Separations for females by external cause in ICD-9-CM groupings and age group, all hospitals, Australia, 1997–98**

External cause	<1	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total <sup>(a)</sup>
E800–E848 Transport accidents	68	498	2,602	3,736	2,423	1,810	1,456	981	1,026	1,170	15,770
E850–E869 Accidental poisoning	130	1,499	370	1,661	1,292	1,155	606	241	213	258	7,426
E870–E879 Misadventure during or due to medical care	161	473	975	1,937	3,280	4,447	4,744	4,204	5,620	6,265	32,106
E880–E888 Accidental falls	381	2,626	6,726	1,977	2,181	2,514	3,289	4,412	8,373	28,510	60,991
E890–E899 Accidents caused by fire or flames	9	54	64	69	97	63	49	35	37	44	521
E900–E929 Other accidents, late effects of accidental injury	382	3,081	3,814	3,792	3,864	3,494	2,907	1,797	1,778	2,705	27,614
E930–E949 Adverse effects of therapeutic drugs, biologicals	49	64	76	160	219	228	243	217	311	517	2,084
E950–E959 Suicide & self-inflicted injury	0	4	327	3,307	3,075	2,784	1,350	412	204	161	11,624
E960–E969 Homicide, injury purposely inflicted by others	83	90	150	1,199	1,622	983	392	119	65	111	4,814
E970–E999 Other injuries	3	3	17	87	79	61	27	20	6	10	313
<b>Total</b>	<b>1,266</b>	<b>8,392</b>	<b>15,121</b>	<b>17,925</b>	<b>18,132</b>	<b>17,539</b>	<b>15,063</b>	<b>12,438</b>	<b>17,633</b>	<b>39,751</b>	<b>163,263</b>

(a) Includes separations for which age was not reported.

**Table 9.6: Separations by external cause in ICD-9-CM groupings and place of occurrence, all hospitals, Australia, 1997–98**

External cause	Home	Farm	Mine & quarry	Industrial place & premises	Place of recreation and sport	Street and highway	Public building	Residential institute	Other specified places	Unspecified place	Total <sup>(a)</sup>
E800–E848 Transport accidents	1,602	1,542	153	391	2,188	27,686	308	195	2,518	11,492	48,124
E850–E869 Accidental poisoning	7,875	284	32	236	89	125	361	283	249	5,227	14,768
E870–E879 Misadventure during or due to medical care	1,798	141	28	19	19	15	125	12,543	336	50,868	66,200
E880–E888 Accidental falls	39,233	984	94	2,255	9,344	3,172	6,293	8,612	3,433	39,117	112,850
E890–E899 Accidents caused by fire or flames	902	71	8	112	27	14	28	26	144	723	2,058
E900–E929 Other accidents, late effects of accidental injury	20,013	2,215	401	10,957	8,944	788	2,268	950	4,282	45,726	96,869
E930–E949 Adverse effects of therapeutic drugs, biologicals	800	16	2	4	7	4	35	290	44	2,410	3,615
E950–E959 Suicide & self-inflicted injury	11,511	221	3	81	96	191	287	454	348	6,932	20,131
E960–E969 Homicide, injury purposely inflicted by others	3,023	99	3	164	266	1,250	2,035	341	742	10,389	18,336
E970–E999 Other injuries	283	7	1	14	14	16	22	25	25	363	777
<b>Total</b>	<b>87,040</b>	<b>5,580</b>	<b>725</b>	<b>14,233</b>	<b>20,994</b>	<b>33,261</b>	<b>11,762</b>	<b>23,719</b>	<b>12,121</b>	<b>173,247</b>	<b>383,728</b>

(a) Includes separations for which place of occurrence was not reported.

# 10 Australian National Diagnosis Related Groups for admitted patients

## Introduction

Australian National Diagnosis Related Groups (AN-DRGs) is an Australian patient classification system which provides a means of summarising and relating the number and type of patients treated in a hospital (that is, its casemix) to the resources required by the hospital (Department of Health and Family Services and 3M Health Information Systems 1996). The classification categorises acute admitted patient episodes of care into groups with similar conditions and similar usage of hospital resources, using information in the hospital morbidity record such as the diagnoses, procedures and demographic characteristics. The classification was adapted from United States classifications to reflect Australian clinical standards and practice and was first released in 1992.

This report uses AN-DRG version 3.1, valid from July 1996, for tables using AN-DRG based data in Chapters 2, 4, 5, and 10. A new version of this DRG classification system has recently been released, Australian Refined Diagnosis Related Groups version 4.0 (Department of Health and Aged Care, 1998) (AR-DRG v4.0). Summary information by State and Territory is provided for all AN-DRGs (version 3.1) and AR-DRGs (version 4.0) on the Internet at <http://www.aihw.gov.au/publications/health/ahs97-8.html> (Tables S10.1–S10.34).

The AN-DRG classification is based on a description of body systems, a separation of medical and surgical procedures, and a hierarchy of procedures, medical problems and other factors that differentiate processes of care. The classification is partly hierarchical, with 23 Major Diagnostic Categories (MDCs) into which the 667 AN-DRGs can be grouped.

The MDCs are mostly defined by body system or disease type, and correspond with particular medical specialities (Department of Health and Family Services 1997). In general, episodes are assigned to MDCs on the basis of the principal diagnosis (coded using ICD-9-CM disease codes). Some episodes involving procedures that are particularly resource intensive can also be assigned to the Pre-MDC category (AN-DRGs 001–010), irrespective of the MDC assigned on the basis of principal diagnosis. Records for these episodes have been categorised separately in tables and figures based on MDCs in this chapter. Episodes with Edit-DRGs (AN-DRGs 950–956, see Glossary) have been similarly categorised separately, even if they were assigned to an MDC.

Episodes are assigned to AN-DRGs within MDCs, primarily on the basis of the ICD-9-CM procedure codes (in the surgical partition) or the diagnosis codes (in the medical partition). For the assignment of AN-DRGs, the principal procedure is defined as the one with the highest resource intensity. This definition differs from the definition of principal procedure in the *National Health Data Dictionary* and used in Chapter 8. When more than one AN-DRG is associated with a cluster of closely-related procedures or diagnoses, other variables, such as the patient's age, the presence of complications or comorbidities, and the mode of

separation, are used for AN-DRG assignment (Department of Health and Family Services 1997).

The data were regrouped by the Institute, in consultation with the States and Territories and the AN-DRGs that resulted from this regrouping are reported here.

The information in this chapter is presented using both levels of the AN-DRG classification:

- MDCs—these 23 groups are used to provide information aggregated at a high level (Figures 10.1 and 10.2, Tables 10.1 to 10.6);
- AN-DRGs—detailed information is presented for the 30 of the 667 AN-DRGs with the highest number of separations (Tables 10.7 to 10.14).

In addition, Table 10.15 presents summary statistics for the 30 AN-DRGs with the highest number of separations for public psychiatric hospitals.

All tables in this chapter include separations for which the type of episode of care was reported as acute or was not reported. That is, separations for episode of care types rehabilitation, palliative care, non-acute care, other care and unqualified neonates are excluded where they were able to be identified (see Table 5.11). Of the separations for which the type of episode of care was reported, 97.1% were reported as acute (96.9%, 3,595,799 of 3,709,450 in the public sector and 97.6%, 1,682,999 of 1,725,331 in the private sector). For public psychiatric hospitals 82% of separations for which the type of episode of care was reported were acute.

Tables are presented with summary separation, patient day and length of stay statistics for public and private hospitals, nationally and by State and Territory. National information on age group and sex distributions is also presented.

The average length of stay figures were calculated using all separations for which lengths of stay were provided. That is, the data were not trimmed of separations with unusually long or short lengths of stay.

Some data for private hospitals in Tasmania and the Australian Capital Territory have not been included in Tables 10.10 and 10.12. These data were supplied but are not published, for confidentiality reasons.

## Cost weights and costs by volume

For each version 3.1 AN-DRG, cost weights were estimated for 1997–98 for the public and private sectors by the Department of Health and Aged Care, through the National Hospital Cost Data Collection (unpublished). Cost weights were also estimated for each version 4.0 AR-DRG for 1997–98 in this study. The cost weights represent the costliness of an AN-DRG relative to all other AN-DRGs, such that the average cost weight for all separations is 1.00. The data collection also provided estimates of average costs for each separation for an AN-DRG with a cost weight of 1.00: \$2,422 in the public sector and \$1,932 in the private sector. Separate cost weights were estimated for the public and private sectors because of the differences in the range of costs recorded in public and private hospitals.

The *Cost by volume* figures in this chapter were derived for each AN-DRG by multiplying the estimated average cost for the AN-DRG by the number of separations for the AN-DRG. For MDCs, the cost estimates for all the AN-DRGs within the MDC were then summed to produce an estimated cost for the MDC.

The *Cost by volume* figures in this chapter are estimates only, intended for use as a guide to the approximate relative costs of hospital services during 1997–98. They should be used with caution in any comparisons of the States and Territories or the public and private

sectors. They are not derived from, or comparable with the expenditure and cost per casemix-adjusted separation information presented in Chapters 2 and 3.

Information based on the average cost weights of 1997–98 separations is included in Chapters 2, 4 and 5. Appendix 8 includes further information on the National Hospital Cost Data Collection and its results for AN-DRG version 3.1 for 1997–98.

## Major Diagnostic Categories

Figures 10.1 and 10.2 provide a summary of the numbers of separations and patient days reported for each of the MDCs by sector.

The MDC with the highest number of separations in the public sector was *Kidney and urinary tract* (MDC 11), followed by *Digestive system* (MDC 06). In the private sector, *Digestive system* had the largest number of separations, followed by *Musculoskeletal system and connective tissue*. For the public sector the highest numbers of patient days were reported for the *Circulatory system* (MDC 05) and *Mental diseases and disorders* (MDC 19) MDCs. The *Musculoskeletal system and connective tissue* and *Digestive system* MDCs accounted for the highest numbers of patient days in the private sector. For the public and private sectors combined, the two MDCs with the most separations were *Digestive system* and *Kidney and urinary tract*. The largest numbers of patient days were reported for the *Musculoskeletal system and connective tissue* and *Circulatory system* MDCs.

The average lengths of stay varied by MDC and hospital sector (Tables 10.1 and 10.2). In the public sector, they ranged from 28 days for the *Pre-MDC* group to 1.6 days for *Kidney and urinary tract* and *Eye diseases and disorders* (MDC 02). In the private sector, the longest average length of stay was 30 days for the *Pre-MDC* group, and the shortest was 1.2 days, for *Eye diseases and disorders*.

Notable differences between hospital sectors were for *Pregnancy, childbirth and puerperium* (MDC 14), where the average length of stay was higher for private hospitals (4.2 days) than public hospitals (3.1 days), *Newborns and other neonates* (MDC 15), where the average length of stay was higher in public hospitals (8.3 days) than private hospitals (6.3 days), *Mental diseases and disorders* (MDC 19), where the average length of stay was higher for public hospitals (11.6 days) than private hospitals (6.4 days), *Infectious and parasitic diseases* (MDC 18), where the average length of stay was higher for private hospitals (6.1 days) than public hospitals (4.8 days), and *Alcohol/drug use and disorders* (MDC 20), where the average length of stay was higher for private hospitals (6.9 days) than public hospitals (4.7 days). A variety of factors could be responsible for such discrepancies, for example different patient populations (and numbers of separations for AN-DRGs within the MDCs), patterns of service provision, facilities available, treatment regimes and reporting practices.

The cost by volume data for MDCs in Tables 10.1 and 10.2 show that the costliest MDC in the public sector was estimated to be *Circulatory system*. In the private sector it was *Musculoskeletal system and connective tissue*.

## States and Territories

Tables 10.3 to 10.6 contain detail on the number of separations and patient days by MDC in the States and Territories. These tables enable State by State comparisons of overall hospital use for the different MDCs, and the share of separations between the private and public sectors. For example, the proportion of total separations for *Respiratory system* (MDC 04) in private hospitals (rather than public hospitals) was higher in Tasmania (32%, 1991) than in



the other jurisdictions, for example, Queensland (27%, 15,528) and New South Wales (13%, 13,785). The proportion of total patient days for *Pregnancy, childbirth and the puerperium* that was in private hospitals (rather than public hospitals) was 30% overall (444,960), but ranged from 26% in South Australia (29,848) and 27% in New South Wales (135,551) to 40% in Tasmania (15,574).

The distributions of separations and patient days by MDC within the States and Territories were broadly consistent with those at the national level. Notable exceptions in the public sector included *Neoplastic disorders* (MDC 17) in the Northern Territory (0.4% of separations, 192, compared with a national average of 4.6%, 167,765) and *Kidney and urinary tract* in the Australian Capital Territory (21.2%, 12,133, compared with 13.6%, 495,962). In the private sector, South Australia and Western Australia reported fewer separations for *Digestive system* (MDC 06) (14.32% of separations, 20,922, and 15.3% of separations, 24,334, compared with 18.9%, 330,718, nationally).

## Australian National Diagnosis Related Groups

Tables 10.7 to 10.14 present information on the most commonly reported AN-DRGs. Tables 10.7 and 10.8 contain summary separation, patient day and average length of stay statistics for the 30 AN-DRGs with the most separations in public and private hospitals.

In the public sector in 1997–98 *Admit for renal dialysis* (AN-DRG 572) was the most common AN-DRG, accounting for 10.2% (372,965) of total separations (Table 10.7). Other leading AN-DRGs included *Chemotherapy* (AN-DRG 780) with 3.7% (133,062), and *Vaginal delivery without complicating diagnosis* (AN-DRG 674) with 3.0% (109,246) of total public sector separations. The corresponding top three AN-DRGs in the private sector were *Other gastroscopy for non-major digestive disease without complications and comorbidities* (AN-DRG 332) with 6% (107,914) of total separations, *Other colonoscopy without complications and comorbidities* (AN-DRG 335) with 5.4% (95,483), and *Lens procedures without vitrectomy and without complications and comorbidities* (AN-DRG 099) with 3.8% (66,183) (Table 10.8).

Of the 10 AN-DRGs with the most separations for the public sector, only three were not included in the top 30 for the private sector, namely *Bronchitis and asthma age <50 without complications and comorbidities* (AN-DRG 187), *Other antenatal admission with moderate or no complicating disorder* (AN-DRG 686), and *Chronic obstructive airways disease* (AN-DRG 177). On the other hand, only one of the leading 10 AN-DRGs in the private sector, *Knee procedures* (AN-DRG 421), was missing from the top 30 for the public sector.

Among the 30 AN-DRGs with the most separations for the public sector, there were seven which were among the top 10 in terms of the most patient days. Similarly, for the private sector, there were five AN-DRGs among the 30 AN-DRGs with the most separations that were also in the top 10 AN-DRGs in terms of patient days. Within the top 30, average lengths of stay ranged from 24 days for *Schizophrenia disorders* (AN-DRG 841) in the public sector to 1 day for seven different AN-DRGs in the private sector.

The highest costs in public hospitals were estimated to be for *Vaginal delivery without complicating diagnosis* (AN-DRG 674) followed by *Admit for renal dialysis* (AN-DRG 572). In the private sector, the costliest AN-DRGs in the top 30 were estimated to be *Lens procedures without vitrectomy and without complications and comorbidities* (AN-DRG 099) and *Other gastroscopy for non-major digestive disease without complications and comorbidities* (AN-DRG 332).

## States and Territories

There was some variation between the States and Territories in the relative number of separations for the most common AN-DRGs (Tables 10.9 and 10.10). For example, in the public sector in the Northern Territory and the Australian Capital Territory, *Admit for renal dialysis* (AN-DRG 572) accounted for a markedly greater proportion of separations than the national average (33.3%, 17,241, and 18.9%, 10,812, respectively, compared with 10.2%).

In the private sector, examples of differences include separations in the Australian Capital Territory, *Other gastroscopy for non-major digestive disease without complications and comorbidities* (AN-DRG 332) which accounted for a lower proportion of total separations than the national average (0.7%, 127, compared with 6%, 107,914), and *Other colonoscopy without complications and comorbidities* (AN-DRG 335) (1.0%, 168, compared with 5.4%, 95,483). In South Australia, *Myringotomy with tube insertion* (AN-DRG 124) accounted for 1.3% of separations (1,926), compared with the national average of 0.8%.

The average lengths of stay were mainly similar among the States and Territories (Tables 10.11 and 10.12). However, there was some variation. In the public sector, *Other factors influencing health status age <80 without complications and comorbidities* (AN-DRG 943) (15.7 days in the Australian Capital Territory to 1.7 days in Western Australia) and *Chronic obstructive airways disease* (AN-DRG 177) (6.1 days in Victoria to 8.8 days in the Australian Capital Territory). In the private sector, variation in lengths of stay was evident for AN-DRGs such as *Major affective disorders* (AN-DRG 843) and *Other skin graft and/or debridement procedures* (AN-DRG 505).

## Age group and sex

Tables 10.13 and 10.14 summarise separations by age group and sex for the 30 leading AN-DRGs. Fourteen of the top 30 AN-DRGs were common to both sexes, while some others were more sex-specific (for example, *Vaginal delivery without complicating diagnosis* (AN-DRG 674)). *Admit for renal dialysis* (AN-DRG 572) was the most commonly reported AN-DRG for both sexes, with the most separations in the 65 to 74 years age group.

The age distributions varied by AN-DRG. For example, *Tonsillectomy &/or adenoidectomy* (AN-DRG 122) was most commonly reported for males and females in the 5 to 14 years age group. *Knee procedures* (AN-DRG 421) was most commonly reported for males in the 25 to 34 years age group and for females in the 45 to 54 years age group, and 62% of separations (24,436) for *Heart failure and shock* (AN-DRG 252) were for persons over the age of 75 years.

## Additional data

The accompanying tables on the Internet at <http://www.aihw.gov.au/publications/health/ahs97-8.html> provide national and State and Territory summary statistics for public and private hospitals for each AN-DRG (version 3.1) and AR-DRG (version 4.0) (as presented for the top 30 AN-DRGs in Tables 10.7 and 10.8). For confidentiality, data for some AN-DRGs in the private sector have been suppressed. The information was suppressed if there were fewer than 50 private hospital separations reported for the AN-DRG and fewer than three reporting units (hospitals, or States or Territories where the hospitals were not individually identified), or there were three reporting units and one contributed more than 85% of the total separations, or two contributed more than 90% of the separations for the AN-DRG.

## Public psychiatric hospitals

Information on AN-DRGs for patients of public psychiatric hospitals was supplied by all States and Territories. Most of these 16,752 separations had AN-DRGs reported that were within the *Mental diseases and disorders* and *Alcohol/drug use and disorders* MDCs (AN-DRGs 841–848 and 860–863, respectively) (Table 10.15). *Schizophrenia disorders* (AN-DRG 841) accounted for the most separations and the most patient days. *Major affective disorders* (AN-DRG 843) ranked second for separations and *Dementia and global disturbances of cerebral function* (AN-DRG 056) for patient days.

The average length of stay was long for most of these AN-DRGs and only 5% (893) of separations were same day separations, compared with 43% in public hospitals overall. The average length of stay for *Schizophrenia disorders* (AN-DRG 841) in public psychiatric hospitals (64.7 days) was markedly more than that in public hospitals overall (Table 10.7: 24.1 days). Similarly, the average length of stay for *Major affective disorders* (AN-DRG 843) (26.3 days) was longer than in public hospitals overall (12.1 days) and in private hospitals (Table 10.8: 7.6 days).

Separations in public psychiatric hospitals include some with very long lengths of stay, up to several years. Hence the average lengths of stay should be interpreted taking into consideration the inclusion of some very long stay separations. The median lengths of stay were markedly shorter than the average lengths of stay for *Schizophrenia disorders* (AN-DRG 841) (15 days) and *Major affective disorders* (AN-DRG 843) (17 days) and for *Dementia and global disturbances of cerebral function* (AN-DRG 056) (29 days, compared with the average length of stay of 113 days). (By definition, half the separations have a shorter length of stay and half have a longer length of stay than the median.)

