

Admitted patient palliative care in Australia 1999–00

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Admitted patient palliative care in Australia 1999–00

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Abbreviations

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
DoHA	Commonwealth Department of Health and Ageing
DVA	Department of Veterans' Affairs
HIV/AIDS	Human immunodeficiency virus/acquired immune deficiency syndrome
ICD-10	International Classification of Diseases, 10th Revision
ICD-10-AM	International Classification of Diseases, 10th Revision, Australian Modification
NMDS	National Minimum Data Set
RRMA	Rural, Remote and Metropolitan Areas
SLA	Statistical Local Area

Symbols

- <5 when used in a table, means cell size is less than 5 separations and is not published for reasons of confidentiality
- n.p. when used in a table, means not published to maintain confidentiality for other cells with less than 5 separations
- .. when used in a table, means not applicable
- when used in a table, means nil

Summary

This report summarises 1999–00 data reported for the Admitted Patient Palliative Care National Minimum Data Set. Some of the key findings of this report are:

- During 1999–00, there were 21,341 palliative care separations from public and private hospitals in Australia, and the age-standardised palliative care separation rate was 102.3 per 100,000 of the population (Table 9).¹
- Of all palliative care separations, 16,742 (78%) were from public hospitals and 4,599 (22%) were from private hospitals (calculated from Table 18).
- There were 11,745 (55%) separations for males and 9,596 (45%) separations for females (Table 4).
- Patients aged 65 and over accounted for 68% of all palliative care separations; in contrast, the proportion was under 1% for patients aged 24 or less (Table 4).
- The average length of stay for patients who received palliative care was 12.3 days (Table 4). In contrast, the average length of stay for all hospital patients was 3.8 days (AIHW 2001:47).
- Of all palliative care patient days in public and private hospitals, 75% related to patients living in metropolitan areas, 23% to those living in rural areas and 2% to those living in remote areas (based on the area of the patient's usual residence) (Table 6).
- Patients living in metropolitan areas had the highest average length of stay of 13.7 days (Table 6).
- Of all palliative care patients treated in public hospitals, nationally 39.6% residing in an Other remote area were treated at public hospitals located outside of the Other remote area category. In contrast, only 0.5% for patients residing in Capital cities were treated at public hospitals located outside of the Capital cities category (Table 7).
- The age-standardised rate for those born overseas was 84.6 separations per 100,000 population, compared to 106.1 per 100,000 population for those born in Australia (Table 9).
- The age-standardised separation rate for Aboriginal and/or Torres Strait Islander patients was 133.0 separations per 100,000 population, compared to 98.2 for non-Aboriginal and/or Torres Strait Islander patients (Table 10).
- Of all palliative care separations, 33% were transferred from another hospital or were a statistical type change (transferred from one care type to another within the same hospital), compared to only 4% for all hospital separations (Table 14).
- Of all palliative care separations from hospitals, 49% were coded to the mode of separation 'died'. A further 40% of palliative care separations had a mode of separation of 'other', suggesting that those patients went home after separation from the hospital. It should be noted that it is likely that a (unknown) proportion of those patients who went home returned to hospital at a later stage and may have died there rather than at home (Table 15).

1 The rate was directly age-standardised to the Australian population as at 30 June 1991.

- Sixty-nine per cent of palliative care separations had a principal diagnosis of cancer (Table 16).
- The mean number of diagnoses per separation for palliative care patients was 6.2 in public hospitals and 5.2 in private hospitals (Table 18).
- The mean number of procedures per separation for palliative care patients was 2.4 in public hospitals and 1.8 in private hospitals (Table 22).
- In both public and private hospitals, 40% of palliative care separations did not have a procedure reported. This compared to 27% for all hospital separations in public hospitals, and 11% for all hospital separations in private hospitals (Table 22).
- Of all palliative care separations for which a procedure was reported, 72% had an allied health intervention (Table 19).