## Edit DRGs

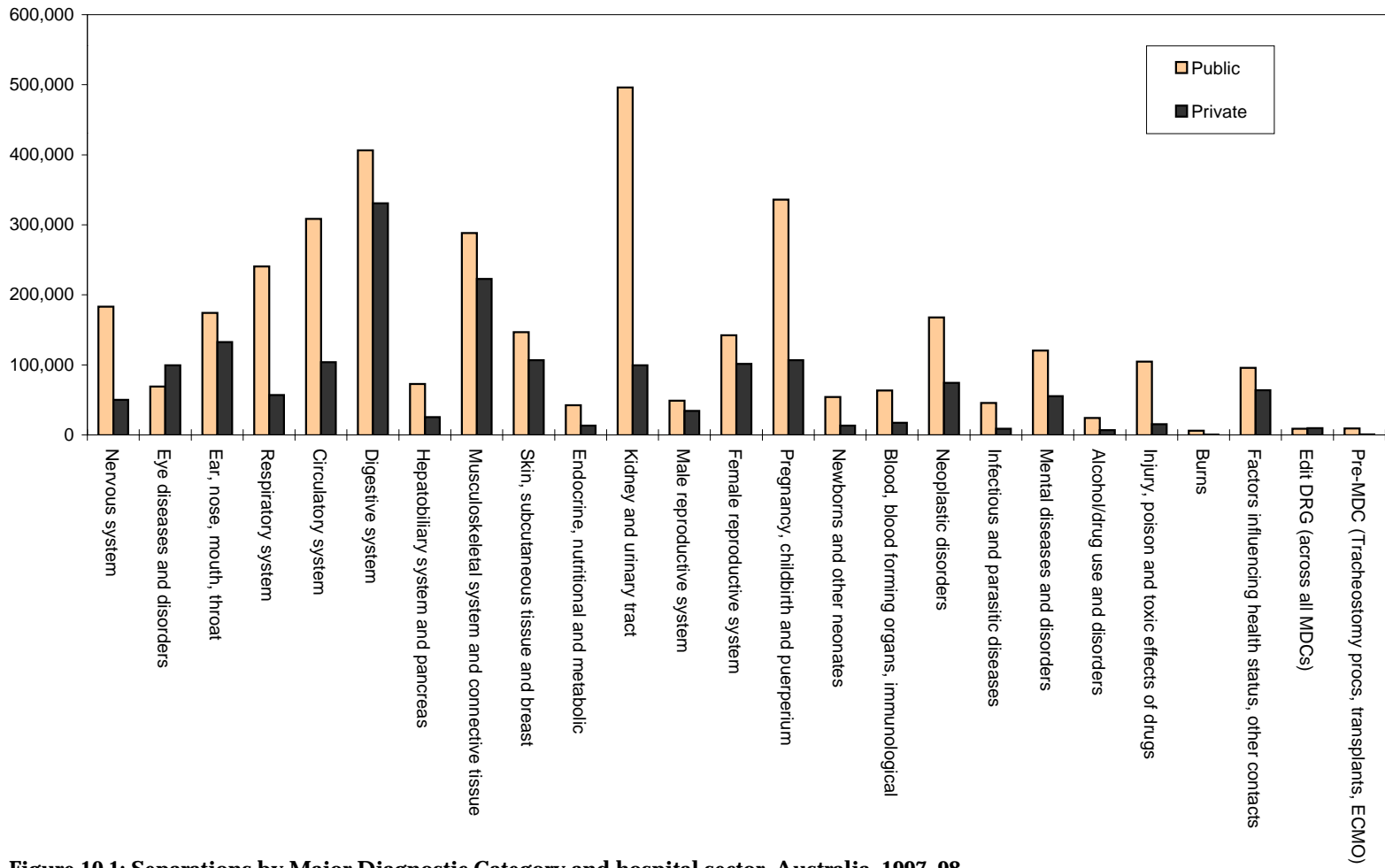
Edit DRGs are the groups to which records containing clinically inconsistent or invalid information are assigned. Group 1 Edit DRGs, 950, 953 and 954, are used when all the operating room procedures are unrelated to the MDC of the patient's principal diagnosis. Group 2 Edit DRGs, 951, 955, 956, are used when a principal diagnosis is coded which will not allow the patient to be assigned to a clinically coherent DRG. Group 3 Edit DRG, 952, is used when the principal diagnosis is invalid, or when other necessary information is incorrect or missing (Department of Health and Family Services 1997).

Table 10.16 provides information on Group 1 Edit DRGs for the 10 principal procedures with the highest number of separations, by hospital sector and State and Territory. Table 10.17 provides information on Group 2 Edit DRGs, for the 10 principal diagnoses with the highest number of separations, by hospital sector and State and Territory. A higher number of separations were assigned to Edit DRGs for private hospitals (52%, 7,782 for Group 1 and 72%, 1,242 for Group 2) than for public hospitals (48%, 7,181 for Group 1 and 28%, 473 for Group 2). Variation in the assignment of separations to Edit DRGs is evident between the States and Territories. The assignment of Group 1 Edit DRGs in public hospitals ranged from 70 separations (0.13% of separations) in the Northern Territory to 2,332 (0.25% of all separations) in Victoria. In private hospitals, the assignment of Group 1 Edit DRGs ranged from 48 (0.27% of separations) in the Australian Capital Territory to 2,602 (0.48% of separations) in New South Wales. A similar pattern is evident for Group 2 Edit DRGs in private hospitals with three separations (0.02% of all separations) in the Australian Capital Territory and 792 (0.16% of all separations) in Victoria. In public hospitals the assignment of

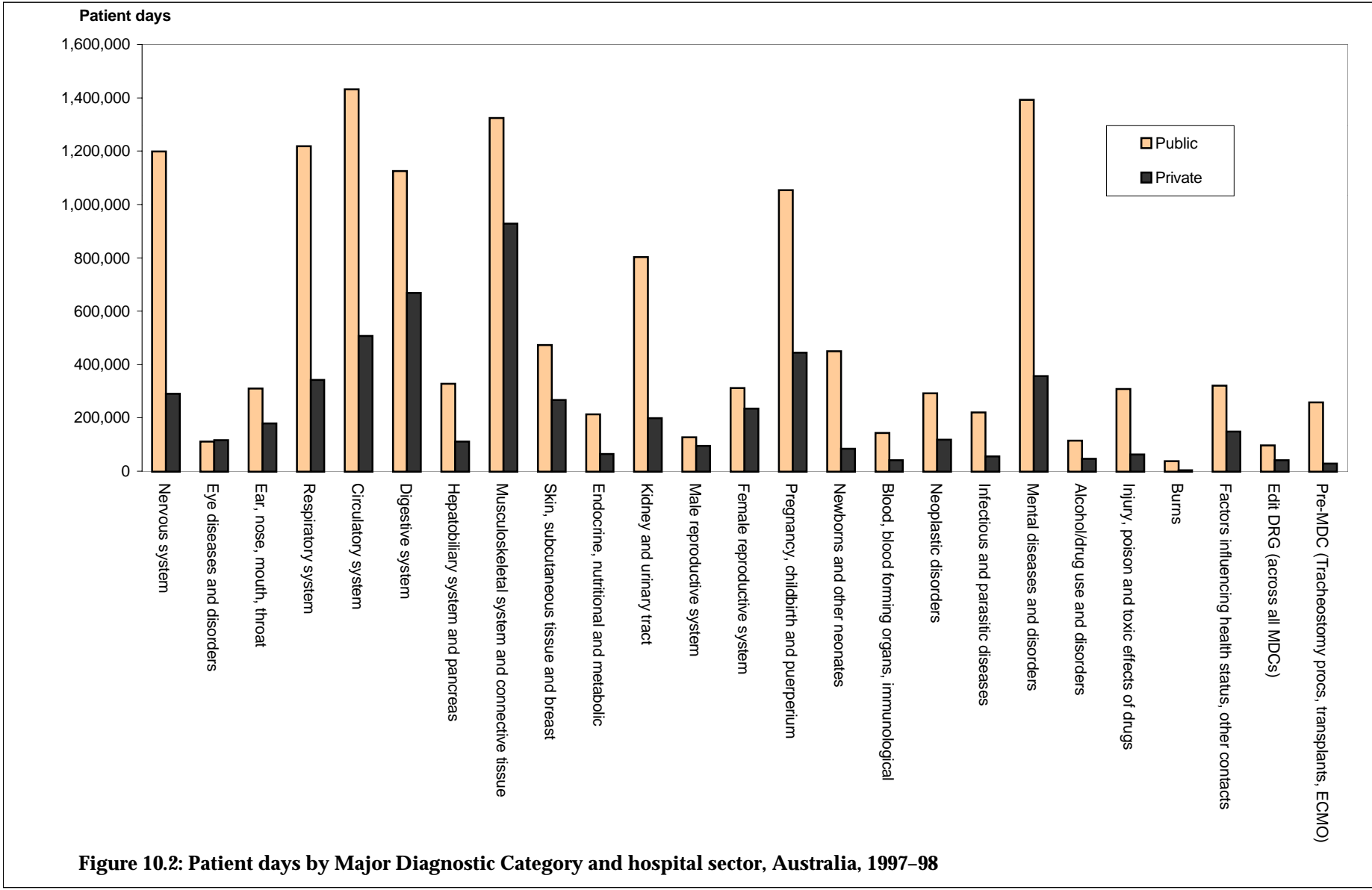
Group 2 Edit DRGs ranged from 4 separations (0.01% of separations) in the Australian Capital Territory to 205 separations (0.02% of separations) in New South Wales.

Figure 10.3 shows Edit DRGs as a percentage of all separations, by State and Territory. Group 3 Edit DRGs accounted for the lowest proportion of separations assigned to Edit DRGs, while Group 1 Edit DRGs accounted for the highest proportion. Compared with the 1995–96 data published in the *Australian Casemix Report on Hospital Activity* (Department of Health and Family Services 1997), the proportion of hospital episodes assigned to Edit DRGs has decreased.

**Separations**



**Figure 10.1: Separations by Major Diagnostic Category and hospital sector, Australia, 1997-98**



**Figure 10.2: Patient days by Major Diagnostic Category and hospital sector, Australia, 1997-98**

**Table 10.1: Separation, same day separation, patient day, average length of stay and cost statistics by Major Diagnostic Category, public hospitals<sup>(a)</sup>, Australia, 1997–98**

Major Diagnostic Category	Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)	ALOS (days) excluding same day	Cost by volume (\$'000)
01 Nervous system	183,343	50,792	27.7	9.8	1,198,714	64.4	6.5	8.7	615,799
02 Eye diseases and disorders	69,294	44,153	63.7	3.7	110,275	5.9	1.6	2.6	130,727
03 Ear, nose, mouth, throat	174,061	73,567	42.3	9.3	310,673	16.7	1.8	2.4	257,713
04 Respiratory system	240,621	31,118	12.9	12.9	1,218,736	65.4	5.1	5.7	683,977
05 Circulatory system	308,450	59,462	19.3	16.6	1,432,227	76.9	4.6	5.5	1,129,699
06 Digestive system	406,414	190,236	46.8	21.8	1,125,655	60.4	2.8	4.3	791,455
07 Hepatobiliary system and pancreas	72,901	12,266	16.8	3.9	327,891	17.6	4.5	5.2	248,051
08 Musculoskeletal system and connective tissue	288,386	91,777	31.8	15.5	1,324,235	71.1	4.6	6.3	969,782
09 Skin, subcutaneous tissue and breast	146,834	72,913	49.7	7.9	472,976	25.4	3.2	5.4	308,455
10 Endocrine, nutritional and metabolic	42,378	8,745	20.6	2.3	212,371	11.4	5.0	6.1	131,623
11 Kidney and urinary tract	495,962	416,892	84.1	26.6	803,407	43.1	1.6	4.9	467,688
12 Male reproductive system	48,910	24,686	50.5	2.6	126,436	6.8	2.6	4.2	96,400
13 Female reproductive system	142,340	86,304	60.6	7.6	311,225	16.7	2.2	4.0	260,776
14 Pregnancy, childbirth and puerperium	336,086	73,634	21.9	18.0	1,054,020	56.6	3.1	3.7	706,489
15 Newborns and other neonates	54,175	6,354	11.7	2.9	449,520	24.1	8.3	9.3	278,540
16 Blood, blood forming organs, immunological	63,556	41,196	64.8	3.4	143,440	7.7	2.3	4.6	92,580
17 Neoplastic disorders	167,765	150,341	89.6	9.0	291,203	15.6	1.7	8.1	190,727
18 Infectious and parasitic diseases	45,532	8,200	18.0	2.4	220,688	11.9	4.8	5.7	139,488
19 Mental diseases and disorders	120,315	32,232	26.8	6.5	1,391,271	74.7	11.6	15.4	446,657
20 Alcohol/drug use and disorders	24,459	4,601	18.8	1.3	113,814	6.1	4.7	5.5	44,728
21 Injury, poison and toxic effects of drugs	104,822	36,604	34.9	5.6	308,102	16.5	2.9	4.0	231,558
22 Burns	5,963	1,320	22.1	0.3	37,033	2.0	6.2	7.7	31,653
23 Factors influencing health status, other contacts	95,740	65,570	68.5	5.1	321,608	17.3	3.4	8.5	136,065
ED Edit DRG (across all MDCs)	8,975	2,463	27.4	0.5	97,606	5.2	10.9	14.6	52,964
PR Pre-MDC (Tracheostomy procs, transplants, ECMO)	9,165	245	2.7	0.5	257,547	13.8	28.1	28.8	405,540
<b>Total</b>	<b>3,656,447</b>	<b>1,585,671</b>	<b>43.4</b>	<b>196.3</b>	<b>13,660,673</b>	<b>733.5</b>	<b>3.7</b>	<b>5.8</b>	<b>8,849,132</b>

(a) Separations for which the type of episode of care was reported as acute, or was not reported.

Note: Abbreviations: ALOS—Average length of stay, MDC—Major Diagnostic Category, DRG—Diagnosis Related Group, procs—procedures, ECMO—extracorporeal membrane oxygenation.

**Table 10.2: Separation, same day separation, patient day, average length of stay and cost statistics by Major Diagnostic Category, private hospitals<sup>(a)</sup>, Australia, 1997–98**

Major Diagnostic Category	Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)	ALOS (days) excluding same day	Cost by volume (\$'000)
01 Nervous system	50,183	16,036	32.0	2.7	289,646	15.7	5.8	8.0	131,580
02 Eye diseases and disorders	99,322	69,550	70.0	5.4	116,934	6.3	1.2	1.6	153,078
03 Ear, nose, mouth, throat	132,418	74,496	56.3	7.2	180,016	9.8	1.4	1.8	137,690
04 Respiratory system	57,141	6,037	10.6	3.1	342,916	18.6	6.0	6.6	138,045
05 Circulatory system	103,869	16,983	16.4	5.6	507,523	27.5	4.9	5.6	342,606
06 Digestive system	330,718	240,909	72.8	17.9	667,651	36.2	2.0	4.8	414,598
07 Hepatobiliary system and pancreas	25,525	2,280	8.9	1.4	111,923	6.1	4.4	4.7	70,263
08 Musculoskeletal system and connective tissue	222,701	79,019	35.5	12.1	928,272	50.4	4.2	5.9	646,710
09 Skin, subcutaneous tissue and breast	106,747	63,867	59.8	5.8	266,263	14.4	2.5	4.7	182,664
10 Endocrine, nutritional and metabolic	13,382	2,336	17.5	0.7	65,043	3.5	4.9	5.7	34,554
11 Kidney and urinary tract	99,647	70,447	70.7	5.4	198,825	10.8	2.0	4.4	100,081
12 Male reproductive system	34,543	16,813	48.7	1.9	95,573	5.2	2.8	4.4	57,309
13 Female reproductive system	101,670	65,185	64.1	5.5	235,105	12.8	2.3	4.7	168,830
14 Pregnancy, childbirth and puerperium	106,843	31,734	29.7	5.8	444,960	24.1	4.2	5.5	220,110
15 Newborns and other neonates	13,243	1,576	11.9	0.7	84,086	4.6	6.3	7.1	29,450
16 Blood, blood forming organs, immunological	17,255	9,978	57.8	0.9	41,453	2.2	2.4	4.3	19,921
17 Neoplastic disorders	74,210	66,642	89.8	4.0	117,840	6.4	1.6	6.8	49,951
18 Infectious and parasitic diseases	9,023	947	10.5	0.5	55,079	3.0	6.1	6.7	25,819
19 Mental diseases and disorders	55,407	35,324	63.8	3.0	357,168	19.4	6.4	16.0	101,142
20 Alcohol/drug use and disorders	6,721	2,897	43.1	0.4	46,536	2.5	6.9	11.4	14,984
21 Injury, poison and toxic effects of drugs	15,475	3,840	24.8	0.8	62,091	3.4	4.0	5.0	30,864
22 Burns	429	83	19.3	<0.1	2,894	0.2	6.7	8.1	1,824
23 Factors influencing health status, other contacts	63,702	50,643	79.5	3.5	148,897	8.1	2.3	7.5	95,171
ED Edit DRG (across all MDCs)	9,527	5,733	60.2	0.5	41,200	2.2	4.3	9.3	33,888
PR Pre-MDC (Tracheostomy procs, transplants, ECMO)	943	15	1.6	0.1	28,305	1.5	30.0	30.5	29,056
<b>Total</b>	<b>1,750,644</b>	<b>933,370</b>	<b>53.3</b>	<b>95.0</b>	<b>5,436,199</b>	<b>294.9</b>	<b>3.1</b>	<b>5.5</b>	<b>3,230,187</b>

(a) Separations for which the type of episode of care was reported as acute, or was not reported.

Note: Abbreviations: ALOS—Average length of stay, MDC—Major Diagnostic Category, DRG—Diagnosis Related Group, procs—procedures, ECMO—extracorporeal membrane oxygenation.



**Table 10.3: Separations by Major Diagnostic Category, public hospitals<sup>(a)</sup>, States and Territories, 1997–98**

Major Diagnostic Category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
01 Nervous system	62,300	46,940	32,467	17,910	16,460	3,699	2,184	1,383	183,343
02 Eye diseases and disorders	22,645	19,324	11,322	6,219	7,802	650	652	680	69,294
03 Ear, nose, mouth, throat	52,798	44,691	34,221	16,309	18,250	3,188	2,724	1,880	174,061
04 Respiratory system	88,394	52,402	42,676	21,756	25,382	4,144	2,535	3,332	240,621
05 Circulatory system	114,504	73,207	54,282	24,565	29,191	6,413	4,411	1,877	308,450
06 Digestive system	144,941	94,721	71,769	40,074	37,213	8,026	5,945	3,725	406,414
07 Hepatobiliary system and pancreas	27,156	17,667	12,843	5,815	6,273	1,416	1,149	582	72,901
08 Musculoskeletal system and connective tissue	97,948	69,132	53,362	26,271	27,933	6,305	4,280	3,155	288,386
09 Skin, subcutaneous tissue and breast	47,124	32,077	31,459	13,784	15,635	3,015	1,825	1,915	146,834
10 Endocrine, nutritional and metabolic	13,184	11,009	7,892	3,531	4,186	1,127	521	928	42,378
11 Kidney and urinary tract	153,306	133,405	79,670	50,112	37,133	11,767	12,133	18,436	495,962
12 Male reproductive system	17,473	13,438	6,300	4,494	4,940	1,209	623	433	48,910
13 Female reproductive system	44,651	38,854	25,263	12,751	14,673	2,654	1,915	1,579	142,340
14 Pregnancy, childbirth and puerperium	113,898	85,221	59,516	29,239	30,242	7,031	5,006	5,933	336,086
15 Newborns and other neonates	19,514	13,358	10,609	3,491	4,602	641	831	1,129	54,175
16 Blood, blood forming organs, immunological	21,070	17,691	8,862	5,916	6,722	1,866	1,101	328	63,556
17 Neoplastic disorders	51,071	46,222	28,123	17,038	15,612	5,157	4,350	192	167,765
18 Infectious and parasitic diseases	16,118	10,120	8,995	4,198	4,122	877	512	590	45,532
19 Mental diseases and disorders	38,631	27,286	22,527	14,021	12,263	3,563	1,304	720	120,315
20 Alcohol/drug use and disorders	11,021	3,628	5,232	2,593	1,390	330	89	176	24,459
21 Injury, poison and toxic effects of drugs	33,243	22,442	26,760	10,064	7,964	1,963	1,034	1,352	104,822
22 Burns	1,758	1,051	1,455	899	525	121	47	107	5,963
23 Factors influencing health status, other contacts	25,789	22,956	21,033	8,551	12,144	2,506	1,753	1,008	95,740
ED Edit DRG (across all MDCs)	2,206	3,024	1,070	1,324	723	314	84	230	8,975
PR Pre-MDC (Tracheostomy procs, transplants, ECMO)	3,072	2,440	1,582	774	846	170	167	114	9,165
<b>Total</b>	<b>1,223,815</b>	<b>902,306</b>	<b>659,290</b>	<b>341,699</b>	<b>342,226</b>	<b>78,152</b>	<b>57,175</b>	<b>51,784</b>	<b>3,656,447</b>

(a) Separations for which the type of episode of care was reported as acute, or was not reported.

Note: Abbreviations: MDC—Major Diagnostic Category, DRG—Diagnosis Related Group, procs—procedures, ECMO—extracorporeal membrane oxygenation.

**Table 10.4: Separations by Major Diagnostic Category, private hospitals<sup>(a)</sup>, States and Territories, 1997–98**

Major Diagnostic Category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
01 Nervous system	11,748	14,173	12,134	4,825	5,009	n.p.	n.p.	n.a.	50,183
02 Eye diseases and disorders	36,391	21,262	25,143	7,740	5,271	n.p.	n.p.	n.a.	99,322
03 Ear, nose, mouth, throat	37,466	35,142	26,162	14,047	14,412	n.p.	n.p.	n.a.	132,418
04 Respiratory system	13,785	15,982	15,528	4,302	5,181	n.p.	n.p.	n.a.	57,141
05 Circulatory system	28,396	30,156	24,229	7,983	9,501	n.p.	n.p.	n.a.	103,869
06 Digestive system	106,831	93,861	74,633	24,334	20,922	n.p.	n.p.	n.a.	330,718
07 Hepatobiliary system and pancreas	7,614	6,486	5,841	2,190	2,247	n.p.	n.p.	n.a.	25,525
08 Musculoskeletal system and connective tissue	64,874	58,541	37,877	26,456	24,804	n.p.	n.p.	n.a.	222,701
09 Skin, subcutaneous tissue and breast	34,936	25,935	23,560	8,221	10,285	n.p.	n.p.	n.a.	106,747
10 Endocrine, nutritional and metabolic	3,396	3,727	3,217	1,246	1,280	n.p.	n.p.	n.a.	13,382
11 Kidney and urinary tract	28,591	29,232	20,429	6,345	12,480	n.p.	n.p.	n.a.	99,647
12 Male reproductive system	11,688	9,758	5,950	3,013	2,210	n.p.	n.p.	n.a.	34,543
13 Female reproductive system	33,996	25,950	20,596	8,859	7,171	n.p.	n.p.	n.a.	101,670
14 Pregnancy, childbirth and puerperium	38,372	23,710	19,602	13,212	6,500	n.p.	n.p.	n.a.	106,843
15 Newborns and other neonates	4,035	3,062	2,131	1,137	662	n.p.	n.p.	n.a.	13,243
16 Blood, blood forming organs, immunological	3,907	5,071	4,987	1,351	1,243	n.p.	n.p.	n.a.	17,255
17 Neoplastic disorders	10,791	26,444	21,690	6,611	6,736	n.p.	n.p.	n.a.	74,210
18 Infectious and parasitic diseases	1,983	2,267	2,720	807	748	n.p.	n.p.	n.a.	9,023
19 Mental diseases and disorders	11,767	19,920	8,933	9,550	2,939	n.p.	n.p.	n.a.	55,407
20 Alcohol/drug use and disorders	1,240	2,923	1,627	368	340	n.p.	n.p.	n.a.	6,721
21 Injury, poison and toxic effects of drugs	3,490	4,261	3,645	1,703	1,543	n.p.	n.p.	n.a.	15,475
22 Burns	97	105	96	42	73	n.p.	n.p.	n.a.	429
23 Factors influencing health status, other contacts	22,095	15,341	16,433	3,932	4,086	n.p.	n.p.	n.a.	63,702
ED Edit DRG (across all MDCs)	2,701	3,615	1,940	627	402	n.p.	n.p.	n.a.	9,527
PR Pre-MDC (Tracheostomy procs, transplants, ECMO)	181	270	328	33	102	n.p.	n.p.	n.a.	943
<b>Total</b>	<b>520,371</b>	<b>477,194</b>	<b>379,431</b>	<b>158,934</b>	<b>146,147</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.a.</b>	<b>1,750,644</b>

(a) Separations for which the type of episode of care was reported as acute, or was not reported.