1 Introduction

1.1 Background

Palliative care is the specialised care provided to a person whose condition has progressed beyond the stage where curative treatment is effective and attainable, or where the person chooses not to pursue curative treatment. A person receiving palliative care will have an active, progressive and far-advanced disease, with little or no prospect of cure. The central aim of palliative care is to achieve the best quality of life, both for the person who is dying and for their family. Palliative care emerged as a specialised health care field in Australia in the 1980s, beginning as a community-led call for recognition of the needs of people who are dying and their families, and for services to address those needs (DoHA 2000). Since then, there has been significant growth in the availability, number and type of palliative care services, in both community-based and admitted patient settings across Australia.

Recent developments in palliative care include the launch of the National Palliative Care Strategy, which was first released by the Commonwealth Department of Health and Ageing (DoHA) in 1998, and then revised in 2000 (DoHA 2000). The three goals of the Strategy are awareness and understanding, quality and effectiveness, and partnerships in care.

The Strategy was developed as a consensus document providing a framework that sets out national priorities intended to inform palliative care policy and service development across Commonwealth, state and territory governments. It represents the commitment of governments, palliative care service providers and community-based organisations to the development and implementation of palliative care policies, strategies and services across Australia, and to the delivery of quality palliative care that is accessible to all people who are dying.

The National Palliative Care Strategy recognises that palliative care:

- affirms life, and regards dying as a normal process
- neither hastens nor postpones death
- provides relief from pain and other distressing symptoms
- integrates the physical, psychological, social, emotional and spiritual aspects of care, with coordinated assessment and management of each person's needs
- offers a support system to help people live as actively as possible until death
- offers a support system to help the family cope during the person's illness and in their bereavement (DoHA 2000:4).

Palliative care is provided to people of all ages who are dying. The majority of people requiring palliative care are in the older age groups. The strategy identifies a number of groups with particular needs, including young people, Aboriginal and/or Torres Strait Islander people, culturally and linguistically diverse groups, people with HIV/AIDS, people with post-traumatic stress disorder, people living in rural and remote areas and residential aged care, prisoners, and people with mental illness and dementia.

The setting of care for people who are dying is also an important policy issue. Many people choose to be cared for and to die at home. Home for a significant proportion of people is a

residential aged care facility. This report focuses on palliative care provided in admitted patient settings. In general, palliative care – whether admitted patient or community-based – is best provided within or close to the person’s local environment and community (DoHA 2000:9).

Objective 2.3, under Goal 2 ‘Quality and effectiveness’ of the Strategy, relates to accountability and reporting. This objective seeks to ‘achieve nationally consistent reporting on palliative care service provision in both the public and private sectors and across all service delivery settings’.

In its Portfolio Budget Statements for 2002–03, DoHA further emphasises the importance of having consistent and reliable reporting on palliative care. Of all the strategies on palliative care, three are specifically related to accountability and reporting. These are to:

- develop better reporting and information systems to inform planning and policy
- build evidence on appropriate funding and service delivery models across settings
- raise awareness and knowledge about palliative care in the wider community (DoHA 2002).

1.2 Purpose of this report

The purpose of this report is to provide a national picture of palliative care delivered in Australian hospitals during 1999–00. It is designed to assist with meeting some of the strategies and objectives related to accountability and reporting outlined above. It describes hospital establishments that provide palliative care, demographic characteristics of patients, accommodation status, modes of admission and separation, principal and additional diagnoses, procedures undergone, and average lengths of stay.

This report is also designed to complement the performance indicator development work undertaken recently on behalf of DoHA by South Eastern Area Health.² The Australian Institute of Health and Welfare (AIHW) was asked by DoHA to provide:

- a report on the analysis of the Admitted Patient Palliative Care National Minimum Data Set (NMDS) for 1999–00;
- a draft Palliative Care Performance Indicator Data Dictionary, detailing technical specifications and other enhancements for the draft performance indicators recommended for collection in both the community-based and institutional care sector by South Eastern Area Health.