Note: Abbreviations: MDC—Major Diagnostic Category, DRG—Diagnosis Related Group, procs—procedures, ECMO—extracorporeal membrane oxygenation.

n.p. not published.

n.a. not available.

**Table 10.5: Patient days by Major Diagnostic Category, public hospitals<sup>(a)</sup>, States and Territories, 1997–98**

Major Diagnostic Category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
01 Nervous system	429,255	283,528	189,640	148,688	104,479	20,805	14,627	7,692	1,198,714
02 Eye diseases and disorders	39,239	26,404	18,802	10,868	11,107	1,340	1,038	1,477	110,275
03 Ear, nose, mouth, throat	103,262	71,635	56,804	29,920	34,131	5,657	5,160	4,104	310,673
04 Respiratory system	465,518	262,341	203,348	107,087	121,891	23,254	16,139	19,158	1,218,736
05 Circulatory system	557,266	320,625	245,183	115,319	130,830	32,873	20,579	9,552	1,432,227
06 Digestive system	422,125	260,645	181,084	105,089	102,837	23,130	18,383	12,362	1,125,655
07 Hepatobiliary system and pancreas	131,242	75,475	51,088	26,975	27,995	6,164	5,796	3,156	327,891
08 Musculoskeletal system and connective tissue	491,204	302,616	223,448	126,788	112,480	27,750	23,568	16,381	1,324,235
09 Skin, subcutaneous tissue and breast	172,524	103,431	86,207	43,782	43,255	8,854	5,759	9,164	472,976
10 Endocrine, nutritional and metabolic	67,637	52,194	38,902	19,162	18,965	4,608	2,606	8,297	212,371
11 Kidney and urinary tract	271,863	199,376	135,063	76,173	62,976	17,869	17,337	22,750	803,407
12 Male reproductive system	47,824	32,417	16,171	10,597	12,347	3,223	2,761	1,096	126,436
13 Female reproductive system	105,021	78,645	50,965	30,677	31,216	6,401	5,346	2,954	311,225
14 Pregnancy, childbirth and puerperium	372,661	259,174	175,666	100,791	84,915	23,304	17,222	20,287	1,054,020
15 Newborns and other neonates	153,630	117,857	79,272	35,440	38,393	5,479	9,395	10,054	449,520
16 Blood, blood forming organs, immunological	52,754	35,198	21,540	12,180	14,414	3,283	2,571	1,500	143,440
17 Neoplastic disorders	97,219	73,765	48,820	26,483	29,089	8,205	7,172	450	291,203
18 Infectious and parasitic diseases	76,941	57,234	38,058	19,363	17,542	4,890	2,745	3,915	220,688
19 Mental diseases and disorders	531,918	294,271	208,031	187,231	119,102	27,593	16,182	6,943	1,391,271
20 Alcohol/drug use and disorders	54,269	15,777	22,490	12,265	5,992	1,764	407	850	113,814
21 Injury, poison and toxic effects of drugs	104,561	61,251	69,174	31,341	23,875	6,694	5,355	5,851	308,102
22 Burns	10,634	6,688	6,984	7,270	3,430	822	349	856	37,033
23 Factors influencing health status, other contacts	77,549	71,009	56,226	18,537	43,518	15,321	35,464	3,984	321,608
ED Edit DRG (across all MDCs)	21,059	31,286	9,083	20,658	6,747	4,955	1,552	2,266	97,606
PR Pre-MDC (Tracheostomy procs, transplants, ECMO)	89,205	64,854	43,880	23,235	23,830	4,003	5,731	2,809	257,547
<b>Total</b>	<b>4,946,380</b>	<b>3,157,696</b>	<b>2,275,929</b>	<b>1,345,919</b>	<b>1,225,356</b>	<b>288,241</b>	<b>243,244</b>	<b>177,908</b>	<b>13,660,673</b>

(a) Separations for which the type of episode of care was reported as acute, or was not reported.

Note: Abbreviations: MDC—Major Diagnostic Category, DRG—Diagnosis Related Group, procs—procedures, ECMO—extracorporeal membrane oxygenation.

**Table 10.6: Patient days by Major Diagnostic Category, private hospitals<sup>(a)</sup>, States and Territories, 1997–98**

Major Diagnostic Category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
01 Nervous system	64,466	84,928	73,175	23,115	31,156	10,783	2,023	n.a.	289,646
02 Eye diseases and disorders	41,716	25,025	29,798	9,815	6,130	3,496	954	n.a.	116,934
03 Ear, nose, mouth, throat	49,518	47,920	35,748	19,081	20,410	5,043	2,296	n.a.	180,016
04 Respiratory system	69,449	99,556	97,532	29,088	31,672	12,587	3,032	n.a.	342,916
05 Circulatory system	127,282	150,845	128,248	37,883	45,967	15,350	1,948	n.a.	507,523
06 Digestive system	189,016	187,573	157,119	56,892	51,971	19,881	5,199	n.a.	667,651
07 Hepatobiliary system and pancreas	31,106	30,266	25,912	9,386	10,125	3,715	1,413	n.a.	111,923
08 Musculoskeletal system and connective tissue	260,173	246,684	182,352	101,999	90,356	35,143	11,565	n.a.	928,272
09 Skin, subcutaneous tissue and breast	80,359	69,014	58,093	22,856	25,134	7,834	2,973	n.a.	266,263
10 Endocrine, nutritional and metabolic	14,310	18,286	16,655	5,986	6,650	2,549	607	n.a.	65,043
11 Kidney and urinary tract	51,380	57,925	44,510	15,653	21,071	6,002	2,284	n.a.	198,825
12 Male reproductive system	30,354	26,084	18,120	7,879	6,706	4,281	2,149	n.a.	95,573
13 Female reproductive system	72,315	57,808	46,750	22,950	21,552	8,775	4,955	n.a.	235,105
14 Pregnancy, childbirth and puerperium	135,551	112,259	90,602	52,304	29,848	15,574	8,822	n.a.	444,960
15 Newborns and other neonates	25,724	16,519	16,849	9,269	3,619	4,290	7,816	n.a.	84,086
16 Blood, blood forming organs, immunological	8,187	11,882	12,501	3,644	3,404	1,525	310	n.a.	41,453
17 Neoplastic disorders	20,258	38,295	35,511	10,247	10,072	2,225	1,232	n.a.	117,840
18 Infectious and parasitic diseases	10,960	14,934	15,876	5,289	4,993	2,397	630	n.a.	55,079
19 Mental diseases and disorders	72,895	108,276	84,191	38,130	42,906	8,830	1,940	n.a.	357,168
20 Alcohol/drug use and disorders	11,836	16,154	10,537	2,542	4,202	1,106	159	n.a.	46,536
21 Injury, poison and toxic effects of drugs	13,786	18,709	14,811	5,560	6,035	2,508	682	n.a.	62,091
22 Burns	825	773	761	183	298	53	1	n.a.	2,894
23 Factors influencing health status, other contacts	49,690	31,226	29,514	8,029	23,569	5,215	1,654	n.a.	148,897
ED Edit DRG (across all MDCs)	9,235	14,719	9,718	4,302	2,203	842	181	n.a.	41,200
PR Pre-MDC (Tracheostomy procs, transplants, ECMO)	4,680	8,213	10,224	559	3,609	979	41	n.a.	28,305
<b>Total</b>	<b>1,445,071</b>	<b>1,493,873</b>	<b>1,245,107</b>	<b>502,641</b>	<b>503,658</b>	<b>180,983</b>	<b>64,866</b>	<b>n.a.</b>	<b>5,436,199</b>

(a) Separations for which the type of episode of care was reported as acute, or was not reported.

Note: Abbreviations: MDC—Major Diagnostic Category, DRG—Diagnosis Related Group, procs—procedures, ECMO—extracorporeal membrane oxygenation.

n.a. not available.

**Table 10.7: Separation, same day separation, patient day, average length of stay and cost statistics for the 30 AN-DRGs with the highest number of separations, public hospitals<sup>(a)</sup>, Australia, 1997–98**

AN-DRG	Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	Average length of stay (days)	Cost by volume (\$'000)	Rank by patient days
572 Admit for Renal Dialysis	372,965	372,691	99.9	20.0	373,651	20.1	1.0	168,580	3
780 Chemotherapy	133,062	132,743	99.8	7.1	133,398	7.2	1.0	75,712	11
674 Vaginal Delivery W/O Complicating Diagnosis	109,246	4,140	3.8	5.9	348,767	18.7	3.2	240,450	4
332 Other Gastroscopy for Non-Major Digestive Disease W/O CC	73,505	67,536	91.9	3.9	86,955	4.7	1.2	63,067	18
335 Other Colonoscopy W/O CC	49,758	44,700	89.8	2.7	62,157	3.3	1.2	42,195	40
683 Abortion W D&C, Aspiration Curettage or Hysterotomy	37,885	27,961	73.8	2.0	40,830	2.2	1.1	38,491	70
686 Other Antenatal Admission W Moderate or No Complicating I	37,819	14,960	39.6	2.0	66,482	3.6	1.8	38,462	33
187 Bronchitis & Asthma Age<50 W/O CC	37,516	5,643	15.0	2.0	77,634	4.2	2.1	43,031	23
177 Chronic Obstructive Airways Disease	37,421	2,800	7.5	2.0	264,391	14.2	7.1	124,013	6
484 Other Skin, Subcutaneous Tissue & Breast Procedures	36,208	30,729	84.9	1.9	48,635	2.6	1.3	50,220	54
659 Conisation, Vagina, Cervix & Vulva Procedures	32,411	27,687	85.4	1.7	38,449	2.1	1.2	34,647	79
252 Heart Failure & Shock	31,959	2,213	6.9	1.7	229,076	12.3	7.2	111,058	7
843 Major Affective Disorders	31,418	9,349	29.8	1.7	381,484	20.5	12.1	142,292	2
261 Chest Pain	31,373	9,438	30.1	1.7	61,655	3.3	2.0	36,957	41
099 Lens Procedures W/O Vitrectomy & W/O CC	31,222	24,050	77.0	1.7	34,031	1.8	1.1	57,667	97
347 Abdominal Pain or Mesenteric Adenitis W/O CC	30,108	9,755	32.4	1.6	52,150	2.8	1.7	28,633	48
349 Oesophagitis, Gastroent & Misc Dig Dis Age 10-74 W/O CC	28,116	8,892	31.6	1.5	54,878	2.9	2.0	28,453	42
943 Other Factors Influencing Health Status Age<80 W/O CC	27,362	17,949	65.6	1.5	71,333	3.8	2.6	25,091	28
841 Schizophrenia Disorders	27,248	3,709	13.6	1.5	657,135	35.3	24.1	147,303	1
889 Poisoning/Toxic Effects of Drugs Age<60 W/O CC	26,957	10,004	37.1	1.4	41,321	2.2	1.5	25,960	68
455 Medical Back Problems Age<75 W/O CC	25,938	9,908	38.2	1.4	81,306	4.4	3.1	44,276	22
885 Injuries Age<65	25,873	13,490	52.1	1.4	39,239	2.1	1.5	25,019	75
660 Endoscopic Procedures, Female Reproductive System	24,413	20,795	85.2	1.3	26,954	1.4	1.1	32,030	137
128 Dental Extractions & Restorations	23,967	21,579	90.0	1.3	27,011	1.5	1.1	27,754	136
122 Tonsillectomy &/or Adenoidectomy	23,898	3,134	13.1	1.3	31,240	1.7	1.3	32,764	111
367 Cholecystectomy W/O C.D.E.	23,708	170	0.7	1.3	77,050	4.1	3.2	87,980	25
847 Personality Disorders & Acute Reactions	23,520	5,989	25.5	1.3	118,210	6.3	5.0	52,403	12
170 Respiratory Infections/Inflamns Age>54 W CC	23,082	849	3.7	1.2	208,240	11.2	9.0	108,070	8
274 Circ Dsr W/O AMI W Invas Card Inves Proc W/O Comp Dx &	23,022	12,886	56.0	1.2	37,790	2.0	1.6	39,805	81
473 Fx, Sprn, Strn&Disloc of Frarm, Hnd, Ft Age<75 W/O CC	22,586	9,542	42.2	1.2	27,206	1.5	1.2	24,348	134
Other	2,192,881	660,380	30.1	117.8	9,862,015	529.6	4.5	6,876,748	..
<b>Total</b>	<b>3,656,447</b>	<b>1,585,671</b>	<b>43.4</b>	<b>196.3</b>	<b>13,660,673</b>	<b>733.5</b>	<b>3.7</b>	<b>8,849,132</b>	<b>..</b>

(a) Separations for which the type of episode of care was reported as acute, or was not reported.

Note:

1. Main abbreviations: W—with, W/O—without, CC—complications and comorbidities, proc.—procedure, dsr—disorder.

2. Similar tables for all AN-DRGs are provided on the Internet at <http://www.aihw.gov.au/publications/health/ahs97-8.html> for Australia and each State and Territory.

**Table 10.8: Separation, same day separation, patient day, average length of stay and cost statistics for the 30 AN-DRGs with the highest number of separations, private hospitals<sup>(a)</sup>, Australia, 1997–98**

AN-DRG	Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	Average length of stay (days)	Cost by volume (\$'000)	Rank by patient days
332 Other Gastroscopy for Non-Major Digestive Disease W/O CC	107,914	104,185	96.5	5.9	116,640	6.3	1.1	81,151	3
335 Other Colonoscopy W/O CC	95,483	90,690	95.0	5.2	104,404	5.7	1.1	72,949	4
099 Lens Procedures W/O Vitrectomy & W/O CC	66,183	47,449	71.7	3.6	72,234	3.9	1.1	101,525	9
780 Chemotherapy	60,467	60,188	99.5	3.3	60,740	3.3	1.0	21,224	14
128 Dental Extractions & Restorations	49,425	40,557	82.1	2.7	50,372	2.7	1.0	43,247	17
421 Knee Procedures	49,370	28,990	58.7	2.7	67,513	3.7	1.4	71,241	12
572 Admit for Renal Dialysis	44,394	44,368	99.9	2.4	44,483	2.4	1.0	13,629	22
674 Vaginal Delivery W/O Complicating Diagnosis	31,878	361	1.1	1.7	163,471	8.9	5.1	72,204	2
484 Other Skin, Subcutaneous Tissue & Breast Procedures	29,826	25,819	86.6	1.6	36,051	2.0	1.2	33,524	29
683 Abortion W D&C, Aspiration Curettage or Hysterotomy	27,357	25,550	93.4	1.5	27,823	1.5	1.0	21,721	42
843 Major Affective Disorders	24,660	15,681	63.6	1.3	187,600	10.2	7.6	53,192	1
455 Medical Back Problems Age<75 W/O CC	20,994	9,861	47.0	1.1	62,329	3.4	3.0	25,130	13
657 Uterine, Adnexa Proc for Non-Malig Age<40 W/O CC	18,859	12,946	68.6	1.0	32,680	1.8	1.7	31,947	36
656 Uterine, Adnexa Proc for Non-Malig (Age>39 W/O CC)or(Age	18,564	5,803	31.3	1.0	71,224	3.9	3.8	47,208	11
122 Tonsillectomy &/or Adenoidectomy	18,543	3,739	20.2	1.0	21,878	1.2	1.2	14,871	60
274 Circ Dsr W/O AMI W Invas Card Inves Proc W/O Comp Dx &	17,892	7,072	39.5	1.0	27,781	1.5	1.6	26,301	43
320 Inguinal & Femoral Hernia Procedures Age>9	17,760	992	5.6	1.0	41,329	2.2	2.3	31,222	24
330 Other Gastroscopy for Major Digestive Disease W/O CC	16,333	14,607	89.4	0.9	21,910	1.2	1.3	15,239	59
659 Conisation, Vagina, Cervix & Vulva Procedures	16,076	13,906	86.5	0.9	18,415	1.0	1.1	14,854	71
424 Local Excision & Removal Int Fix Devs Exc Hip & Femur	15,975	8,370	52.4	0.9	26,643	1.4	1.7	21,822	44
318 Anal & Stomal Procedures W/O CC	15,701	7,799	49.7	0.9	30,031	1.6	1.9	20,882	40
483 Skin, Subcutaneous Tissue & Breast Plastic Procedures	15,590	8,905	57.1	0.8	24,445	1.3	1.6	27,220	50
934 Short Stay Contacts W Health Services	14,952	14,641	97.9	0.8	15,297	0.8	1.0	35,197	92
367 Cholecystectomy W/O C.D.E.	14,473	62	0.4	0.8	48,336	2.6	3.3	39,627	19
432 Hand or Wrist Procedures Exc Major Joint	13,794	8,331	60.4	0.7	16,623	0.9	1.2	16,815	80
661 Diagnostic Curettage &/or Diagnostic Hysteroscopy	13,377	12,473	93.2	0.7	13,787	0.7	1.0	11,906	102
505 Other Skin Graft &/or Debridement Procedures	13,362	9,536	71.4	0.7	22,411	1.2	1.7	22,141	56
124 Myringotomy W Tube Insertion	13,335	13,056	97.9	0.7	13,507	0.7	1.0	10,215	104
660 Endoscopic Procedures, Female Reproductive System	11,976	9,735	81.3	0.6	13,132	0.7	1.1	15,473	107
030 Carpal Tunnel Release	11,096	8,274	74.6	0.6	12,405	0.7	1.1	10,941	112
Other	865,035	279,424	32.3	46.9	3,970,705	215.4	4.6	2,216,510	..
<b>Total</b>	<b>1,750,644</b>	<b>933,370</b>	<b>53.3</b>	<b>95.0</b>	<b>5,436,199</b>	<b>294.9</b>	<b>3.1</b>	<b>3,230,187</b>	<b>..</b>

Note:

1. Main abbreviations: W—with, W/O—without, CC—complications and comorbidities, proc.—procedure, dsr—disorder.

2. Similar tables for all AN-DRGs for Australia and each State and Territory are provided on the Internet at <http://www.aihw.gov.au/publications/health/ahs97-8.html>

**Table 10.9: Separations for the 30 AN-DRGs with the highest number of separations<sup>(a)</sup>, public hospitals, States and Territories, 1997–98**

AN-DRG	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
572 Admit for Renal Dialysis	109,238	104,237	57,799	37,771	26,622	9,245	10,812	17,241	372,965
780 Chemotherapy	41,351	36,737	21,326	14,166	11,771	4,108	3,468	135	133,062
674 Vaginal Delivery W/O Complicating Diagnosis	41,731	25,415	20,007	9,117	7,464	2,063	1,917	1,532	109,246
332 Other Gastroscopy for Non-Major Digestive Disease W/O CC	24,884	17,611	12,136	8,351	6,838	1,733	1,250	702	73,505
335 Other Colonoscopy W/O CC	16,793	10,468	8,901	6,240	4,726	1,221	1,001	408	49,758
683 Abortion W D&C, Aspiration Curettage or Hysterotomy	10,623	10,687	3,846	3,010	7,051	929	444	1,295	37,885
686 Other Antenatal Admission W Moderate or No Complicating Diagnosis	12,052	9,946	7,953	3,065	2,945	857	373	628	37,819
187 Bronchitis & Asthma Age<50 W/O CC	13,503	7,291	6,851	4,208	4,516	434	355	358	37,516
177 Chronic Obstructive Airways Disease	14,844	7,949	6,397	3,262	3,466	709	345	449	37,421
484 Other Skin, Subcutaneous Tissue & Breast Procedures	10,377	7,781	9,559	3,345	3,682	749	525	190	36,208
659 Conisation, Vagina, Cervix & Vulva Procedures	8,677	8,837	7,378	2,056	4,085	547	378	453	32,411
252 Heart Failure & Shock	11,704	8,052	5,010	2,893	3,188	567	286	259	31,959
843 Major Affective Disorders	8,873	6,505	5,988	4,275	4,094	1,129	435	119	31,418
261 Chest Pain	12,534	6,839	6,142	1,922	2,963	390	316	267	31,373
099 Lens Procedures W/O Vitrectomy & W/O CC	10,376	9,177	4,483	2,564	3,858	161	319	284	31,222
347 Abdominal Pain or Mesenteric Adenitis W/O CC	11,723	6,709	5,776	2,567	2,270	554	269	240	30,108
349 Oesophagitis, Gastroent & Misc Dig Dis Age 10–74 W/O CC	10,837	5,576	5,649	2,715	2,571	373	194	201	28,116
943 Other Factors Influencing Health Status Age<80 W/O CC	6,563	6,383	5,666	2,315	5,046	397	520	472	27,362
841 Schizophrenia Disorders	8,356	6,677	6,086	2,116	2,695	708	388	222	27,248
889 Poisoning/Toxic Effects of Drugs Age<60 W/O CC	8,105	6,216	6,659	2,640	2,217	611	270	239	26,957
455 Medical Back Problems Age<75 W/O CC	8,543	6,159	4,564	3,236	2,447	562	101	326	25,938
885 Injuries Age<65	7,838	4,174	9,113	2,295	1,432	344	144	533	25,873
660 Endoscopic Procedures, Female Reproductive System	8,048	6,572	3,651	2,760	2,092	566	385	339	24,413
128 Dental Extractions & Restorations	5,139	7,049	5,179	2,518	2,417	821	470	374	23,967
122 Tonsillectomy &/or Adenoidectomy	7,064	7,352	4,312	1,708	2,504	382	451	125	23,898
367 Cholecystectomy W/O C.D.E.	8,335	6,339	4,142	1,784	2,181	441	346	140	23,708
847 Personality Disorders & Acute Reactions	7,967	4,073	4,571	3,090	2,750	642	220	207	23,520
170 Respiratory Infections/Inflamns Age>54 W CC	8,433	7,151	2,990	1,420	2,204	479	236	169	23,082
274 Circ Dsr W/O AMI W Invas Card Inves Proc W/O Comp Dx & W/O Maj C	8,620	4,421	3,373	2,419	2,948	429	809	3	23,022
473 Fx,Sprn,Strn&Disloc of Frarm,Hnd,Ft Age<75 W/O CC	8,188	4,465	5,707	1,819	1,440	361	276	330	22,586
Other	752,496	535,458	398,076	200,052	207,743	45,640	29,872	23,544	2,192,881
<b>Total</b>	<b>1,223,815</b>	<b>902,306</b>	<b>659,290</b>	<b>341,699</b>	<b>342,226</b>	<b>78,152</b>	<b>57,175</b>	<b>51,784</b>	<b>3,656,447</b>

(a) Separations for which the type of episode of care was reported as acute, or was not reported.

Note: Main abbreviations: W—with, W/O—without, CC—complications and comorbidities, proc.—procedure, dsr—disorder, diag—diagnosis.

**Table 10.10: Separations for the 30 AN-DRGs with the highest number of separations<sup>(a)</sup>, private hospitals, States and Territories, 1997–98**

AN-DRG	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
332 Other Gastroscopy for Non-Major Digestive Disease W/O CC	38,879	30,061	23,581	6,753	6,038	2,475	127	n.a.	107,914
335 Other Colonoscopy W/O CC	30,531	28,549	21,424	7,090	5,499	2,222	168	n.a.	95,483
099 Lens Procedures W/O Vitrectomy & W/O CC	23,901	14,109	17,568	4,984	3,651	1,604	366	n.a.	66,183
780 Chemotherapy	8,451	22,360	16,537	5,807	5,811	698	803	n.a.	60,467
128 Dental Extractions & Restorations	13,513	14,332	9,343	5,998	4,586	n.p.	n.p.	n.a.	49,425
421 Knee Procedures	16,048	12,775	7,223	5,326	6,085	1,100	813	n.a.	49,370
572 Admit for Renal Dialysis	10,912	15,799	7,963	1,625	8,095	0	0	n.a.	44,394
674 Vaginal Delivery W/O Complicating Diagnosis	8,530	8,358	6,886	3,627	2,425	1,413	639	n.a.	31,878
484 Other Skin, Subcutaneous Tissue & Breast Procedures	10,992	6,909	6,200	2,149	2,529	671	376	n.a.	29,826
683 Abortion W D&C, Aspiration Curettage or Hysterotomy	15,807	3,678	2,285	4,292	832	372	91	n.a.	27,357
843 Major Affective Disorders	4,133	10,027	4,341	3,484	1,766	844	65	n.a.	24,660
455 Medical Back Problems Age<75 W/O CC	4,962	5,557	2,574	3,964	2,856	1,018	63	n.a.	20,994
657 Uterine, Adnexa Proc for Non-Malig Age<40 W/O CC	6,097	4,805	4,527	1,283	972	751	424	n.a.	18,859
656 Uterine, Adnexa Proc for Non-Malig (Age>39 W/O CC)or(Age<40 W CC)	5,928	4,609	4,019	1,526	1,495	604	383	n.a.	18,564
122 Tonsillectomy &/or Adenoidectomy	5,759	4,028	4,341	1,752	1,845	554	264	n.a.	18,543
274 Circ Dsr W/O AMI W Invas Card Inves Proc W/O Comp Dx & W/O Maj C	6,761	3,955	3,995	1,506	1,372	n.p.	n.p.	n.a.	17,892
320 Inguinal & Femoral Hernia Procedures Age>9	6,064	4,601	3,406	1,439	1,347	586	317	n.a.	17,760
330 Other Gastroscopy for Major Digestive Disease W/O CC	5,774	4,761	3,404	1,081	949	326	38	n.a.	16,333
659 Conisation, Vagina, Cervix & Vulva Procedures	5,849	3,768	3,153	1,218	1,322	528	238	n.a.	16,076
424 Local Excision & Removal Int Fix Devs Exc Hip & Femur	5,412	4,469	2,208	1,690	1,397	520	279	n.a.	15,975
318 Anal & Stomal Procedures W/O CC	6,373	3,570	2,871	1,194	1,062	445	186	n.a.	15,701
483 Skin, Subcutaneous Tissue & Breast Plastic Procedures	4,968	3,644	3,998	1,143	1,408	287	142	n.a.	15,590
934 Short Stay Contacts W Health Services	6,018	4,074	3,314	893	332	292	29	n.a.	14,952
367 Cholecystectomy W/O C.D.E.	5,069	3,469	2,959	1,111	1,167	470	228	n.a.	14,473
432 Hand or Wrist Procedures Exc Major Joint	3,968	3,873	2,481	1,432	1,492	407	141	n.a.	13,794
661 Diagnostic Curettage &/or Diagnostic Hysteroscopy	4,399	3,966	2,087	1,279	1,070	333	243	n.a.	13,377
505 Other Skin Graft &/or Debridement Procedures	4,539	2,640	3,302	554	2,006	183	138	n.a.	13,362
124 Myringotomy W Tube Insertion	3,427	3,989	1,967	1,427	1,926	421	178	n.a.	13,335
660 Endoscopic Procedures, Female Reproductive System	3,976	3,357	1,928	1,229	753	513	220	n.a.	11,976
030 Carpal Tunnel Release	3,251	3,039	2,192	1,111	1,097	283	123	n.a.	11,096
Other	240,080	234,063	197,354	80,967	72,962	29,832	9,777	n.a.	865,035
<b>Total</b>	<b>520,371</b>	<b>477,194</b>	<b>379,431</b>	<b>158,934</b>	<b>146,147</b>	<b>50,996</b>	<b>17,571</b>	<b>n.a.</b>	<b>1,750,644</b>

(a) Separations for which the type of episode of care was reported as acute, or was not reported.

Note: Main abbreviations: W—with, W/O—without, CC—complications and comorbidities, proc.—procedure, dsr—disorder.

n.a. not available.



**Table 10.11: Average length of stay (days) for the 30 AN-DRGs with the highest number of separations, public hospitals<sup>(a)</sup>, States and Territories, 1997–98**

AN-DRG	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
572 Admit for Renal Dialysis	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
780 Chemotherapy	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
674 Vaginal Delivery W/O Complicating Diagnosis	3.2	3.3	2.9	3.4	3.1	3.8	2.9	3.8	3.2
332 Other Gastroscopy for Non-Major Digestive Disease W/O CC	1.2	1.1	1.2	1.2	1.2	1.1	1.2	1.2	1.2
335 Other Colonoscopy W/O CC	1.3	1.2	1.2	1.2	1.3	1.2	1.3	1.3	1.2
683 Abortion W D&C, Aspiration Curettage or Hysterotomy	1.1	1.1	1.2	1.1	1.0	1.1	1.1	1.1	1.1
686 Other Antenatal Admission W Moderate or No Complicating Diagnosis	1.8	1.6	1.7	2.1	1.8	1.6	2.2	1.9	1.8
187 Bronchitis & Asthma Age<50 W/O CC	2.1	1.9	2.1	2.1	2.2	2.0	2.5	2.8	2.1
177 Chronic Obstructive Airways Disease	7.4	6.1	7.1	7.6	6.9	7.6	8.8	7.5	7.1
484 Other Skin, Subcutaneous Tissue & Breast Procedures	1.5	1.3	1.2	1.3	1.3	1.4	1.3	2.3	1.3
659 Conisation, Vagina, Cervix & Vulva Procedures	1.2	1.2	1.1	1.3	1.2	1.2	1.2	1.2	1.2
252 Heart Failure & Shock	7.6	6.5	6.9	7.2	7.2	9.2	10.0	7.7	7.2
843 Major Affective Disorders	12.0	12.2	11.5	14.4	11.9	7.3	14.8	13.0	12.1
261 Chest Pain	2.0	1.7	2.1	2.1	1.9	2.3	2.0	2.7	2.0
099 Lens Procedures W/O Vitrectomy & W/O CC	1.1	1.1	1.1	1.1	1.1	1.2	1.1	1.3	1.1
347 Abdominal Pain or Mesenteric Adenitis W/O CC	1.8	1.6	1.7	1.8	1.8	1.8	2.3	2.1	1.7
349 Oesophagitis, Gastroent & Misc Dig Dis Age 10–74 W/O CC	2.0	1.8	1.9	2.0	1.9	2.2	2.6	2.4	2.0
943 Other Factors Influencing Health Status Age<80 W/O CC	2.8	2.3	2.0	1.7	2.1	8.0	15.7	2.7	2.6
841 Schizophrenia Disorders	35.3	20.7	14.3	36.2	15.2	13.4	16.4	15.4	24.1
889 Poisoning/Toxic Effects of Drugs Age<60 W/O CC	1.6	1.4	1.5	1.4	1.6	1.8	3.0	1.9	1.5
455 Medical Back Problems Age<75 W/O CC	3.6	2.6	3.0	3.1	3.0	3.7	4.0	3.2	3.1
885 Injuries Age<65	1.6	1.4	1.3	1.8	1.6	2.1	2.2	2.6	1.5
660 Endoscopic Procedures, Female Reproductive System	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.1
128 Dental Extractions & Restorations	1.1	1.0	1.1	1.1	1.5	1.0	1.1	1.2	1.1
122 Tonsillectomy &/or Adenoidectomy	1.4	1.2	1.2	1.4	1.4	1.3	1.4	1.2	1.3
367 Cholecystectomy W/O C.D.E.	3.5	3.3	2.6	3.8	3.0	2.8	3.5	4.7	3.2
847 Personality Disorders & Acute Reactions	4.9	5.6	4.7	5.8	4.3	4.4	5.7	4.9	5.0
170 Respiratory Infections/Inflamns Age>54 W CC	9.3	8.6	9.4	9.1	9.0	8.9	9.9	8.5	9.0
274 Circ Dsr W/O AMI W Invas Card Inves Proc W/O Comp Dx & W/O Maj C	1.7	1.5	1.8	1.6	1.6	1.9	1.5	5.3	1.6
473 Fx, Sprn, Strn&Disloc of Frarm,Hnd,Ft Age<75 W/O CC	1.2	1.2	1.1	1.3	1.2	1.3	1.2	1.9	1.2
Other	4.7	4.3	4.2	4.7	4.3	4.6	6.0	5.4	4.5
<b>Total</b>	<b>4.0</b>	<b>3.5</b>	<b>3.5</b>	<b>3.9</b>	<b>3.6</b>	<b>3.7</b>	<b>4.3</b>	<b>3.4</b>	<b>3.7</b>

(a) Separations for which the type of episode of care was reported as acute, or was not reported.

Note: Main abbreviations: W—with, W/O—without, CC—complications and comorbidities, proc.—procedure, dsr—disorder.

**Table 10.12: Average length of stay (days) for the 30 AN-DRGs with the highest number of separations, private hospitals<sup>(a)</sup>, States and Territories, 1997–98**

AN-DRG	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
332 Other Gastroscopy for Non-Major Digestive Disease W/O CC	1.0	1.1	1.1	1.1	1.1	1.1	1.4	n.a.	1.1
335 Other Colonoscopy W/O CC	1.1	1.1	1.1	1.1	1.1	1.2	1.5	n.a.	1.1
099 Lens Procedures W/O Vitrectomy & W/O CC	1.1	1.1	1.1	1.2	1.0	1.2	1.2	n.a.	1.1
780 Chemotherapy	1.0	1.0	1.0	1.0	1.0	n.p.	n.p.	n.a.	1.0
128 Dental Extractions & Restorations	1.0	1.0	1.0	1.1	1.0	1.0	1.0	n.a.	1.0
421 Knee Procedures	1.3	1.4	1.4	1.5	1.5	1.4	1.2	n.a.	1.4
572 Admit for Renal Dialysis	1.0	1.0	1.0	1.0	1.0	..	..	n.a.	1.0
674 Vaginal Delivery W/O Complicating Diagnosis	5.2	5.2	5.2	5.1	5.0	4.3	5.4	n.a.	5.1
484 Other Skin, Subcutaneous Tissue & Breast Procedures	1.1	1.2	1.3	1.5	1.2	1.3	1.3	n.a.	1.2
683 Abortion W D&C, Aspiration Curettage or Hysterotomy	1.0	1.0	1.0	1.0	1.1	1.1	1.0	n.a.	1.0
843 Major Affective Disorders	7.9	6.1	9.4	5.5	16.1	4.8	16.1	n.a.	7.6
455 Medical Back Problems Age<75 W/O CC	3.0	3.5	3.8	2.1	2.1	3.6	6.8	n.a.	3.0
657 Uterine, Adnexa Proc for Non-Malig Age<40 W/O CC	1.6	1.6	1.7	2.6	2.3	2.0	1.7	n.a.	1.7
656 Uterine, Adnexa Proc for Non-Malig (Age>39 W/O CC)or(Age<40 W CC)	3.6	3.7	3.5	4.6	4.6	4.4	5.1	n.a.	3.8
122 Tonsillectomy &/or Adenoidectomy	1.2	1.3	1.1	1.2	1.3	1.3	1.2	n.a.	1.2
274 Circ Dsr W/O AMI W Invas Card Inves Proc W/O Comp Dx & W/O Maj CC	1.4	1.8	1.7	1.2	1.5	n.p.	n.p.	n.a.	1.6
320 Inguinal & Femoral Hernia Procedures Age>9	2.5	2.3	2.0	2.5	2.8	2.2	2.1	n.a.	2.3
330 Other Gastroscopy for Major Digestive Disease W/O CC	1.2	1.3	1.5	1.4	1.4	1.8	2.6	n.a.	1.3
659 Conisation, Vagina, Cervix & Vulva Procedures	1.1	1.1	1.2	1.2	1.2	1.1	1.1	n.a.	1.1
424 Local Excision & Removal Int Fix Devs Exc Hip & Femur	1.6	1.7	1.7	1.7	1.7	1.5	1.5	n.a.	1.7
318 Anal & Stomal Procedures W/O CC	1.6	1.9	2.1	2.6	2.5	2.2	2.5	n.a.	1.9
483 Skin, Subcutaneous Tissue & Breast Plastic Procedures	1.4	1.8	1.4	1.9	1.6	2.2	1.9	n.a.	1.6
934 Short Stay Contacts W Health Services	1.0	1.0	1.0	1.0	1.1	1.0	1.0	n.a.	1.0
367 Cholecystectomy W/O C.D.E.	3.1	3.6	3.3	3.7	3.5	3.3	3.3	n.a.	3.3
432 Hand or Wrist Procedures Exc Major Joint	1.2	1.2	1.2	1.3	1.2	1.3	1.2	n.a.	1.2
661 Diagnostic Curettage &/or Diagnostic Hysteroscopy	1.0	1.0	1.1	1.0	1.0	1.1	1.0	n.a.	1.0
505 Other Skin Graft &/or Debridement Procedures	1.5	1.8	1.6	3.1	1.3	2.5	1.8	n.a.	1.7
124 Myringotomy W Tube Insertion	1.0	1.0	1.0	1.0	1.0	1.0	1.0	n.a.	1.0
660 Endoscopic Procedures, Female Reproductive System	1.1	1.1	1.1	1.1	1.2	1.2	1.1	n.a.	1.1
030 Carpal Tunnel Release	1.1	1.1	1.1	1.2	1.1	1.2	1.2	n.a.	1.1
Other	4.3	4.7	4.8	4.5	5.0	4.7	5.0	n.a.	4.6
<b>Total</b>	<b>2.8</b>	<b>3.1</b>	<b>3.3</b>	<b>3.2</b>	<b>3.4</b>	<b>3.5</b>	<b>3.7</b>	n.a.	<b>3.1</b>

(a) Separations for which the type of episode of care was reported as acute, or was not reported.

Note: Main abbreviations: W—with, W/O—without, CC—complications and comorbidities, proc.—procedure, dsr—disorder.

.. not applicable.

n.p. not published.

n.a. not available.

**Table 10.13: Separations for males for the 30 AN-DRGs with the highest number of hospital separations, by age group, all hospitals<sup>(a)</sup>, Australia, 1997-98**

AN-DRG	<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total <sup>(b)</sup>
572 Admit for Renal Dialysis	0	21	825	7,431	19,848	30,746	40,146	48,313	64,912	27,110	239,352
780 Chemotherapy	59	1,365	2,321	2,137	3,028	6,387	15,459	26,340	28,810	10,557	96,463
332 Other Gastroscopy for Non-Major Digestive Disease W/O CC	207	608	1,143	3,643	9,097	13,435	17,112	15,211	14,490	8,015	82,961
335 Other Colonoscopy W/O CC	10	50	196	1,358	4,218	8,598	14,756	15,066	14,935	7,935	67,122
421 Knee Procedures	2	9	510	7,416	9,674	9,164	7,616	5,012	2,985	1,046	43,434
099 Lens Procedures W/O Vitrectomy & W/O CC	15	32	70	85	197	549	1,869	4,500	12,928	18,625	38,870
484 Other Skin, Subcutaneous Tissue & Breast Procedures	237	796	1,951	1,909	2,792	3,778	4,826	4,686	6,016	5,487	32,478
320 Inguinal & Femoral Hernia Procedures Age>9	0	0	312	1,708	2,783	3,975	5,876	5,985	6,310	4,420	31,369
128 Dental Extractions & Restorations	6	4,017	5,152	10,971	5,311	2,194	1,274	735	484	290	30,434
274 Circ Dsr W/O AMI W Invas Card Inves Proc W/O Comp Dx & W/O Maj CC	66	101	100	111	308	1,696	5,337	7,731	8,303	2,883	26,636
177 Chronic Obstructive Airways Disease	8	88	221	83	126	345	1,146	3,893	9,861	10,191	25,962
455 Medical Back Problems Age<75 W/O CC	9	68	278	1,289	3,770	5,796	5,322	3,527	3,036	0	23,095
187 Bronchitis & Asthma Age<50 W/O CC	1,212	8,968	6,689	1,909	1,158	974	476	0	0	0	21,386
122 Tonsillectomy &/or Adenoidectomy	51	6906	9602	2209	1126	535	238	111	49	14	20,841
432 Hand or Wrist Procedures Exc Major Joint	45	429	892	4,421	3,919	2,953	2,573	2,352	2,187	998	20,769
843 Major Affective Disorders	0	0	554	2,233	3,473	3,707	4,246	2,333	2,083	1,946	20,575
261 Chest Pain	4	10	63	327	1,215	3,232	4,868	4,262	3,577	2,373	19,931
252 Heart Failure & Shock	18	17	16	34	123	285	853	2,046	5,815	10,501	19,708
318 Anal & Stomal Procedures W/O CC	220	114	135	679	2,683	4,507	4,840	3,363	2,232	875	19,648
841 Schizophrenia Disorders	0	1	44	4,955	6,616	4,229	2,136	664	419	81	19,145
424 Local Excision & Removal Int Fix Devs Exc Hip & Femur	32	227	1,479	4,475	4,243	3,221	2,487	1,611	954	406	19,135
885 Injuries Age<65	52	1,062	2,451	4,760	4,333	3,059	2,045	1,251	0	0	19,013
330 Other Gastroscopy for Major Digestive Disease W/O CC	10	15	110	650	1,397	2,197	3,347	3,690	4,256	3,052	18,724
579 Urinary Stones W/O ESW Lithotripsy	27	37	81	500	2,103	3,772	4,783	3,558	2,401	953	18,215
727 Neonate, Adm Wt >2499g, W/O Signif O.R. Proc, W/O Problem	16,400	0	0	0	0	0	0	0	0	0	16,400
170 Respiratory Infections/Inflamns Age>54 W CC	0	0	0	0	0	0	0	2,100	5,003	8,776	15,879
473 Fx, Sprn, Strn&Disloc of Frarm, Hnd, Ft Age<75 W/O CC	22	1,093	8,227	2,845	1,382	953	694	354	268	0	15,838
943 Other Factors Influencing Health Status Age<80 W/O CC	1,080	844	518	617	1,545	1,824	2,845	2,768	2,533	1,015	15,589
847 Personality Disorders & Acute Reactions	177	252	1,252	2,070	2,965	2,319	4,515	870	322	636	15,378
124 Myringotomy W Tube Insertion	685	7,960	5,411	183	136	157	235	231	217	129	15,344
349 Oesophagitis, Gastroent & Misc Dig Dis Age 10-74 W/O CC	0	0	1,326	2,292	2,743	2,201	2,254	1,948	2,165	0	14,929
Other	61,231	74,203	79,424	98,681	116,069	138,418	164,639	185,543	248,058	234,924	1,401,194
<b>Total</b>	<b>81,885</b>	<b>109,293</b>	<b>131,353</b>	<b>171,981</b>	<b>218,381</b>	<b>265,206</b>	<b>328,813</b>	<b>360,054</b>	<b>455,609</b>	<b>363,238</b>	<b>2,485,817</b>

(a) Separations for which the type of episode of care was reported as acute, or was not reported.

(b) Includes separations for which age was not reported.

Note: Main abbreviations: W—with, W/O—without, CC—complications and comorbidities, proc.—procedure, dsr—disorder.