Data from the Admitted Patient Palliative Care NMDS published in this report contribute to meeting the accounting and reporting objectives of the Strategy.³ However, the capacity of the data to report on this and other objectives (e.g. Objective 2.4: Service development⁴) is

2 South Eastern Area Health 2001: Development of national high-level performance indicators for palliative care.

3 **Objective 2.3: Accountability and reporting:** to achieve nationally consistent reporting on palliative care service provision in both the public and private sectors and across all service delivery settings (admitted patient palliative care unit, acute hospital, home and community).

4 **Objective 2.4: Service development:** To promote ongoing evaluation and research into client care needs, best practice palliative care, service delivery models, and resource allocation models; and to implement the results of such research.

limited by the fact that data on people receiving palliative care services in the community are not currently collected and reported nationally. Furthermore, the statistical counting unit of the Admitted Patient Palliative Care NMDS is 'admitted patient episodes', rather than 'patients' (or 'people'). This limits comparisons with other related data sets such as the National Death Index and the AIHW National Mortality Database (which count people).

Future data development in the community palliative care sector would provide a more comprehensive picture of palliative care services in Australia, and would improve the ability to report against relevant objectives of the National Palliative Care Strategy.

1.3 National Hospital Morbidity Database

The National Hospital Morbidity Database is a compilation of summary records from 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.

The data supplied for the National Hospital Morbidity Database were based on the NMDSs for Admitted Patient Care, Admitted Patient Palliative Care and Admitted Patient Mental Health care. The Admitted Patient Palliative Care NMDS is a subset of the Admitted Patient Care NMDS, with the exception of the data item 'Previous specialised treatment' which is not included in the Admitted Patient Care NMDS. An NMDS is a core set of data elements agreed by the National Health Information Management Group for mandatory collection and reporting at a national level.

The scope of the Admitted Patient Palliative Care NMDS is admitted patients receiving palliative care in all public and private hospitals, and private free-standing day hospital facilities. State and territory health authorities provide the data to the AIHW for collation in the National Hospital Morbidity Database on an annual basis.

The data supplied for the Admitted Patient Palliative Care NMDS for 1999–00 were based on the patient-level data items included in the *National Health Data Dictionary* Version 8 (AIHW 1999). They include demographic, administrative and length of stay data as well as clinical information on the principal diagnosis of the patient. In addition, data on the additional diagnoses of the patient, the procedures they underwent in hospital and external causes of injury and poisoning were available for these patients from data collected for the Admitted Patient Care NMDS contained in the National Hospital Morbidity Database. Diagnoses, procedures and external causes were classified and coded using the first edition of the *International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification* (ICD-10-AM) (NCCH 1998).

Records for 1999–00 are for hospital separations (discharges, transfers, deaths or changes in type of episode of care) in the period 1 July 1999 to 30 June 2000. Data on patients who were admitted on any date on or before 30 June 2000 are included, provided that they separated between 1 July 1999 and 30 June 2000. 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. A process of validation of the National Hospital Morbidity Database was jointly undertaken by the AIHW and the data providers to ensure data quality.

Palliative care separations are identified in the National Hospital Morbidity Database by the data item 'Type of episode of care', which includes four codes to identify palliative care separations. These are 3.0 Palliative care, 3.1 Palliative care delivered in a designated unit,

3.2 Palliative care according to a designated program and 3.3 Palliative care is the principal clinical intent. Code 3.0 is a catch-all code for all palliative care separations, whereas codes 3.1 to 3.3 are optional and give additional information about the range of palliative care models within an admitted patient setting. The use and reporting of these codes by states and territories for 1999–00 data is discussed in chapter 2 of this report.

Quality of identification of palliative care episodes

There are varying practices across all states and territories and within states and territories regarding the identification of palliative care episodes. It is likely that some episodes of care or portions of episodes of care, although palliative in nature, will not be reported as palliative. This may be because patients who undergo an acute phase of care in hospital, followed by a palliative phase of care (without being physically discharged from the hospital), may not have a statistical separation between the phases. A new care type would therefore not be recorded for the second phase. Hence, it is likely that the number of palliative care separations in jurisdictions in 1999–00 may be under-represented, although this is probably not the case for Victorian public hospitals, as there are specific funding arrangements that mean palliative care episodes are more likely to be reported accurately.