**Table 10.14: Separations for females for the 30 AN-DRGs with the highest number of hospital separations, by age group, all hospitals<sup>(a)</sup>, Australia, 1997–98**

AN-DRG	<1	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total <sup>(b)</sup>
572 Admit for Renal Dialysis	1	4	229	3,810	13,147	19,335	27,678	40,956	54,970	17,877	178,007
674 Vaginal Delivery W/O Complicating Diagnosis	0	0	58	33,519	89,057	18,433	56	0	0	1	141,124
332 Other Gastroscopy for Non-Major Digestive Disease W/O CC	175	407	943	4,728	9,076	14,695	20,845	18,857	17,195	11,517	98,438
780 Chemotherapy	58	1,310	2,026	1,226	3,609	12,007	24,258	23,973	20,879	7,716	97,062
335 Other Colonoscopy W/O CC	12	54	185	2,328	5,504	10,440	16,608	16,476	16,359	10,148	78,114
683 Abortion W D&C, Aspiration Curettage or Hysterotomy	2	0	156	21,566	29,473	13,734	310	1	0	0	65,242
099 Lens Procedures W/O Vitrectomy & W/O CC	10	36	40	67	157	459	1,809	5,001	18,286	32,668	58,533
659 Conisation, Vagina, Cervix & Vulva Procedures	14	115	235	8,629	14,325	11,190	7,779	3,330	1,900	970	48,487
686 Other Antenatal Admission W Moderate or No Complicating Diagnosis	0	0	40	14,908	23,262	4,937	36	0	0	0	43,183
128 Dental Extractions & Restorations	4	3,461	5,560	20,050	7,967	2,848	1,547	706	434	381	42,958
656 Uterine, Adnexa Proc for Non-Malig (Age>39 W/O CC)or(Age<40 W CC)	1	0	18	213	981	12,861	14,814	4,078	2,549	1,081	36,596
660 Endoscopic Procedures, Female Reproductive System	1	1	92	5,004	15,531	12,738	2,416	422	134	50	36,389
843 Major Affective Disorders	4	0	216	3,139	6,061	7,900	7,934	3,935	3,442	2,872	35,503
661 Diagnostic Curettage &/or Diagnostic Hysteroscopy	0	0	11	1,007	3,972	8,534	12,483	5,104	2,562	1,048	34,721
657 Uterine, Adnexa Proc for Non-Malig Age<40 W/O CC	7	6	169	4,120	17,399	12,775	0	0	0	0	34,476
484 Other Skin, Subcutaneous Tissue & Breast Procedures	193	848	2,296	2,933	3,631	4,919	5,404	4,305	4,269	4,756	33,554
670 Caesarean Delivery W/O Complicating Diagnosis	0	0	9	4,160	19,055	5,860	36	1	0	0	29,121
367 Cholecystectomy W/O C.D.E.	0	1	67	1,798	4,708	5,292	5,741	4,754	3,700	1,936	27,997
421 Knee Procedures	1	7	495	3,420	3,665	4,406	4,954	4,116	3,368	1,458	25,890
455 Medical Back Problems Age<75 W/O CC	12	62	296	1,104	2,856	5,045	5,853	4,234	4,375	0	23,837
675 Vaginal Delivery W Moderate Complicating Diagnosis	0	0	6	5,450	14,559	3,274	9	0	0	0	23,298
347 Abdominal Pain or Mesenteric Adenitis W/O CC	109	241	2,651	4,997	4,538	3,531	2,541	1,627	1,342	1,286	22,863
685 Other Antenatal Admission W Severe Complicating Diagnosis	0	0	18	5,761	13,113	3,854	22	1	0	0	22,769
943 Other Factors Influencing Health Status Age<80 W/O CC	908	623	525	2,726	6,108	3,245	2,526	2,441	2,430	1,108	22,640
676 Vaginal Delivery W Severe Complicating Diagnosis	0	0	19	5,470	13,391	3,476	14	0	0	0	22,370
122 Tonsillectomy &/or Adenoidectomy	11	4,417	9,744	5,168	1,448	494	169	80	47	22	21,600
349 Oesophagitis, Gastroent & Misc Dig Dis Age 10–74 W/O CC	0	0	1,041	3,428	3,829	2,955	3,271	2,942	3,401	0	20,867
678 Postpartum & Post Abortion Diagnoses W/O O.R. Procedure	0	0	13	3,953	12,808	3,397	13	0	0	0	20,184
252 Heart Failure & Shock	20	23	12	21	57	132	431	1,214	3,795	13,935	19,640
177 Chronic Obstructive Airways Disease	8	50	136	101	161	346	1,539	3,345	6,274	7,427	19,387
Other	56,432	61,088	67,984	115,528	180,317	176,463	185,664	171,287	215,403	306,145	1,536,334
<b>Total</b>	<b>57,983</b>	<b>72,754</b>	<b>95,290</b>	<b>290,332</b>	<b>523,765</b>	<b>389,575</b>	<b>356,760</b>	<b>323,186</b>	<b>387,114</b>	<b>424,402</b>	<b>2,921,184</b>

(a) Separations for which the type of episode of care was reported as acute, or was not reported.

(b) Includes separations for which age was not reported.

Note: Main abbreviations: W—with, W/O—without, CC—complications and comorbidities, proc.—procedure, dsr—disorder.

**Table 10.15: Separation, same day separation, patient day, average length of stay and cost statistics for the 30 AN-DRGs with the highest number of separations, public psychiatric hospitals<sup>(a)</sup>, Australia, 1997–98**

AN-DRG	Separations	Same day separations	Per cent same day separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	ALOS (days)	Cost by volume (\$'000)	Rank by patient days
841 Schizophrenia Disorders	5,013	134	2.7	0.3	324,151	17.4	64.7	27,100	1
843 Major Affective Disorders	3,606	73	2.0	0.2	94,814	5.1	26.3	16,332	3
847 Personality Disorders & Acute Reactions	2,943	237	8.1	0.2	25,982	1.4	8.8	6,557	5
863 Other Drug Use Disorder & Dependence	1,684	105	6.2	0.1	10,410	0.6	6.2	2,912	10
056 Dementia & Global Disturbances of Cerebral Function	1,091	18	1.6	0.1	122,893	6.6	112.6	6,109	2
862 Alcohol Use Disorder & Dependence	890	37	4.2	<0.1	12,572	0.7	14.1	1,982	8
952 Ungroupable	858	80	9.3	<0.1	28,996	1.6	33.8	3,900	4
842 Paranoia & Acute Psychotic Disorders	689	17	2.5	<0.1	12,568	0.7	18.2	3,041	9
844 Other Affective & Somatoform Disorders	638	30	4.7	<0.1	16,276	0.9	25.5	1,377	6
860 Alcohol Intoxication & Withdrawal	549	105	19.1	<0.1	2,735	0.1	5.0	694	14
861 Drug Intoxication & Withdrawal	497	20	4.0	<0.1	4,186	0.2	8.4	1,399	13
845 Anxiety Disorders	144	11	7.6	<0.1	2,236	0.1	15.5	241	15
943 Other Factors Influencing Health Status Age<80 W/O CC	77	9	11.7	<0.1	1,235	0.1	16.0	71	16
054 Other Disorders of the Nervous System W/O CC	54	3	5.6	<0.1	6,253	0.3	115.8	96	11
848 Childhood Mental Disorders	54	6	11.1	<0.1	14,016	0.8	259.6	234	7
846 Eating & Obsessive-Compulsive Disorders	45	2	4.4	<0.1	764	<0.1	17.0	230	18
678 Postpartum & Post Abortion Diagnoses W/O O.R. Procedure	28	1	3.6	<0.1	375	<0.1	13.4	0	19
889 Poisoning/Toxic Effects of Drugs Age<60 W/O CC	24	1	4.2	<0.1	158	<0.1	6.6	23	22
888 Poisoning/Toxic Effects of Drugs Age>59 or W CC	19	2	10.5	<0.1	77	<0.1	4.1	39	27
063 Degenerative Nervous System Disorders Age<60	13	0	0.0	<0.1	820	<0.1	63.1	35	17
019 Non-Acute Quadriplegia/Paraplegia, W or W/O O.R. Procedure	9	1	11.1	<0.1	5,325	0.3	591.7	71	12
942 Other Factors Influencing Health Status Age>79 or W CC	7	0	0.0	<0.1	103	<0.1	14.7	19	26
062 Degenerative Nervous System Disorders Age>59	6	0	0.0	<0.1	143	<0.1	23.8	31	23
047 Seizure Age<65 W/O CC	5	0	0.0	<0.1	10	<0.1	2.0	6	46
956 Unacceptable Principal Diagnosis	5	0	0.0	<0.1	42	<0.1	8.4	6	31
885 Injuries Age<65	3	0	0.0	<0.1	5	<0.1	1.7	3	51
037 Cerebrovascular Disorders Except TIA W CC	2	0	0.0	<0.1	19	<0.1	9.5	13	38
038 Cerebrovascular Disorders Except TIA W/O CC	2	0	0.0	<0.1	135	<0.1	67.5	7	25
044 Nontraumatic Stupor & Coma	2	0	0.0	<0.1	15	<0.1	7.5	3	43
941 Rehabilitation	2	0	0.0	<0.1	142	<0.1	71.0	22	24
038 Other	35	1	2.9	<0.1	981	0.1	28.0	136	..
<b>Total</b>	<b>18,994</b>	<b>893</b>	<b>4.7</b>	<b>1.0</b>	<b>688,437</b>	<b>37.0</b>	<b>38.5</b>	<b>72,688</b>	<b>..</b>

(a) Separations for which the type of episode of care was reported as acute, or was not reported.

Note: Main abbreviations: W—with, W/O—without, CC—complications and comorbidities, proc.—procedure, dsr—disorder.

**Table 10.16: Separations for Group 1 Edit DRGs for the 10 principal procedures with the highest number of separations<sup>(a)</sup> by hospital sector, States and Territories, 1997–98**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Principal procedure</b>	<b>Public hospitals</b>								
6981 Transvaginal oocyte recovery	37	704	0	122	3	0	0	0	866
0881 Linear repair of laceration of eyelid or eyebrow	32	46	56	48	22	0	0	0	204
6021 Transurethral prostatectomy	41	58	9	10	14	2	3	0	137
294 Plastic operation on pharynx	30	22	19	19	31	5	4	0	130
470 Appendectomy	37	37	11	21	10	5	0	2	123
6909 Other dilation and curettage of uterus	37	28	12	9	4	2	0	2	94
5791 Sphincterotomy of bladder	33	22	5	9	9	2	0	0	80
543 Excision of lesion or tissue of abdominal wall or umbilicus	23	19	12	10	6	1	0	0	71
5732 Diagnostic procedures on bladder, other cystoscopy	18	20	10	10	8	2	1	1	70
540 Other operation on abdominal wall, incision of abdominal wall	18	18	10	11	4	1	0	1	63
Other procedures	1,677	1,358	793	714	568	97	72	64	5,343
<b>Total</b>	<b>1,983</b>	<b>2,332</b>	<b>937</b>	<b>983</b>	<b>679</b>	<b>117</b>	<b>80</b>	<b>70</b>	<b>7,181</b>
	<b>Private hospitals</b>								
6981 Transvaginal oocyte recovery	621	1,043	379	42	0	1	5	n.a.	2,091
294 Plastic operation on pharynx	93	57	46	62	19	3	7	n.a.	287
6983 Gamete intrafallopian transfer (GIFT)	4	63	134	6	0	0	0	n.a.	207
5732 Diagnostic procedures on bladder, other cystoscopy	61	18	31	5	3	2	4	n.a.	124
6021 Transurethral prostatectomy	18	42	21	13	8	2	0	n.a.	104
863 Other local excision of lesion or tissue of skin	25	28	23	4	4	2	0	n.a.	86
2769 Palatoplasty, other plastic repair of palate	49	17		4	4	3	1	n.a.	78
1341 Phacoemulsification and aspiration of cataract	32	10	23	4	3	1	0	n.a.	73
5791 Sphincterotomy of bladder	23	19	4	9	7	4	0	n.a.	66
6909 Other dilation and curettage of uterus	32	10	11	8	4	1	0	n.a.	66
Other procedures	1,644	1,041	998	463	304	119	31	n.a.	4,600
<b>Total</b>	<b>2,602</b>	<b>2,348</b>	<b>1,670</b>	<b>620</b>	<b>356</b>	<b>138</b>	<b>48</b>	<b>n.a.</b>	<b>7,782</b>

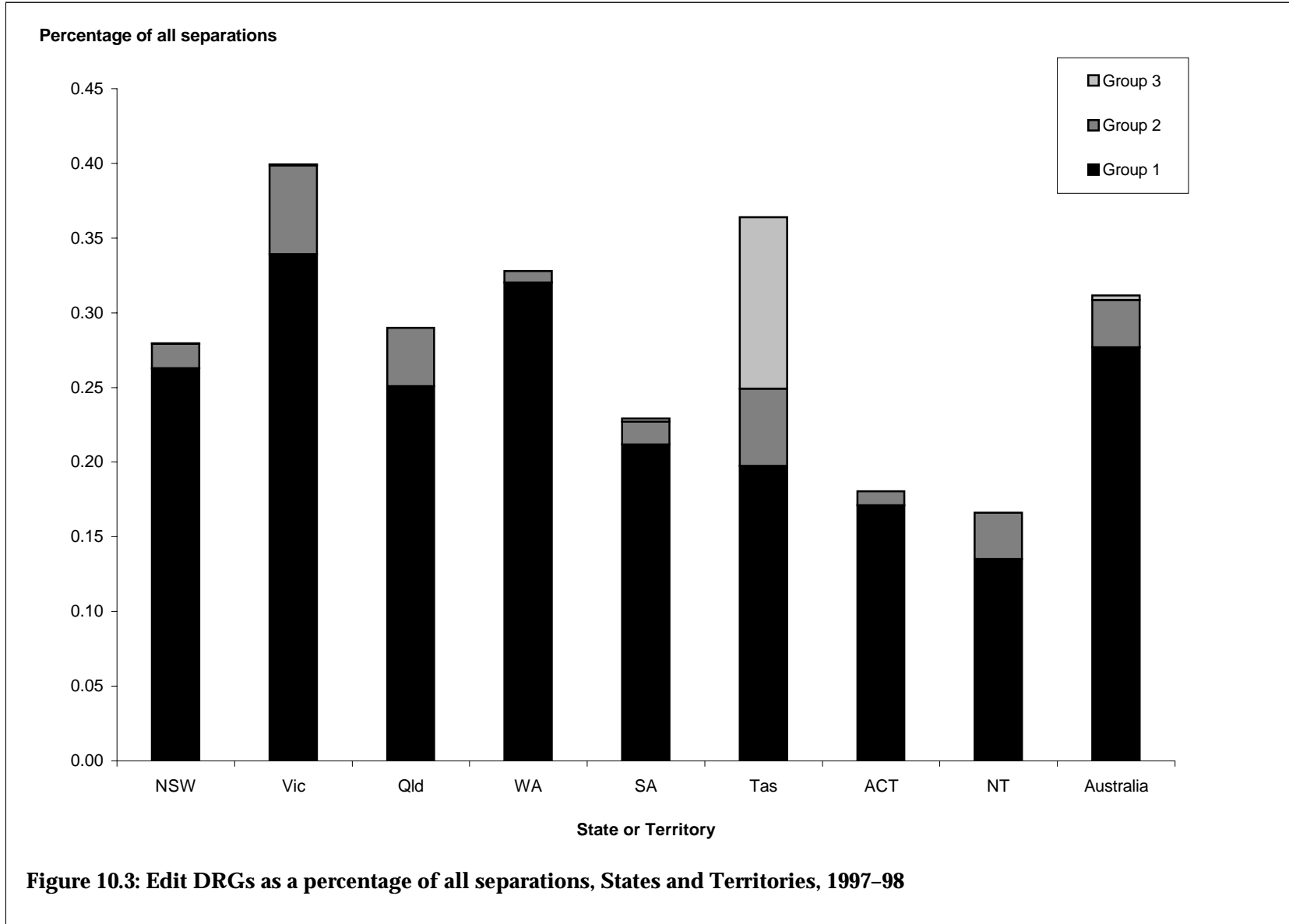
(a) Separations for which the Type of episode of care was reported as acute, or was not reported.

n.a. not available.

**Table 10.17: Separations for Group 2 Edit DRGs for the 10 principal diagnoses with the highest number of separations<sup>(a)</sup> by hospital sector, States and Territories, 1997–98**

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Principal diagnosis</b>		<b>Public hospitals</b>								
650	Single spontaneous vaginal delivery	15	5	11	5	6	1	0	2	45
76519	Disorders relating to short gestation, other preterm infants	11	0	6	5	3	0	1	3	29
27701	Cystic fibrosis with intestinal manifestations	4	0	8	1	3	0	0	0	16
64300	Mild hyperemesis gravidarum, unspec.	15	0	0	0	0	0	0	0	15
64660	Infections of genitourinary tract in pregnancy, unspec.	13	0	1	0	0	0	0	0	14
V1272	Personal history of certain dis. of digestive system, colonic polyps	1	1	10	1	0	0	0	0	13
V1279	Personal history of certain dis. of digestive system, other	0	1	9	0	0	0	0	2	12
64190	Unspecified antepartum haemorrhage, unspec.	11	0	1	0	0	0	0	0	12
64240	Hypertension complicating pregnancy, mild/unspec. pre-eclampsia	7	0	1	0	0	0	0	0	8
65490	Abnormality of organs and soft tissues of pelvis, other & unspec.	0	8	0	0	0	0	0	0	8
	Other diagnosis	128	14	87	19	24	17	3	9	301
<b>Total</b>		<b>205</b>	<b>29</b>	<b>134</b>	<b>31</b>	<b>36</b>	<b>18</b>	<b>4</b>	<b>16</b>	<b>473</b>
		<b>Private hospitals</b>								
V1272	Personal history of certain dis. of digestive system, colonic polyps	0	269	83	0	1	12	0	n.a.	365
V1005	Personal history of malignant neoplasm, large intestine	0	183	42	0	0	7	0	n.a.	232
V1051	Personal history of malignant neoplasm, bladder	0	47	32	0	0	0	0	n.a.	79
650	Single spontaneous vaginal delivery	6	31	17	0	1	1	1	n.a.	57
V1006	Personal history of malignant neoplasm—rectum etc.	1	44	5	0	0	1	0	n.a.	51
V1270	Personal history of certain dis. of digestive system, unspec.	0	36	1	0	0	0	0	n.a.	37
V1271	Personal history of certain dis. of digestive system, peptic ulcers	0	24	7	0	0	1	0	n.a.	32
65960	Other indic. for care related to labour, adv. maternal age, unspec.	30	0	0	0	0	0	0	n.a.	30
V1279	Personal history of certain dis. of digestive system, other	0	22	7	0	0	0	0	n.a.	29
V7649	Special screening for malignant neoplasms, other sites	0	4	11	1	4	0	0	n.a.	20
	Other diagnosis	44	132	66	6	33	27	2	n.a.	310
<b>Total</b>		<b>81</b>	<b>792</b>	<b>271</b>	<b>7</b>	<b>39</b>	<b>49</b>	<b>3</b>	<b>n.a.</b>	<b>1,242</b>

(a) Separations for which the Type of episode of care was reported as acute, or was not reported.  
n.a. not available.





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# Appendix 3: Technical notes

## Technical notes on tables in this report

### Definitions

If not otherwise indicated, data elements were defined according to the 1997–98 definitions in the *National Health Data Dictionary* Version 6.0 (summarised in the Glossary).

Unless otherwise specified:

- the Department of Veterans' Affairs hospital in New South Wales and the public psychiatric hospitals are included in the public hospital (public sector) category; and
- private psychiatric hospitals and private free-standing day hospital facilities are included in the private hospital (private sector) category.

Data presented by State or Territory refer to the State or Territory of the hospital, not to the State or Territory of the usual residence of the patient. The exceptions are Tables 5.8, 5.9 and 5.10, in which the State or Territory of usual residence of the patient is reported against the State or Territory of hospitalisation. Data presented in Table 8.1 are also presented by State or Territory of usual residence. The maps in Chapters 4 and 7 are also based on data on the State or Territory and Statistical Division of usual residence of the patient (see below).

### Population rates

Crude population rates throughout the report and age group-specific rates in Chapter 6 were calculated using Australian Bureau of Statistics' population estimates for 31 December 1997

(Appendix 4). For Figure 6.7, estimates for the Indigenous population for 30 June 1997 were used for age group specific rates for the Indigenous population.

Age-standardised rates were calculated using the direct standardisation method and 5-year age groups. The total Australian population for 30 June 1991 was used as the population for which expected rates were calculated. For the observed rates, the population estimates for 31 December 1997 were used for the observed rates in Tables 2.4, 4.1, 4.2 and 5.2. For Tables 6.7 and 6.8, the observed rates were calculated using population estimates for the Indigenous population and for the population for selected countries of birth for 30 June 1997, respectively (Appendix 4). Rates in Table 2.4 were standardised by sex as well as by age.

### Data presentation

Except as noted, where totals are provided in the tables, they include data only for those States and Territories for which data were available, as indicated in the tables. The exceptions are Table 2.3, Tables 4.3 and 4.4, and some tables for private hospitals in

Chapters 7, 8 and 10. Although available, some data in these tables were not published, for confidentiality reasons. The abbreviation 'n.p.' has been used in these tables to denote this.

Throughout the publication, percentages may not add up to 100.0 due to rounding. Percentages and population rates printed as 0.0 or 0 may denote less than 0.05 or 0.5 respectively.

## Data on Statistical Division of usual residence

Data on the Statistical Division of usual residence of admitted patients is presented in maps in Chapter 5 (Figures 5.1 and 5.2) and Chapter 7 (Figures 7.3 to 7.6). The data used for these maps were derived from data supplied for each separation by the States and Territories for the National Hospital Morbidity Database on the area of usual residence of the patients. The *National Health Data Dictionary* specifies that these data should be provided as the State or Territory and the Statistical Local Area (SLA) of usual residence. SLAs are small units within the Australian Bureau of Statistics' Australian Standard Geographical Classification (ASGC), and can be aggregated to Statistical Divisions for reporting, as in the maps in this publication. The data on the State or Territory of usual residence is reported in Chapter 5 (Tables 5.7, 5.8 and 5.9).

Although most separations included data on the State or Territory of usual residence, not all States and Territories were able to provide information on the area of usual residence in the form of an SLA code, using the 1997 edition of the ASGC. If SLA information was unavailable for a patient then postcode was requested. The Institute then mapped the supplied data to the standard, as far as possible. The standardised data were then aggregated to Statistical Division data for reporting.

New South Wales, Victoria, Tasmania and the Australian Capital Territory were able to provide SLA codes for both usual resident and non-usual resident patients. Western Australia was able to provide postcode for usual resident and non-usual resident patients, the Northern Territory supplied SLA codes for usual resident and postcodes for non-usual resident patients and South Australia was able to provide SLA codes for usual resident patients only. Queensland did not supply SLA codes but was able to provide Statistical Division and Statistical Sub-Division for usual resident patients only.