Other limitations

In the National Hospital Morbidity Database, a record is included for each separation, not for each patient. This means that tracking individual patients across statistical separations, from acute care to palliative care within a hospital stay, for example, is difficult. It is possible to count the number of palliative care patients (and all hospital patients) who died in an admitted patient setting in a given year (see Chapter 9 for further discussion). Nevertheless, as the data are not patient-centred, linkages cannot be made with previous episodes when the patient did not die. The possibility of using an identifier to link an individual's records across multiple separations is an area that could potentially be explored for all separations, palliative care included, in the future.

Data on the geographic location of hospitals should be interpreted with caution, because the location of a hospital with multiple campuses is defined as that of the main administrative centre. Therefore, smaller units within the auspices of larger establishments may be geographically separate, but their Rural Remote and Metropolitan Area classification would be reported as that of the main administrative centre.

No information is available on the types of settings in which palliative care patients lived before admission. For example, separations for people who are admitted from residential aged care facilities are not currently identified. A proposal aimed at reporting more information relating to mode of admission is discussed in Chapter 8.

The number of separations can be affected by the demographic composition of the population. Each state and territory has a demographic structure that differs from others: factors such as age and Aboriginal or Torres Strait Islander status can effect on the nature of health care delivery amongst jurisdictions.

The quality of the data provided for Aboriginal and/or Torres Strait Islander status in 1999–00 was considered by most states and territories to be in need of improvement. Only the Northern Territory and South Australia considered their data to be of acceptable quality. (AIHW 2001a:79).

Not all private hospital separations are included in the National Hospital Morbidity Database. In 1999–00 the National Hospital Morbidity Database reported 5.7% fewer separations than the Australian Bureau of Statistics' (ABS) Private Health Establishments Collection (2001), which has wider coverage.

1.4 Limitations related to mortality data

Information from the National Mortality Database is used in Chapter 12 of this report to provide an estimate of the number of deaths due to neoplasm in 1999–00. The AIHW National Mortality Database stores information about deaths in Australia. These data are collected from information reported on death certificates in each state and territory, which are forwarded to the ABS. These data are then coded and de-identified by the ABS, and a copy of the database is forwarded to the AIHW.

The database includes information about causes of death (classified using ICD-10-AM), date of death, the state and place of death (coded as Local Government Area), and sociodemographic data including date of birth, age at death, duration of residence in Australia, sex, marital status, usual residence (coded as Statistical Local Area), birthplace (country), occupation and Indigenous status. The quality and completeness of mortality data on Indigenous status varies and has been publishable for only three states (South Australia, Western Australia and Northern Territory) from 1990 to 1998. Since 1998, Queensland data has also been considered of adequate completeness and quality to be published. The setting of the place of death (hospital, community housing, residence) is currently reported on death certificates; however, these data are no longer input by the ABS, due to resourcing issues.

Future development of national performance indicators for palliative care could potentially make use of mortality data to provide estimates of the palliative care 'target population'. Consideration would need to be given to the types of causes of death that could be used to identify palliative care target groups.

2 Types of admitted patient palliative care

The data item 'Care type' includes code 3.0 Palliative care, not further specified, which can be used to code all types of palliative care episodes, regardless of the model of palliative care that is provided. Three additional codes provide a greater level of detail by describing the model of palliative care delivered. These optional codes are 3.1 Palliative care delivered in a designated unit, code 3.2 Palliative care delivered according to a designated program, and code 3.3 Palliative care is the principal clinical intent (Table 1).