To enable further analysis of this information, it was aggregated to Statistical Sub-Division and Statistical Division levels. This process identified missing, invalid and superseded codes, but resulted in 98.9% of separations being assigned valid Statistical Division and Statistical Sub-Division codes. This high level of assignment was achieved for all jurisdictions, ranging from 94.4% for the Northern Territory separations to 99.8% for Western Australian separations. Data for the two Statistical Divisions in the Australian Capital Territory were combined for mapping purposes because of the difference in the relative size of the populations.

## Patient days

Patient days provide information on the length of stay of patients and are defined in the *National Health Data Dictionary* as 'the total number of days or part days of stay for all patients who were admitted for an episode of care and who underwent separation during the reporting period'. For overnight-stay patients, the day that the patient is admitted is counted as a patient day, while the day that the patient is separated is not counted as a patient day. Same day patients are allocated a length of stay of one day.

This definition means that not all patient days reported will have occurred in the reporting period (that is, 1 July 1997 to 30 June 1998) and, therefore, cannot be used to calculate accurate financial year-based activity estimates. It is expected, however, that in acute hospitals, patient days for patients who separated in 1997–98, but were admitted in 1996–97 would be counterbalanced by the patient days for patients in hospital on 30 June 1998 who will separate in the following reporting period, and for whom data will be reported in the data collection for the 1998–99 year. Because of the more variable lengths of stay in long-stay establishments (such as public psychiatric hospitals), the numbers of separations and patient days can be a less accurate measure of the activity of these establishments.

## **Discrepancies in reporting of separations and patient days**

The scope of the National Hospital Morbidity Database and the National Public Hospital Establishments Database are described in Chapter 1. Both databases include data on separations and patient days. The data are collected at the patient level for the National Hospital Morbidity Database and at an aggregate level for individual hospitals for the National Public Hospital Establishments Database. However, even after excluding private hospital separations and patient days from the National Hospital Morbidity Database, there are discrepancies in the number of separations and patient days reported to the two databases. This is borne out by comparing Table 4.2 with Tables 4.3 and 4.4.

Differences between the National Public Hospital Establishments Database and the National Hospital Morbidity Database are slight for 1997–98. They were mainly caused by differences in the timing of extractions of data for the two databases and slight differences in the definitions of boarders and the inclusions of unqualified neonates. For example: in supplying data to the National Public Hospital Establishments Database, the Northern Territory used the diagnosis codes V63 and V68 to indicate boarders; however the Institute did not use these codes to identify records of boarders for removal from the National Hospital Morbidity Database.

## **Private hospitals in the National Hospital Morbidity Database**

Chapter 1 includes details of the hospitals included in the National Hospital Morbidity Database. Data are not provided for 1997–98 for the one private hospital in the Northern Territory, the private free-standing day hospital facilities in the Australian Capital Territory, two private free-standing day hospital facilities and one small former public hospital has recently been privatised in Tasmania, and about 4,500 New South Wales private hospital separations.

The Australian Bureau of Statistics collates summary hospital morbidity data from private hospitals in its Private Hospital Establishments Collection. In 1996–97, the Private Health Establishments Collection reported 1,765,643 separations (Australian Bureau of Statistics 1998) compared with 1,684,948 separations reported for the National Hospital Morbidity Database.

This discrepancy of 80,695 separations (4.6%) (4,868 for private free-standing day hospital facilities and 75,827 for other private hospitals) may be due to the use of differing definitions or different interpretations of definitions. It is also likely to reflect the omission of some private hospitals from the National Hospital Morbidity Database and perhaps also some

separations for some private hospitals which were otherwise included in the database. In 1996–97, the National Hospital Morbidity Database included all private hospitals as for 1997–98, and included all New South Wales separations. In contrast, the Private Health Establishments Collection included all private acute and psychiatric hospitals licensed by State and Territory health authorities and all private free-standing day hospital facilities approved by the Department of Health and Aged Care.

Fewer separations were reported to the National Hospital Morbidity Database for 1996–97 than to the Private Health Establishments Collection for all geographical areas for which data are available from the Private Health Establishments Collection (ABS 1998):

- New South Wales and the Australian Capital Territory combined—540,086 and 555,506 separations, respectively (a discrepancy of 15,420 or 2.8%)
- Victoria—458,554 and 459,396 separations, respectively (a discrepancy of 842 or 0.2%)
- Queensland—362,299 and 373,836 separations, respectively (a discrepancy of 11,537 or 3.1%)
- South Australia and the Northern Territory combined—142,644 and 155,596 separations, respectively (a discrepancy of 12,952 or 8.3%)
- Western Australia and Tasmania combined—181,365 and 221,309 separations, respectively (a discrepancy of 39,944 or 18.0%)

With the exception of Queensland, the discrepancies seem to reflect the major differences in coverage of the National Hospital Morbidity Database and the Private Health Establishments Collection. That is, they seem to reflect the omission from the National Hospital Morbidity Database of private hospitals in the Australian Capital Territory, the Northern Territory and Tasmania. However, because of other apparent differences between the databases (manifest as discrepancies in the numbers of separations reported by each State and Territory grouping for both private free-standing day hospital facilities and other private hospitals), it cannot be concluded that the discrepancies represent measures of the numbers of separations for the omitted hospitals.

# Appendix 4: Population estimates

Table A4.1: Estimated resident population by age group and sex, States and Territories, 31 December 1997

Sex	Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia <sup>(a)</sup>
Females	0	42,837	29,903	22,669	11,926	8,916	2,937	2,085	1,683	122,982
	1-4	170,856	122,634	95,283	49,709	37,789	12,940	8,475	6,931	504,733
	5-14	428,523	310,298	243,604	130,703	97,836	34,488	21,790	15,677	1,283,263
	15-24	431,330	322,425	248,532	130,859	97,584	32,040	25,202	14,786	1,302,902
	25-34	484,660	366,429	263,880	140,321	108,037	33,544	25,620	17,924	1,440,712
	35-44	485,705	358,412	263,111	143,791	114,208	36,853	25,253	14,779	1,442,407
	45-54	402,255	298,724	220,706	115,359	98,691	30,622	21,849	10,029	1,198,377
	55-64	274,174	202,265	139,488	72,509	67,120	21,250	11,032	4,239	792,132
	65-74	241,506	176,323	114,266	56,699	62,035	18,293	7,572	1,925	678,640
	75 and over	210,739	154,643	98,918	48,676	57,253	16,528	5,747	1,049	593,567
<i>Total</i>		<i>3,172,585</i>	<i>2,342,056</i>	<i>1,710,457</i>	<i>900,552</i>	<i>749,469</i>	<i>239,495</i>	<i>154,625</i>	<i>89,022</i>	<i>9,359,715</i>
Males	0	45,110	31,889	23,949	12,695	9,366	3,105	2,152	1,750	130,043
	1-4	180,036	129,312	100,608	52,615	39,818	13,823	8,762	7,308	532,397
	5-14	449,955	325,113	256,548	137,713	103,269	35,732	22,743	16,805	1,348,214
	15-24	448,125	335,116	258,910	138,396	102,472	33,191	26,782	16,494	1,359,691
	25-34	483,058	360,998	264,446	144,176	110,053	32,237	25,046	19,398	1,439,737
	35-44	486,108	352,695	261,868	144,494	112,964	35,981	24,079	16,268	1,434,761
	45-54	413,084	297,967	230,014	122,193	98,099	31,108	21,624	12,254	1,226,596
	55-64	276,665	201,546	146,253	75,115	65,931	21,221	11,336	5,752	803,917
	65-74	217,643	157,682	107,337	53,460	55,863	16,638	6,731	2,363	617,738
	75 and over	130,082	94,519	65,308	30,680	35,111	10,141	3,515	852	370,225
<i>Total</i>		<i>3,129,866</i>	<i>2,286,837</i>	<i>1,715,241</i>	<i>911,537</i>	<i>732,946</i>	<i>233,177</i>	<i>152,770</i>	<i>99,244</i>	<i>9,263,319</i>
Persons	0	87,947	61,792	46,618	24,621	18,282	6,042	4,237	3,433	253,025
	1-4	350,892	251,946	195,891	102,324	77,607	26,763	17,237	14,239	1,037,130
	5-14	878,478	635,411	500,152	268,416	201,105	70,220	44,533	32,482	2,631,477
	15-24	879,455	657,541	507,442	269,255	200,056	65,231	51,984	31,280	2,662,593
	25-34	967,718	727,427	528,326	284,497	218,090	65,781	50,666	37,322	2,880,449
	35-44	971,813	711,107	524,979	288,285	227,172	72,834	49,332	31,047	2,877,168
	45-54	815,339	596,691	450,720	237,552	196,790	61,730	43,473	22,283	2,424,973
	55-64	550,839	403,811	285,741	147,624	133,051	42,471	22,368	9,991	1,596,049
	65-74	459,149	334,005	221,603	110,159	117,898	34,931	14,303	4,288	1,296,378
75 and over	340,821	249,162	164,226	79,356	92,364	26,669	9,262	1,901	963,792	
<b>Total</b>		<b>6,302,451</b>	<b>4,628,893</b>	<b>3,425,698</b>	<b>1,812,089</b>	<b>1,482,415</b>	<b>472,672</b>	<b>307,395</b>	<b>188,266</b>	<b>18,623,034</b>

(a) Includes Other Territories.

Source: Australian Bureau of Statistics unpublished data.

**Table A4.2: Projected Aboriginal and Torres Strait Islander population by age group and sex, States and Territories, 30 June 1997**

Sex	Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia <sup>(a)</sup>
Females	0	1,633	324	1,563	755	303	213	43	679	5,513
	1-4	6,572	1,290	6,279	2,989	1,227	821	162	2,656	22,002
	5-14	14,082	2,774	13,587	7,426	2,843	2,000	397	6,208	49,336
	15-24	10,333	2,067	10,424	5,400	2,191	1,590	341	5,498	37,860
	25-34	9,449	1,986	9,078	5,012	2,045	1,185	308	4,559	33,638
	35-44	6,863	1,455	6,384	3,511	1,370	1,031	222	3,111	23,960
	45-54	4,136	826	3,808	1,898	758	542	92	1,859	13,929
	55-64	2,249	453	1,979	1,047	428	260	21	1,086	7,526
	65-74	1,100	284	1,065	604	214	126	13	522	3,932
	75 and over	518	146	525	302	120	66	3	269	1,950
	<i>Total</i>	<i>56,935</i>	<i>11,605</i>	<i>54,692</i>	<i>28,944</i>	<i>11,499</i>	<i>7,834</i>	<i>1,602</i>	<i>26,447</i>	<i>199,646</i>
Males	0	1,716	342	1,641	796	315	222	48	719	5,801
	1-4	6,665	1,348	6,388	3,150	1,227	854	197	2,906	22,743
	5-14	14,782	2,829	14,075	7,558	2,923	2,120	393	6,732	51,434
	15-24	10,445	2,101	10,448	5,502	2,046	1,514	317	5,493	37,891
	25-34	8,284	1,851	8,248	4,648	1,836	1,073	269	4,494	30,721
	35-44	6,186	1,368	5,749	3,249	1,320	966	218	2,822	21,894
	45-54	3,906	860	3,406	1,742	715	614	83	1,666	13,000
	55-64	2,084	208	1,679	950	369	256	25	893	6,666
	65-74	863	402	846	495	167	100	6	400	3,085
	75 and over	301	88	386	229	86	28	3	210	1,333
	<i>Total</i>	<i>55,232</i>	<i>11,397</i>	<i>52,866</i>	<i>28,319</i>	<i>11,004</i>	<i>7,747</i>	<i>1,559</i>	<i>26,335</i>	<i>194,568</i>
Persons	0	3,349	666	3,204	1,551	618	435	91	1,398	11,314
	1-4	13,237	2,638	12,667	6,139	2,454	1,675	359	5,562	44,745
	5-14	28,864	5,603	27,662	14,984	5,766	4,120	790	12,940	100,770
	15-24	20,778	4,168	20,872	10,902	4,237	3,104	658	10,991	75,751
	25-34	17,733	3,837	17,326	9,660	3,881	2,258	577	9,053	64,359
	35-44	13,049	2,823	12,133	6,760	2,690	1,997	440	5,933	45,854
	45-54	8,042	1,686	7,214	3,640	1,473	1,156	175	3,525	26,929
	55-64	4,333	661	3,658	1,997	797	516	46	1,979	14,192
	65-74	1,963	686	1,911	1,099	381	226	19	922	7,017
	75 and over	819	234	911	531	206	94	6	479	3,283
<b>Total</b>		<b>112,167</b>	<b>23,002</b>	<b>107,558</b>	<b>57,263</b>	<b>22,503</b>	<b>15,581</b>	<b>3,161</b>	<b>52,782</b>	<b>394,214</b>

(a) Includes Other Territories.

Source: ABS 1998 Experimental projections of the Aboriginal and Torres Strait Islander population, 30 June 1996 to 30 June 2006 Cat. No. 3231.0.

**Table A4.3: Estimated resident population by country/region of birth, Australia 30 June 1997**

Country/region of birth	Population	Country/region of birth	Population
Australia	14,212,498	Myanmar	11,555
New Zealand	327,323	Indonesia	47,839
Papua New Guinea	26,419	Cambodia	24,075
Fiji	40,518	Malaysia & Brunei	86,465
Oceania (other)	26,774	Philippines	109,879
<i>Oceania (total)</i>	<i>14,633,532</i>	Singapore	30,740
		Vietnam	167,325
United Kingdom & Ireland	1,232,537	Thailand	21,533
Greece	141,962	China	135,345
Italy	254,379	Hong Kong & Macau	58,456
Malta	55,342	Japan	23,705
Former Yugoslavia	198,080	Korea	36,149
Former USSR & Baltic States	54,272	India	90,374
Hungary	27,187	Sri Lanka	54,115
Poland	71,156	Asia (other)	57,662
Romania	13,592	<i>Asia (total)</i>	<i>955,217</i>
Austria	22,309		
France	18,713	Canada	28,559
Germany	121,214	United States of America	56,385
Netherlands	95,531	North America (other)	92
Europe & the former USSR (other)	124,055	<i>North America (total)</i>	<i>85,036</i>
<i>Europe &amp; the former USSR (total)</i>	<i>2,430,329</i>		
		Argentina	11,850
Lebanon	76,151	Chile	25,804
Turkey	31,656	The Caribbean	3,349
Iran	17,908	Central & South America (other)	41,640
Egypt	37,955	<i>South America, Central America &amp; The Caribbean (total)</i>	<i>82,643</i>
Middle East & North Africa (other)	50,286		
<i>Middle East &amp; North Africa (total)</i>	<i>213,956</i>	Mauritius	18,304
		South Africa	65,095
		Africa excluding North Africa (other)	40,043
		<i>Africa excluding North Africa (total)</i>	<i>123,442</i>
		<i>Overseas (total)</i>	<i>4,311,657</i>
		<b>Total</b>	<b>18,524,155</b>

Source: ABS 1998. Migration Australia 1996–97. Cat No. 3412.0.

# Appendix 5: Cost per casemix-adjusted separation methodology

## Introduction

Table 2.1 presents a measure of the average cost of providing care for an admitted patient (whether an overnight-stay patient or a same day patient), adjusted for the relative complexity of the patient's clinical condition and of the hospital services provided. The cost per casemix-adjusted separation does not, however, take account of the quality of care delivered within a hospital nor the health outcomes achieved.

The methodology used to calculate the cost per casemix-adjusted separation for the current report uses as its base the method used to report this indicator in *Australian Hospital Statistics 1996–97* (AIHW 1998a) and other reports including those of the National Health Ministers' Benchmarking Working Group (NHMBWG 1998, in press) and the Steering Committee for the Review of Commonwealth/State Service Provision (SCRCSSP 1999). The indicator is calculated as:

$$\frac{\text{Recurrent expenditure} \times \text{IFRAC}}{\text{Total separations} \times \text{Average cost weight}}$$

where IFRAC (admitted patient fraction) is the estimated proportion of total hospital costs related to admitted patients and average cost weight is a single number representing the relative costliness of cases for a particular provider (or a group of providers, for example teaching hospitals). Calculation of the average cost weight is described below.

Recurrent expenditure for this indicator is defined by the recurrent expenditure data elements in the *National Health Data Dictionary*.

Total separations excludes unqualified neonates and boarders and are defined in the Glossary. In short, a separation is counted when a patient completes an episode of hospital care, whereas an admission is counted when a patient commences an episode of care.

As there is inconsistency between States and Territories in the recording of depreciation, it has been excluded from this analysis. It is anticipated that as accrual accounting becomes universally adopted by health authorities, comparable data on depreciation will become available and it will be included in these analyses, (see Tables 3.8 and 3.10 for available data on capital expenditure and depreciation).

The cost per casemix-adjusted separation can not be used as the sole measure of the efficiency of the different jurisdictions in providing hospital services, however, as many of the costs incurred are costs beyond the control of a jurisdiction. For example, the Northern Territory has high staffing and transport costs, and treats a greater proportion of Indigenous patients than other jurisdictions. Because of factors such as these, cost disabilities associated with providing the same level and standard of hospital services available elsewhere in Australia are recognised by the Commonwealth Grants Commission (CGC). Cost disability



refers to variables such as remoteness, high input costs and socioeconomic factors that increase the cost of providing services. Note that the CGC's 'hospital services' category includes ambulance and central administration expenditures as well as acute hospital services expenditure (CGC 1997). Other jurisdictions may suffer cost disabilities for other reasons. Factors such as these should be taken into account when making comparisons.

## Scope

For the purposes of improving the comparability of data across jurisdictions and increasing the accuracy of the analysis, the scope for Table 2.1 has been restricted to selected public acute hospitals. As can be seen from the table, the number of separations excluded from the analysis is 3.5% of the total number of separations for the nation. Hospitals excluded from the analysis include psychiatric, drug and alcohol services, rehabilitation, dental, mothercraft, hospices and hospitals that satisfy the New South Wales definition of community non-acute hospitals. The scope of public hospital establishments included in the calculation of the cost per casemix-adjusted separation figures for 1997–98 is different from the scope of the data reported in all other tables and the scope has also changed since the reports using 1996–97 data (AIHW 1998a, SCRCSSP 1999, NHMBWG in press).

In previous years the scope was decided by each jurisdiction and as a result there has been some slight inconsistencies in the establishments that were included and excluded amongst jurisdictions. This year after consultation with data providers it was agreed to address this problem by uniformly using the criteria for community non acute hospitals specified by New South Wales in their peer group classification (NSW Health in press) to exclude hospitals. Community non-acute hospitals are defined as hospitals with fewer than 2,000 acute weighted separations and more than 40% of patient days that are either outlier bed days or not acute (excluding unqualified neonates).

Financial data for most Victorian, Tasmanian and some South Australian hospitals were only available at the network level. For Victoria it was not possible to exclude thirteen hospitals (campuses) with a total of 19,500 separations that would otherwise have satisfied the criteria for exclusion. The effect on the Victorian estimate is likely to be in the order of 1%. There was a single Tasmanian record covering all Tasmanian psychiatric and district hospitals. The best approach in Tasmania's case was to exclude the record covering the psychiatric and district hospitals as the majority of institutions within the grouped record would have been excluded. The networking made no difference to the exclusions for South Australia as all of the members of the networks were classified to the same categories as the networks themselves.

The New South Wales methodology identifies a range of non-acute hospitals specifically by their role as psychiatric, mothercraft, rehabilitation, hospices and multi-purpose services. These hospitals are already excluded by most jurisdictions. Hospitals with less than 2,000 acute weighted separations are defined as community. Community hospitals are divided into acute and non-acute by examining the proportion of patient days that relates to: patients other than acute; and outlier patient days. If the proportion of 'patient days other than acute and outlier patient days' is over 40% the hospital are classified as community non-acute hospitals. The trim points published in the *Casemix Standards for NSW 1998–99* (NSW Health 1998) have been used to determine outlier days.

Among the hospitals with fewer than 2,000 acute weighted separations across Australia there are a number of institutions on the cusp. Across Australia there are 434 establishments with less than 2,000 acute weighted separations. 168 of these have a 'patient days other than acute and outlier patient days' proportion of more than 40%. Ten of the hospitals with less than 2,000 acute weighted separations have a 'patients other than acute and outlier patient

day' proportion within 2% of the 40% mark in either direction. While natural variability in the acute/not acute proportion may cause these institutions to move in or out of scope, their contribution to the estimates is insignificant.

As the service reforms under the National Mental Health Strategy are put into place, fewer patients are being treated in specialised psychiatric hospitals, with a shift to treatment and rehabilitation being provided in the public acute hospital system and in the community, including specialised community residential facilities (Commonwealth of Australia 1998). However, these changes are occurring at a different rate between jurisdictions. Table 4.2 shows the crude separation rate for public psychiatric hospitals varied widely, from 0.3 per 1,000 population in Victoria, to 2.9 per 1,000 population in South Australia. This variation reflects differences in the extent to which public psychiatric hospital services have been mainstreamed into public acute hospitals or replaced by community care, and indicates that there are differences across jurisdictions in the number of psychiatric patients who are being included in the total separations used to calculate the cost figures in Table 2.1.

## Determining costs for admitted patients

Ideally, costs for acute admitted patients only would be used for this indicator. This is because the current methodology is restricted to using cost weights published for Australian National Diagnosis Related Groups which only apply to acute admitted patients.

There are two dimensions to this scope: *admitted* patients and *acute* admitted patients. On the first dimension, it is necessary to exclude costs not directly associated with admitted patient care, notably non-admitted patient costs. To determine the costs associated with admitted patients, an admitted patient fraction (IFRAC) is used. The IFRAC is an expression of the ratio of admitted patient costs to total hospital costs. The IFRAC is generally estimated at a hospital level from the results of surveys.

$$\text{IFRAC} = \frac{\text{Inpatient cost}}{\text{Total cost}}$$

For hospitals where the IFRAC was not available or clearly inconsistent with the data, the admitted patient costs were estimated using the Health and Allied Services Advisory Council (HASAC) ratio (see Cooper-Stanbury, Solon & Cook 1994). The HASAC IFRAC is calculated using the following formula:

$$\text{IFRAC}_H = \frac{\text{Patient days}}{\text{Patient days} + \left( \frac{\text{NIOOS}}{\text{Ratio}} \right)}$$

Where NIOOS = Non-inpatient occasions of service

IFRAC<sub>H</sub> = the IFRAC calculated and

Ratio = the ratio of non-admitted patient cost to admitted patient cost per service.