Table 1: Definitions for each type of admitted patient palliative care

Type of episode of care	Definition
Code 3.0 Palliative care	The clinical intent or treatment goal is primarily quality of life for a patient with an active, progressive disease with little or no prospect of cure. It is usually evidenced by an interdisciplinary assessment and/or management of the physical, psychological, emotional and spiritual needs of the patient; and a grief and bereavement support service for the patient and their carers/family. It includes care provided in a palliative care unit (code 3.1); or in a designated palliative care program (code 3.2); or under the principal clinical management of a palliative care physician or, in the opinion of the treating doctor, when the principal clinical intent of care is palliation (code 3.3).
Code 3.1 Palliative care delivered in a designated unit	A dedicated ward or unit (and can be a stand-alone unit) that receives identified funding for palliative care and/or primarily delivers palliative care.
Code 3.2 Palliative care delivered according to a designated program	Care is delivered by a specialised team of staff who provide palliative care to patients in beds that may or may not be dedicated to palliative care. The program may or may not be funded through identified palliative care funding. Code 3.1 should be used instead of code 3.2 if care is being delivered in a designated palliative care program and a designated palliative care unit.
Code 3.3 Palliative care is the principal clinical intent	Occurs when the patient is primarily managed by a medical practitioner who is a specialist in palliative care or when, in the opinion of the treating medical practitioner, the care provided is palliative care even if the doctor is not a palliative care specialist. The exception to this is when the medical practitioner is providing care within a designated unit or a designated program, in which case code 3.1 or 3.2 should be used, respectively. For example, code 3.3 would apply to a patient dying of cancer who was being treated in a geriatric ward without specialist input by palliative care staff.

Source: *National Health Data Dictionary*, Version 10, 2001 (AIHW 2001b).

During 1999–00, there were 21,341 palliative care separations from public and private hospitals in Australia, ranging from 36 separations in the Northern Territory to 7,957 separations in New South Wales (Table 2).

Of the eight states and territories, five reported palliative care separations against the 'general' code 3.0 Palliative care, not further specified (New South Wales, Victoria, South Australia, Tasmania and the Northern Territory) (Table 2). The remaining two states and one territory (Queensland, Western Australia and the Australian Capital Territory) reported palliative care separations against the optional codes 3.1, 3.2 and 3.3.

For palliative care separations in Queensland and the Australian Capital Territory, the highest proportion were coded as 3.1 Palliative care delivered in a designated unit. A 'designated unit' can be either a dedicated ward/unit within a hospital or a stand-alone unit. The remainder of separations in Queensland were coded as 3.3 Palliative care is the principal

clinical intent (35%) and code 3.2 Palliative care delivered according to a designated program (7%).

For palliative care separations in Western Australia, the highest proportion was coded as 3.3 Palliative care is the principal clinical intent (52%). The remainder of separations in Western Australia were coded as 3.1 Palliative care delivered in a designated unit and 3.2 Palliative care delivered according to a designated program.

Table 2: Palliative care separations by palliative care type, all hospitals, states and territories, 1999-00

Palliative care episode types	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total	Per cent of total
<i>General code</i>										
3.0 Palliative care, not further specified	7,957	4,217	..	..	1,270	540	..	36	14,020	65.7
<i>Optional codes</i>										
3.1 Palliative care delivered in a designated unit	..	..	n.p.	n.p.	..	..	332	..	4,165	19.5
3.2 Palliative care delivered according to a designated program	..	..	n.p.	<5	..	..	—	..	345	1.6
3.3 Palliative care is the principal clinical intent	..	..	1,676	1,130	..	..	5	..	2,811	13.2
Total	7,957	4,217	4,794	2,190	1,270	540	337	36	21,341	100.0

3 Public hospital establishments providing palliative care

This chapter presents information on palliative care separations by public hospital peer group. The peer groups were designed not only to explain variability in the average cost per casemix-adjusted separation but also to group hospitals into broadly similar groups in terms of their range of admitted patient activities and their geographical location. It is used in measuring the performance of individual hospitals. Details of the derivation of the peer groups are available in Appendix 11 of *Australian Hospital Statistics 1998–99* (AIHW 2000).

The outcome evaluation of Goal 2 'Quality and effectiveness' of the Strategy requires data items such as cost and staffing, and other clinically significant data. The evaluation should be based on the hospital peer group classification so that 'like with like' comparison can be made. Such information is not available at present. This is an area for consideration and possible development in the future.