The ratio used in this report equates the cost of 5.753 non-admitted patient services to the cost of one admitted patient bed day.

Unbundling teaching and research costs from the total costs are not directly covered by this equation. The component of costs that relate to teaching are not directly estimated by this HASAC calculation. In effect they would be allocated to admitted patients and non-admitted patients according to the proportion calculated by the HASAC IFRAC. For the most part research costs are omitted from the scope of the collection as they are most frequently controlled by institutions legally (if not physically) separated from the hospital.

A brief analysis of hospitals where IFRACs were supplied shows that the ratio of non-admitted patient cost to admitted patient cost per service varies considerably between hospitals and jurisdictions. There are two explanations for this: either the casemix is different between the hospitals or the occasions of service are not being counted consistently. For example, a hospital that performed non-admitted patient pathology for a number of other hospitals may have a very different ratio of admitted patient costs to non-admitted patient costs compared with a hospital that performed many non-admitted patient magnetic resonance imaging scans.

The HASAC method is used in this report to estimate IFRACs for 15 selected and three excluded hospitals in Queensland, 10 excluded hospitals in New South Wales, one selected and one excluded hospital in the Australian Capital Territory, four selected and one excluded hospitals in Western Australia, eight selected and two excluded hospitals in South Australia and one excluded network in Tasmania. In New South Wales, Queensland and South Australia the HASAC IFRAC was usually only used on small rural hospitals. It also seems apparent from inspection of the data that some hospitals may have used the HASAC method to estimate their IFRAC for reporting purposes.

Ideally, different IFRACs would be used for different cost categories. In the absence of comprehensive sets of IFRACs, a single hospital-wide IFRAC was applied to all cost categories.

## Admitted patients other than acute patients

It was not possible to isolate the costs of acute admitted patients from all admitted patient costs (as defined by the *National Health Data Dictionary* data element *Type of episode of care*). Because costs are being estimated per separation and not per patient day most of the non-acute admitted patients (including rehabilitation and non-acute patients) will have higher costs per separation, as these patients typically have longer lengths of stay, even though their daily costs are lower. These patients make up less than 3% of total admitted patient episodes and account for approximately 15% of patient days. Many of these records were excluded from the analysis by the restrictions in establishment scope.

There is also variation in the application of the episodes of care and type of episode of care between States and Territories. Only the Australian Capital Territory does not identify episodes of care other than acute, apart from unqualified neonates (see Table 5.10). This is also shown in the proportion of statistical separations and rates of statistical admissions and separations (see Tables 5.12 and 5.13). In States or Territories where there is a clear delineation in funding arrangements between acute and sub-acute services, the split between acute and other types of patients may be different from where this is done purely on a statistical basis.

The major differences in the distribution of separations other than acute patients can be seen in the lengths of stay. For example, Queensland and South Australia have extremely long average lengths of stay for non-acute patients. Much of the difference can be adjusted by removing psychiatric hospitals.

The rates at which the types of care other than acute are identified in each jurisdiction do not vary very significantly across the larger jurisdictions, but do vary amongst the smaller jurisdictions. In the current cost per casemix-adjusted separation model they are given the average weights for all other separations in the State. These are within 5% of 1.00 for all States except for the Northern Territory (0.76).

Unqualified neonates have traditionally been costed as a component of the mother’s cost weight. The cost weight of the mother reflects the costs of the mother and the unqualified neonate. As a result, the inclusion of unqualified neonates in the count of casemix-adjusted separations would double count the combined cost weight of the mother and baby combination. From June 1998 neonatal separations will be classified on a different basis allowing casemix analysis to reflect need for care rather than be overly influenced by qualification. Qualified and unqualified patient days will be counted separately for a single record. Unfortunately data for this year is supplied under the earlier definition, which was current for the year of this report. Given the cost weights for deliveries are not large, it is likely that if the cost weight for unqualified neonates is separated from the cost weight of the mother, they would be very low. The cost weight for AN-DRG 727 *Neonate over 2,500g without significant operation without significant problem* is 0.55.

Differences in counting of qualified neonates has been raised as a problem. The formal definition of qualified neonates specifies that babies should be separated every time they move from a qualified unit to an unqualified bed and returned. Hospitals have been inconsistent in their application of this rule within and across jurisdictions. Some hospitals have only counted on separation for the total of qualified days and one for the total of unqualified days. For the 1996–97 report it was estimated that the difference in counting was possibly in the order of 10%. Qualified neonates are 1.5% of separations, unqualified babies are about 5% of all separations and they would have a low cost weight if counted as qualified. As a result the differences in the way babies are qualified in each jurisdiction would have 10% effect on possibly 5% of records with a cost weight of about 0.5, producing a total variation of 0.25% on the overall estimate of average cost per casemix-adjusted separation.

## Adjusting for casemix

The average cost weight is used in this report to adjust for differences in the relative costliness of all acute admitted patients treated in a hospital compared with another hospital or group. The value for a group of hospitals is multiplied by the total number of separations for that group to produce the number of casemix-adjusted separations. The term ‘*cost per casemix-adjusted separation*’ derives from this use of the number of separations adjusted by relative costliness.

Casemix refers to the numbers and types of admitted patients a hospital treats. Hospitals collect data that allow admitted patient episodes to be classified using the Australian National Diagnosis Related Groups (AN-DRG) version 3.1 casemix classification system. This system groups episodes of similar clinical condition and resource use into 667 categories or AN-DRGs. The National Hospital Cost Data Collection has collected data to produce a cost weight for each AN-DRG (see Appendix 8). The set of cost weights is a relative value scale for all AN-DRGs, calculated so that the average cost weight across all episodes used to produce the set of weights is 1.00. Once a set of cost weights has been produced, it is possible to determine the average cost weight for a hospital or group of hospitals. The average cost weight is calculated as follows:

$$\text{Average cost weight} = \frac{\sum_{i=1}^n (CW_i \times \text{separations}_i)}{\text{Total no. of acute separations}}$$

where  $i$  represents each of the 667 AN-DRGs and  $CW_i$  is the cost weight for the  $i$ th AN-DRG (the different versions of the classification system released to date have different numbers of AN-DRGs).

The average cost weight for a hospital is useful because it represents in a single number the overall complexity of cases treated by a hospital. If the national cost weights are used in the calculation of an average cost weight, then the resultant weight is an indicator of the relative costliness of the hospital's casemix with respect to the national average. For example, a hospital with an average cost weight of 1.08 has an 8% more costly casemix than the national average (by design equal to 1.00).

Hospital morbidity data provided to the National Hospital Morbidity Database were used to estimate average cost weights for the groups of hospitals reported in this analysis. Version 3.1 of the AN-DRG classification system was used to allocate patient episodes to AN-DRGs. Cost weights were supplied by the Department of Health and Aged Care, from the 1997–98 National Hospital Cost Data Collection.

The complexity of cases treated as admitted patients can differ regionally. Some jurisdictions admit patients who might be treated as non-admitted patients in other jurisdictions. Age structures are less of a concern in comparing States and Territories, and the AN-DRG adjustment is deemed to compensate for the differences in costs due to the higher proportion of older patients in some jurisdictions (Gillett & O'Connor-Cox 1996; Duckett & Jackson 1998).

The validity of comparisons of average cost weights is limited by differences in the extent to which each jurisdiction's psychiatric services are integrated into its public hospital system as service delivery changes under the National Mental Health Strategy. For example, in Victoria, almost all public psychiatric hospitals are now mainstreamed into acute hospital services and psychiatric patient data are therefore included in the acute hospital reports. Cost weights are not useful as a measures of resource requirements for acute psychiatric services because the relevant AN-DRGs are less homogeneous than for other acute services.

## Estimating total medical costs

For the medical labour costs category, data are readily available only for public patients, as private patients are charged directly by their doctor for medical services. Private patients are those patients who are treated by a doctor of their choice (as opposed to a hospital-nominated doctor) or choose to be accommodated in a single room. Charges for such private medical services are not included in the recurrent expenditure figures. Although Medicare data on in-hospital services are available, they are not sufficiently detailed to allow the allocation of costs to the groups of hospitals reported. The cost of private patients is therefore estimated by assuming that a patient day of care by a medical practitioner costs the same, whether the patient is public or not. The private patient medical costs are then estimated by pro-rating the sum of salary/sessional and VMO payments according to the number of public patient days and the number of private patient days. This is equivalent to multiplying by one minus the public patient day proportion and dividing by the public patient day proportion. The underlying assumption ignores a number of factors including the propensity for junior medical staff to provide care to private patients and for doctors with private patients to charge at higher rates than they would charge the public system under a contract for public patients.

## Payroll tax

Only Tasmanian hospitals are liable for a significant proportion of payroll tax. The Institute has worked with the Department of Human Services Tasmania to remove payroll tax costs from the cost per casemix-adjusted separation table. While New South Wales hospitals are payroll tax exempt, payroll tax is paid for central office and some other support service staff. The amount is insignificant with respect to the New South Wales total. While Queensland hospitals pay payroll tax it is reimbursed and in theory should not be included in any accounts as reported to the National Public Hospital Establishments Database. In practice there is a very small amount reported due to administrative lags and other inconsistencies. No action has been taken to remove payroll tax from Queensland or New South Wales data.

# Appendix 6: ICD-9-CM codes for selected procedures

Procedure	ICD-9-CM codes
Appendicectomy	47.0
Angioplasty	36.01, 36.02, 36.05, 36.06, 36.07
Caesarean section	74.0, 74.1, 74.2, 74.4, 74.99
Cholecystectomy	51.2
Coronary artery bypass graft	36.1
Endoscopies	
Oesophagus	42.23, 42.24
Stomach	44.13, 44.14
Small intestine	45.13, 45.14, 45.16
Colon	45.23–45.25
Hip replacement	81.51, 81.52, 81.53
Hysterectomy	68.3–68.8
Lens insertion	13.7
Tonsillectomy ± adenoidectomy	28.2, 28.3
Myringotomy	20.01
Knee replacement	81.54, 81.55
Prostatectomy	60.2–60.6, 60.20–60.69
Arthroscopy	80.2, 80.20–80.29

Note: These codes are used for the selected procedures in Table 2.4.

# Appendix 7: Further information

*Australian Hospital Statistics, 1997–98* is complemented by other recent national publications that have also released hospital statistics:

- Previous years' data in the National Hospital Morbidity Database and the National Public Hospital Establishments Database were summarised in *Australian Hospital Statistics 1996–97* (AIHW 1998a) *Australian Hospital Statistics 1995–96* (AIHW 1997a) and *Australian Hospital Statistics 1993–95: An Overview* (AIHW 1997b).
- Establishment-level data on the resources and activities of private hospitals are compiled and published annually by the Australian Bureau of Statistics. Data for 1997–98 are presented in *Private Hospitals, Australia 1997–98* (ABS 1998).
- Analysis of hospital activity based on the AN-DRG classifications were released in Australian Casemix Report on Hospital Activity series for 1991–92 to 1995–96 (Department of Human Services and Health 1994, 1995; Department of Health and Family Services 1996a, 1996b, 1997).
- The *First National Report on Health Sector Performance Indicators* and the *Second National Report on Health Sector Performance Indicators* reported national hospital data against a range of indicators of hospital performance (National Health Ministers' Benchmarking Working Group 1996, 1998).
- Hospital performance indicator data have been released also in the *Report on Government Service Provision 1997* (Steering Committee for the Review of Commonwealth/State Service Provision 1997), the *Report on Government Services 1998* (Steering Committee for the Review of Commonwealth/State Service Provision 1998) and the *Report on Government Services 1999* (Steering Committee for the Review of Commonwealth/State Service Provision 1999).
- The *National Mental Health Report 1997* provides details on hospital psychiatric services for 1997 (Commonwealth of Australia 1999).
- Statistics on the hospital-based pharmaceutical, nursing and medical workforces are respectively included in *Pharmacy labour force 1994*, *Nursing labour force 1995* and *Medical labour force 1997* (AIHW 1996b, 1998b, in press (b)).
- Department of Health and Aged Care's Internet site includes tables of data from the Department's National Hospital Morbidity (Casemix) Database at <http://www.health.gov.au>. The Institute and the Department are working to ensure that, from 1997–98, there is a coordinated approach to compilation of the Institute's National Hospital Morbidity Database and the Department's National Hospital Morbidity (Casemix) Database so that the resulting data sets are as equivalent as possible. For previous years, the Department's database may not exactly correspond with the Institute's National Hospital Morbidity Database. In addition, the scope of the Department's tables may differ from the scope of the tables presented in this report. Data in the Department's tables may therefore not correspond exactly to data presented in this report.



- National Hospital Morbidity Data Service and more data available from the National Public Hospital Establishments Database and the National Hospital Morbidity Database

# Appendix 8: The National Hospital Cost Data Collection

The National Hospital Cost Data Collection (NHCDC) was established to produce annual updates of Diagnosis Related Groups (DRG) cost weights, as incorporated into tables in Chapters 2, 4, 5 and 10. It is undertaken by the Department of Health and Aged Care and is a voluntary collection of hospital cost and activity data covering the financial year prior to the collection period; in 1998–99 the NHCDC collected data for the 1997–98 financial year. The NHCDC collects both public and private hospital data with the results being separately reported for the two sectors.

In the 1997–98 collection, cost data were obtained for the following products: acute admitted patients, outpatients, rehabilitation, palliative care, non-acute admitted patients, outreach/community, staff education, research and other. However, for this report the cost data were analysed and reported at a State and national level for acute admitted patients only (that is, by DRG).

The results used in this report and described here relate to the financial year 1997–98. They involved the collection of data grouped to both Australian National Diagnosis Related Groups (AN-DRG) version 3.1 and Australian Refined Diagnosis Related Groups (AR-DRG) version 4.0. Participating hospitals varied slightly between the two versions with 150 public hospitals contributing AR-DRG version 4.0 data and 154 public hospitals contributing AN-DRG version 3.1 data. (The slight difference in hospital numbers was the result of 13 public hospitals contributing AN-DRG 3.1 data and not AR-DRG 4.0 data, and nine public hospitals contributing AR-DRG 4.0 and not AN-DRG 3.1 data.) Whilst the coverage of public hospitals for both versions was approximately 28% of total hospitals, the total number of separations was approximately 65% of the estimated total population of separations, because of the significant number of large teaching hospitals in the sample. A total of 46 private hospitals contributed both version AN-DRG 3.1 and AR-DRG 4.0 data.

The NHCDC involves arrangements whereby the hospital data are collected by the individual hospitals, and checked and validated by State/Territory/private sector coordinators before being passed onto the Department. Further checks are conducted by the Department in processing the data to produce the final cost weights and associated tables.

The participating hospitals include both patient costing and cost modelling sites. Cost modelling generally refers to a process where estimates of costs are produced at the level of each DRG. The approach is 'top down' where costs from the hospitals' general ledgers are allocated down to acute admitted patients using a series of allocation statistics. Patient costing or clinical costing is a 'bottom up' approach where the costs of each service provided to an individual patient are measured or estimated so that the total cost of treating individual patients is obtained. The majority of participating hospitals are cost modelled sites.

As with the Department's previous studies of hospital costs in Australia, the NHCDC is a voluntary collection, and the data from all sites that chose to participate were used in compiling national public and private sector cost weights. In deriving the final results, the sample hospitals were stratified by factors which predispose towards cost differences such

as sector (public or private), State or Territory, location (major urban/non-major urban) and number of separations.

The following tables provide summary information from the 1997–98 NHCDC for the public and private sectors. Table A8.1 provides a summary of results for both sectors, including the numbers of hospitals and separations included in the NHCDC and the estimated average cost and average length of stay for the estimated total population of separations. Tables A8.2 and A8.3 provide information on the size of the standard error associated with the cost weight estimates for the public and private sectors. Tables A8.4 and A8.7 present data by MDC on numbers of separations, average length of stay and average total cost per separation. The remaining tables provide information by hospital sector on component costs including ward nursing, imaging and pharmacy. Most component costs are split between direct costs and overhead costs and all figures have been population adjusted.

Some tables show slight variations in the reported total average cost. This is due to rounding at the total level and not inconsistencies in the data.

The numbers of hospitals and separations do not necessarily correspond with the numbers of hospitals and separations reported elsewhere in this report. This difference is due to the NHCDC excluding very small hospitals from the population count and using population adjustments to estimate separations.

Further information about the NHCDC is available in the report of the 1996–97 collection (Department of Health and Family Services 1998). Cost weights for 1997–98 and further information about the 1997–98 NHCDC can be obtained from the Costing and Ambulatory Section, Acute and Co-Ordinated Care Branch, Department of Health and Aged Care (phone 02 6289 8272).

**Table A8.1: Summary National Hospital Cost Data Collection results for AN-DRGs version 3.1, by hospital sector, 1997-98**

	Hospitals			Separations				
	Sample	Population	% in NHCDC	Sample		Total population		
				Number	% in NHCDC	Population	Average cost(\$)	ALOS (days)
<b>Public hospitals</b>								
NSW	59	167	35.3	771,624	65.3	1,181,850	2,541	3.49
Vic	25	83	30.1	611,172	71.4	856,024	2,313	3.52
Qld	31	114	27.2	414,569	63.9	648,654	2,240	3.47
SA	18	63	28.6	193,765	59.7	324,378	2,380	3.84
WA	12	77	15.6	173,522	50.7	342,192	2,504	3.42
Tas	3	13	23.1	76,559	93.5	81,923	2,332	3.62
NT	4	5	80.0	55,324	94.1	58,783	2,781	3.61
ACT	2	2	100.0	56,647	100.0	56,647	3,184	3.63
<b>Australia</b>	<b>154</b>	<b>524</b>	<b>29.4</b>	<b>2,353,182</b>	<b>66.3</b>	<b>3,550,451</b>	<b>2,422</b>	<b>3.52</b>
<b>Private hospitals</b>								
<b>Australia</b>	<b>46</b>	<b>271</b>	<b>17.0</b>	<b>482,115</b>	<b>32.0</b>	<b>1,507,585</b>	<b>1,932</b>	<b>3.57</b>

**Table A8.2 AN-DRGs version 3.1 by standard error range, public hospitals, 1997-98**

Standard error	Number of		
	DRGs	Separations	% of DRGs
0.01 - 0.04	282	2,948,049	42.3
0.04 - 0.09	183	384,143	27.4
0.09 - 0.14	80	107,764	12.0
0.14 - 0.19	32	53,745	4.8
0.19 - 0.39	58	46,697	8.7
0.39+	32	10,291	4.8
<b>Total</b>	<b>667</b>	<b>3,550,689</b>	<b>100</b>

**Table A8.3: AN-DRGs version 3.1 by standard error range, private hospitals, 1997-98**

Standard error	Number of		
	DRGs	Separations	% of DRGs
0.01 - 0.04	98	676,546	81.38
0.05 - 0.09	178	502,903	10.40
0.10 - 0.14	102	141,139	4.68
0.15 - 0.19	76	92,764	1.32
0.20 - 0.39	132	80,258	1.73
0.39+	66	13,987	0.48
<b>Total</b>	<b>652</b>	<b>1,507,597</b>	<b>100.00</b>

**Table A8.4: Average costs by Major Diagnostic Category, public hospitals, AN-DRGs version 3.1, 1997–9**

Major Diagnostic Category	Separations		ALOS (days)	Average cost per separation (\$)
	Number	%		
PR Pre-MDC (Tracheostomy procs, transplants, ECMO)	9,194	0.26	27.28	42,515
01 Nervous system	173,319	4.88	5.84	3,353
02 Eye diseases and disorders	72,060	2.03	1.58	1,892
03 Ear, nose, mouth, throat	177,215	4.99	1.72	1,488
04 Respiratory system	229,453	6.46	5.09	2,874
05 Circulatory system	300,193	8.45	4.73	3,771
06 Digestive system	410,324	11.56	2.71	1,944
07 Hepatobiliary system and pancreas	71,065	2.00	4.45	3,427
08 Musculoskeletal system and connective tissue	288,775	8.13	4.55	3,424
09 Skin, subcutaneous tissue and breast	140,541	3.96	3.14	2,103
10 Endocrine, nutritional and metabolic	39,772	1.12	5.03	3,086
11 Kidney and urinary tract	480,299	13.53	1.61	921
12 Male reproductive system	49,942	1.41	2.49	1,938
13 Female reproductive system	140,364	3.95	2.17	1,808
14 Pregnancy, childbirth and puerperium	320,721	9.03	3.20	2,149
15 Newborns and other neonates	70,597	1.99	6.85	4,355
16 Blood, blood forming organs, immunological	64,557	1.82	2.28	1,464
17 Neoplastic disorders	168,831	4.75	1.73	1,141
18 Infectious and parasitic diseases	42,346	1.19	4.89	3,079
19 Mental diseases and disorders	72,294	2.04	8.78	3,789
20 Alcohol/drug use and disorders	18,194	0.51	4.09	1,800
21 Injury, poison and toxic effects of drugs	95,083	2.68	2.94	2,262
22 Burns	5,673	0.16	6.27	5,573
23 Factors influencing health status, other contacts	101,603	2.86	3.96	1,751
ED Edit DRG	8,272	0.23	8.60	6,039
<b>Total</b>	<b>3,550,451</b>	<b>100</b>	<b>3.52</b>	<b>2,422</b>

**Table A8.5: Core and overhead costs by component, public hospitals, AN-DRGs version 3.1, 1997–98**

Component	Core cost		Overhead cost		Total cost	
	\$	%	\$	%	\$	%
Ward medical	261	14.15	54	11.18	315	12.98
Ward nursing	519	28.15	172	35.61	691	28.48
Pathology	76	4.12	22	4.55	98	4.04
Imaging	55	2.98	12	2.48	67	2.76
Allied health	49	2.66	16	3.31	65	2.68
Pharmacology	96	5.21	18	3.73	114	4.70
Critical care	135	7.32	39	8.07	174	7.17
Operating room	244	13.23	70	14.49	314	12.94
Emergency department	33	1.79	17	3.52	50	2.06
Supplies	51	2.77	59	12.22	110	4.53
Prostheses	41	2.22	0	0	41	1.69
Depreciation	77	4.18	0	0	77	3.17
On costs	129	7.00	0	0	129	5.32
SPS	14	0.76	4	0.83	18	0.74
Hotel	0	0	99	20.50	99	4.08
Other	64	3.47	0	0	64	2.64
<b>Total</b>	<b>1,844</b>	<b>100.00</b>	<b>582</b>	<b>100.00</b>	<b>2,426</b>	<b>100.00</b>

**Table A8.6: Percentage of costs by component, public hospitals, AN-DRGs version 3.1, 1997–98**

Component	Core cost	Overhead cost	Total costs
Ward medical	10.76	2.23	12.98
Ward nursing	21.39	7.09	28.48
Pathology	3.13	0.91	4.04
Imaging	2.27	0.49	2.76
Allied health	2.02	0.66	2.68
Pharmacology	3.96	0.74	4.70
Critical care	5.56	1.61	7.17
Operating room	10.06	2.89	12.94
Emergency department	1.36	0.70	2.06
Supplies	2.10	2.43	4.53
Prostheses	1.69	0	1.69
Depreciation	3.17	0	3.17
On costs	5.32	0	5.32
SPS	0.58	0.16	0.74
Hotel	0	4.08	4.08
Other	2.64	0	2.64
<b>Total</b>	<b>76.01</b>	<b>23.99</b>	<b>100.00</b>

**Table A8.7: Average costs by Major Diagnostic Category, private hospitals, AN-DRGs version 3.1, 1997–98**

Major Diagnostic Category	Separations		ALOS (days)	Average cost per separation(\$)
	Number	%		
PR Pre-MDC (Tracheostomy procs, transplants, ECMO)	1,066	0.07	28.77	30,148
01 Nervous system	52,120	3.46	5.95	2,669
02 Eye diseases and disorders	54,949	3.64	1.23	1,545
03 Ear, nose, mouth, throat	128,226	8.51	1.38	1,034
04 Respiratory system	58,150	3.86	6.89	2,660
05 Circulatory system	97,435	6.46	4.99	3,123
06 Digestive system	219,196	14.54	2.61	1,489
07 Hepatobiliary system and pancreas	26,080	1.73	4.61	2,784
08 Musculoskeletal system and connective tissue	215,109	14.27	4.33	2,904
09 Skin, subcutaneous tissue and breast	76,038	5.04	3.01	1,787
10 Endocrine, nutritional and metabolic	11,335	0.75	5.69	2,515
11 Kidney and urinary tract	134,110	8.90	1.74	760
12 Male reproductive system	30,855	2.05	2.92	1,682
13 Female reproductive system	89,697	5.95	2.70	1,736
14 Pregnancy, childbirth and puerperium	79,568	5.28	4.79	2,320
15 Newborns and other neonates	15,290	1.01	4.95	1,962
16 Blood, blood forming organs, immunological	14,504	0.96	2.84	1,244
17 Neoplastic disorders	58,900	3.91	1.88	729
18 Infectious and parasitic diseases	9,350	0.62	6.34	2,889
19 Mental diseases and disorders	57,843	3.84	6.66	1,861
20 Alcohol/drug use and disorders	6,884	0.46	5.91	1,940
21 Injury, poison and toxic effects of drugs	16,402	1.09	3.87	1,940
22 Burns	415	0.03	7.24	3,915
23 Factors influencing health status, other contacts	44,064	2.92	5.12	1,671
24 Edit DRG	9,999	0.66	4.88	3,595
<b>Total</b>	<b>1,507,585</b>	<b>100.00</b>	<b>3.57</b>	<b>1,932</b>

**Table A8.8: Core and overhead costs by component, private hospitals, AN-DRGs version 3.1, 1997–98**

Component	Core cost		Overhead cost		Total cost	
	\$	%	\$	%	\$	%
Ward medical	19	1.54	7	1.01	26	1.35
Ward nursing	424	34.28	175	25.18	600	31.06
Allied health	9	0.73	4	0.58	13	0.67
Pharmacology	39	3.15	5	0.72	44	2.28
Critical care	56	4.53	25	3.60	80	4.14
Operating room	274	22.15	117	16.83	390	20.19
Emergency department	22	1.78	6	0.86	28	1.45
Supplies	75	6.06	138	19.86	213	11.02
Prostheses	88	7.11	0	0	88	4.55
Depreciation	108	8.73	0	0	108	5.59
On costs	91	7.36	0	0	91	4.71
SPS	19	1.54	6	0.86	26	1.35
Hotel	0	0	212	30.50	212	10.97
Other	13	1.05	0	0	13	0.67
<b>Total</b>	<b>1,237</b>	<b>100.00</b>	<b>695</b>	<b>100.00</b>	<b>1,932</b>	<b>100.00</b>

**Table A8.9: Percentage of costs by component, private hospitals, AN-DRGs version 3.1, 1997–98**

Component	Core cost	Overhead cost	Total costs
Ward medical	0.98	0.36	1.35
Ward nursing	21.95	9.06	31.06
Allied health	0.47	0.21	0.67
Pharmacology	2.02	0.26	2.28
Critical care	2.90	1.29	4.14
Operating room	14.18	6.06	20.19
Emergency department	1.14	0.31	1.45
Supplies	3.88	7.14	11.02
Prostheses	4.55	0	4.55
Depreciation	5.59	0	5.59
On costs	4.71	0	4.71
SPS	0.98	0.31	1.35
Hotel	0	10.97	10.97
Other	0.67	0	0.67
<b>Total</b>	<b>64.03</b>	<b>35.97</b>	<b>100.00</b>



# Glossary

For further information on the terms used in this report, refer to the definitions in use in 1997–98 in the *National Health Data Dictionary* version 6.0.

<i>Acute</i>	Having a short and relatively severe course.
<i>Acute hospitals</i>	<p>Establishments which provide at least minimal medical, surgical or obstetric services for admitted patient treatment and/or care, and which provide round-the-clock comprehensive qualified nursing service as well as other necessary professional services. They must be licensed by the State or Territory health department, or controlled by government departments. Most of the patients have acute conditions or temporary ailments and the average stay per admission is relatively short.</p> <p>Public acute hospitals are funded by the State or Territory health authority and include both recognised and non-recognised hospitals. Recognised hospitals are those nominated by States and Territories and accepted by the Commonwealth and appear in schedules to each State/Territory Medicare Agreement (Schedule B in the 1993–98 Medicare Agreements).</p>
<i>Additional diagnoses</i>	Diagnoses or conditions that affect a person's care in terms of requiring therapeutic treatment, clinical evaluation, diagnostic procedure, extended length of hospital stay or increased nursing care and/or monitoring. Additional diagnoses include comorbid conditions (co-existing conditions) and/or complications (conditions that arose during the episode of care).
<i>Administrative and clerical staff</i>	Staff engaged in administrative and clerical duties. Civil engineers and computing staff are included in this category. Medical staff and nursing staff, diagnostic and health professionals and any domestic staff primarily or partly engaged in administrative and clerical duties are excluded.
<i>Administrative expenditure</i>	All expenditure incurred by establishments (but not central administrations) of a management expenses/administrative support nature such as any rates and taxes, printing, telephone, stationery and insurance expenses (including workers' compensation).
<i>Admitted patient</i>	A patient who undergoes a hospital's formal admission process.
<i>Admitted patient cost proportion</i>	The ratio of admitted patient costs to total hospital costs, also known as the inpatient fraction or IFRAC.
<i>Australian National Diagnosis Related Groups (AN-DRGs)</i>	An Australian system of Diagnosis Related Groups (DRGs). DRGs are a means of classifying hospital patients to provide a common basis for comparing factors such as cost-effectiveness and quality of care across hospitals. Each AN-DRG represents a class of patients with similar clinical conditions requiring similar hospital services.
<i>Available beds</i>	Beds immediately available for use by admitted patients as required.

<i>Average length of stay</i>	The average number of patient days for admitted patient episodes. Patients admitted and separated on the same day are allocated a length of stay of one day.
<i>Boarder</i>	A person who is receiving food and/or accommodation but for whom the hospital does not accept responsibility for treatment and/or care. A boarder is not admitted to the hospital, although a hospital may register a boarder.
<i>Compensable patients</i>	Those patients entitled to, or who have been paid, compensation, damages, or other benefits in respect of the injury, illness or disease for which they have received care or treatment. More information is contained in the <i>National Health Data Dictionary</i> version 6.0.
<i>Cost weights</i>	Cost weights represent the costliness of an AN-DRG relative to all other AN-DRGs such that the average cost weight for all separations is 1.00. A separation for an AN-DRG with a cost weight of 5.0 therefore, on average, costs 10 times as much as a separation with a cost weight of 0.5. There are separate cost weights for AN-DRGs in the public and private sectors, reflecting the differences in the range of costs in the different sectors. The cost weights used in this report are 1997–98 national cost weights for AN-DRG v3.1.
<i>Department of Veterans' Affairs hospitals</i>	Hospitals operated by the Commonwealth Department of Veterans' Affairs to provide hospital treatment for eligible veterans and their dependants at Commonwealth expense. Department of Veterans' Affairs hospitals are recorded as public sector hospitals for data reporting purposes.
<i>Diagnostic and health professionals</i>	Qualified staff (other than qualified medical and nursing staff) engaged in duties of a diagnostic, professional or technical nature (but also including diagnostic and health professionals whose duties are primarily or partly of an administrative nature). This category includes all allied health professionals and laboratory technicians but excludes civil engineers and computing staff.
<i>Domestic and other staff</i>	Staff engaged in the provision of food and cleaning services. They include domestic staff, such as food services managers, primarily engaged in administrative duties. This category also includes all staff not elsewhere included (primarily maintenance staff, tradespersons and gardening staff).
<i>Domestic services expenditure</i>	The costs of all domestic services including electricity, other fuel and power, domestic services for staff, accommodation and kitchen expenses but not including salaries and wages, food costs or equipment replacement and repair costs.
<i>Drug supplies expenditure</i>	The cost of all drugs including the cost of containers.
<i>Edit-DRGs</i>	Seven AN-DRGs to which separations are grouped if their records contain clinically inconsistent or invalid information.
<i>Eligible Department of Veterans' Affairs patient</i>	An eligible person whose charges for this hospital admission are met by the Department of Veterans' Affairs. These data are as supplied by the States and Territories and the eligibility to receive hospital treatment as a Department of Veterans' Affairs patient may not necessarily have been confirmed by the Department.

<i>Eligible other patient</i>	An eligible person who does not meet the criteria to be an eligible public, private or Department of Veterans' Affairs patient. This category includes compensable patients, patients with Australian Defence Force personnel entitlements and common law cases.
<i>Eligible person</i>	Under Medicare, an eligible person means a person who resides in Australia and whose stay in Australia is not subject to any limitation as to time imposed by law. Except where they are covered by reciprocal health care agreements, foreign diplomats, their families and persons visiting Australia are excluded.
<i>Eligible private patient</i>	An eligible person who: <ul style="list-style-type: none"> <li>• on admission to a public hospital or soon after, elects to be a private patient treated by a medical practitioner of his or her choice, or elects to occupy a bed in a single room. Such a private patient is responsible for meeting certain hospital charges as well as the professional charges raised by any treating medical or dental practitioner; or</li> <li>• chooses to be admitted to a private hospital. Such a private patient is responsible for meeting all hospital charges as well as the professional charges raised by any treating medical or dental practitioner.</li> </ul>
<i>Eligible public patient</i>	An eligible person who, on admission to a public hospital or soon after, elects to be a public patient, or an eligible public patient whose treatment is contracted to a private hospital. A public patient is entitled to receive care and treatment without charge.
<i>Enrolled nurses</i>	Second-level nurses who are enrolled in all States and Territories except Victoria where they are registered by the State registration board to practise in this capacity. Includes general enrolled nurses and specialist enrolled nurses (e.g. mothercraft nurses in some States and Territories).
<i>Episode of care</i>	An episode of care is as a phase of treatment for an admitted patient. It may correspond to a patient's entire hospital stay, or the hospital stay may be divided into separate episodes of care of different types. See <i>Separation</i> .
<i>External cause</i>	Environmental event, circumstance and/or condition as the cause of injury, poisoning and/or other adverse effect.
<i>Food supplies expenditure</i>	The cost of all food and beverages but not including kitchen expenses such as utensils, cleaning materials, cutlery and crockery.
<i>Full time equivalent staff</i>	Full time equivalent units are on-job hours worked and hours of paid leave (sick, recreation, long service, workers' compensation) by/for a staff member (or contract employee where applicable) divided by the number of hours normally worked by a full time staff member when on the job (or contract employee where applicable) under the relevant award or agreement.
<i>HASAC</i>	For hospitals where the IFRAC was not available or clearly inconsistent with the data, the inpatient costs are estimated by Health and Allied Services Advisory Council (HASAC) ratio (see Appendix 3).

<i>Hospital insurance</i>	Insurance in the categories of registered insurance (hospital insurance with a health insurance fund registered under the <i>National Health Act 1953</i> (Commonwealth)), or general insurance (hospital insurance with a general insurance company under a guaranteed renewable policy providing benefits similar to those available under registered insurance). Patients covered by insurance for benefits of ancillary services only are excluded.
<i>IFRAC</i>	The ratio of admitted patient costs to total hospital costs, also known as the admitted patient cost proportion.
<i>Indigenous status</i>	Indigenous status of the person according to the following definition: <p style="margin-left: 40px;">An Aboriginal or Torres Strait Islander is a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community with which he or she lives.</p>
<i>Ineligible patient</i>	A patient who is not eligible under Medicare.
<i>Interest payments</i>	Payments made by or on behalf of the establishment in respect of borrowings (e.g. interest on bank overdraft) provided the establishment is permitted to borrow.
<i>Length of stay</i>	The length of stay of a patient is calculated by subtracting the date the patient is admitted from the date of separation. All leave days, including the day the patient went on leave, are excluded. A same day patient is allocated a length of stay of one day.
<i>Major Diagnostic Categories (MDCs)</i>	A high level of groupings of patients used in the AN-DRG classification.
<i>Medical and surgical supplies expenditure</i>	The cost of all consumables of a medical or surgical nature (excluding drug supplies) but not including expenditure on equipment repairs.
<i>Non-admitted patient occasion of service</i>	Occurs when a patient attends a functional unit of the hospital for the purpose of receiving some form of service, but is not admitted. A visit for administrative purposes is not an occasion of service.
<i>Non-admitted patients</i>	Patients who receive care from a recognised non-admitted patient service/clinic of a hospital.
<i>Not published (n.p.)</i>	Not available for separate publication but included in the totals where applicable.
<i>Other personal care staff</i>	This category includes attendants, assistants or home assistants, home companions, family aides, ward helpers, wards persons, orderlies, ward assistants and nursing assistants, engaged primarily in the provision of personal care to patients or residents, who are not formally qualified or undergoing training in nursing or allied health professions.
<i>Other recurrent expenditure</i>	Recurrent expenditure not included elsewhere in any of the recurrent expenditure categories.
<i>Other revenue</i>	All other revenue received by the establishment that is not included under patient revenue or recoveries (but not including revenue payments received from State or Territory Governments). This would include revenue such as investment income from temporarily surplus funds and income from charities, bequests and accommodation provided to visitors.

<i>Patient days</i>	The number of full or partial days' stay for patients who were admitted for an episode of care and who underwent separation during the reporting period. A patient who is admitted and separated on the same day is allocated one patient day. Further information on patient days is included in Appendix 3.
<i>Patient revenue</i>	Revenue received by, and due to, an establishment in respect of individual patient liability for accommodation and other establishment charges.
<i>Patient transport</i>	The direct cost of transporting patients excluding salaries and wages of transport staff.
<i>Payments to visiting medical officers</i>	All payments made to visiting medical officers for medical services provided to hospital (public patients) on a sessionally paid or fee-for-service basis.
<i>Place of occurrence of external cause</i>	The place where the external cause of injury, poisoning or violence occurred.
<i>Pre-MDC</i>	Ten AN-DRGs to which separations are grouped, regardless of their principal diagnoses, if they involved procedures that are particularly resource intensive (transplants, tracheostomies or extra-corporeal membrane oxygenation without cardiac surgery).
<i>Principal diagnosis</i>	The diagnosis established after study to be chiefly responsible for occasioning the patient's episode of care in hospital.
<i>Principal procedure</i>	The most significant procedure that was performed for treatment of the principal diagnosis. If no procedure is performed for treatment of the principal diagnosis, other procedures can be reported as the principal procedure. In order, these are a procedure performed for treatment of an additional diagnosis, a diagnostic/exploratory procedure related to the principal diagnosis or a diagnostic/exploratory procedure related to an additional diagnosis.
<i>Private hospital</i>	Privately owned and operated institution, catering for patients who are treated by a doctor of their own choice. Patients are charged fees for accommodation and other services provided by the hospital and relevant medical and paramedical practitioners. Acute and psychiatric hospitals are included.
<i>Psychiatric hospitals</i>	Institutions which provide treatment and care for patients with psychiatric, mental or behavioural disorders.
<i>Public finance database</i>	The Australian Bureau of Statistics (ABS) public finance database includes data about all government outlays, for all areas of expenditure. It is collected by the ABS from State treasuries and other sources and extracts from it are published in ABS Catalogue No. 5512.0 and 5501.0.

<i>Recoveries</i>	<p>All revenue received that is in the nature of a recovery of expenditure incurred. This would include:</p> <ul style="list-style-type: none"> <li>• income received from the use of hospital facilities by salaried medical officers exercising their rights of private practice and by private practitioners treating private patients in hospital; and</li> <li>• other recoveries such as those relating to inter-hospital services where the revenue relates to a range of different costs and cannot be clearly offset against any particular cost.</li> </ul>
<i>Recurrent expenditure</i>	Expenditure which recurs continually or frequently (e.g. salaries). It may be contrasted with capital expenditure, such as the cost of hospital buildings and diagnostic equipment, for which expenditure is made infrequently.
<i>Region</i>	<ul style="list-style-type: none"> <li>• <b>Capital cities</b> statistical division</li> <li>• <b>Other metropolitan centres:</b> urban centres with a population greater than or equal to 100,000</li> <li>• <b>Large rural centres</b> (index of remoteness &lt; 10.5): urban centres with a population between 25,000 and 99,000</li> <li>• <b>Small rural centres</b> (index of remoteness &lt; 10.5): urban centres with a population between 10,000 and 24,999</li> <li>• <b>Other rural areas</b> (index of remoteness &lt; 10.5): urban centres with a population less than 10,000</li> <li>• <b>Remote centres</b> (index of remoteness &gt; 10.5): urban centres with a population greater than 4,999</li> <li>• <b>Other remote areas</b> (index of remoteness &gt; 10.5): urban centres with a population less than 5,000.</li> </ul> <p>For more information see <i>Rural, Remote and Metropolitan Areas Classification, 1991 Census edition</i> (DPIE &amp; DSHS 1994).</p>
<i>Registered nurses</i>	Nurses with at least a 3-year training certificate and nurses holding postgraduate qualifications. Registered nurses must be registered with a State or Territory registration board.
<i>Repairs and maintenance expenditure</i>	The costs incurred in maintaining, repairing, replacing and providing additional equipment, maintaining and renovating building and minor additional works.
<i>Salaried medical officers</i>	Medical officers engaged by the hospital on a full time or part time salaried basis.
<i>Same day patients</i>	Same day patients are admitted patients who are admitted and separate on the same date.
<i>Separation</i>	The term used to refer to the episode of care, which can be a total hospital stay (from admission to discharge, transfer or death), or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute to rehabilitation). 'Separation' also means the process by which an admitted patient completes an episode of care by being discharged, dying, transferring to another hospital or changing type of care.
<i>Specialised service</i>	A facility or unit dedicated to the treatment or care of patients with particular conditions or characteristics.

<i>Statistical Division</i>	A general purpose spatial unit, it is the largest and most stable unit within the Australian Standard Geographical Classification (ASGC). This classification has been developed by the ABS and covers all of Australia without gaps or overlaps or crossing of State or Territory boundaries.
<i>Student nurses</i>	Nurses employed by the establishment currently studying in years 1 to 3 of a 3-year certificate course. This includes any person commencing or undertaking a 3-year course of training leading to registration as a nurse by the State or Territory registration board. This includes full time general student nurses and specialist student nurses, such as mental deficiency nurses, but excludes practising nurses enrolled in post-basic training courses.
<i>Superannuation payments</i>	Contributions paid or (for an emerging cost scheme) that should be paid (as determined by an actuary) on behalf of establishment employees either by the establishment or a central administration such as a State or Territory health authority, to a superannuation fund providing retirement and related benefits to establishment employees.
<i>Trainee/pupil nurses</i>	Nurses that are commencing or undertaking a 1-year course of training leading to registration as an enrolled nurse on the State or Territory registration board (includes all trainee nurses).
<i>Type of admitted patient episode</i>	A classification of admitted patient episodes into broad groups based on principal diagnosis, principal procedure or status as a nursing home type or rehabilitation patient.
<i>Type of non-admitted patient occasion of service</i>	A broad classification of services provided to non-admitted patients. See data element 231 in the <i>National Health Data Dictionary</i> version 6.0 for further details.
<i>Unqualified neonate</i>	A baby who is aged 9 days old or less that meets one of the following criteria: <ul style="list-style-type: none"> <li>• is a single live birth or the first live-born infant of a multiple birth, whose mother is currently an admitted patient;</li> <li>• is not admitted to an intensive care facility in a hospital, being a facility approved by the Commonwealth Minister for the purpose of the provision of special care.</li> </ul>
<i>Visiting medical officer</i>	A medical practitioner appointed by the hospital board to provide medical services for hospital (public) patients on an honorary, sessionally paid, or fee-for-service basis.

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