The peer group classification only relates to public hospitals, which accounted for 78.4% of total palliative care separations. The remaining 21.6% (4,599) were palliative care separations in private hospitals (calculated from Tables 2 and 3).

Table 3 shows that a total of 377 public hospitals reported palliative care separations for the year 1999–00. It should be noted that 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 buildings or locations.

Of all palliative care separations in public hospitals, the largest proportion (37%) was classified as Sub-acute and non-acute hospitals. The majority of these were geriatric treatment centres combining rehabilitation and palliative care (19% of all separations) and hospices (10% of all separations). Only 3 public hospices are separately identified in these data, with a total of 1,746 separations. It should be noted, however, that hospices are not always separately identified in these data, and may be regarded as units under the auspices of 'parent' hospitals.

Of the remainder of palliative care separations, 24% were in hospitals in the Principal referral and specialist women's and children's hospitals peer group, 19% were in the Large hospitals peer group, 14% were in hospitals in the Medium hospitals peer group and 4% were in hospitals in the Small acute hospitals peer group.

Table 3: Palliative care separations and public hospitals reporting palliative care by public hospital peer group, Australia, 1999–00

Peer group	Subgroup ^(a)	Definition	Separations	Per cent	No. of hospitals ^(b)
<i>Principal referral and specialist women's & children's hospitals</i>					
	Principal referral	Metropolitan hospitals with >20,000 acute casemix-adjusted separations and rural hospitals with >16,000 acute casemix-adjusted separations per annum.	3,999	23.9	37
	Specialist women's & children's	Specialised acute women's and children's hospitals with >10,000 acute casemix-adjusted separations per annum.	24	0.1	2
	<i>Total Principal referral and specialist women's & children's hospitals</i>		<i>4,023</i>	<i>24.0</i>	<i>39</i>
<i>Large hospitals</i>					
	Metropolitan	Metropolitan acute hospitals treating more than 10,000 acute casemix-adjusted separations per annum.	2,262	13.5	13
	Rural and remote	Rural acute hospitals treating >8,000 acute casemix-adjusted separations per annum, and remote hospitals with >5,000 acute casemix-adjusted separations.	985	5.9	17
	<i>Total large hospitals</i>		<i>3,247</i>	<i>19.4</i>	<i>30</i>
<i>Medium hospitals</i>					
	Group 1	Acute hospitals in metropolitan areas treating between 5,000 and 10,000 acute casemix-adjusted separations per annum, and in rural areas treating between 5,000 and 8,000 acute casemix-adjusted separations per annum.	933	5.6	30
	Group 2	Acute hospitals in rural and metropolitan areas treating between 2,000 and 5,000 acute casemix-adjusted separations per annum, and acute hospitals treating <2,000 casemix-adjusted separations per annum but with >2,000 separations per annum.	1,468	8.8	50
	<i>Total medium hospitals</i>		<i>2,401</i>	<i>14.4</i>	<i>80</i>
<i>Small acute hospitals</i>					
	Rural	Small rural acute hospitals (mainly small country town hospitals), acute hospitals treating <2,000 separations per annum, and with less than 40% non-acute and outlier patient days of total patient days.	461	2.8	52
	Remote	Small remote hospitals (<5,000 acute casemix-weighted separations but not 'MPS' and not 'community non-acute'). Most are <2,000 separations.	194	1.2	29
	<i>Total small acute hospitals</i>		<i>655</i>	<i>4.0</i>	<i>81</i>
<i>Sub-acute and non-acute hospitals</i>					
	Small non-acute	Small non-acute hospitals, treating <2,000 separations per annum, and with more than 40% non-acute and outlier patient days of total patient days.	1,217	7.3	77
	Multi-purpose services		84	0.5	26
	Hospices		1,746	10.4	3
	Rehabilitation		1	0.0	1
	Other non-acute	For example, geriatric treatment centres combining rehabilitation and palliative care with a small number of acute patients.	3,104	18.5	13
	<i>Total sub-acute and non-acute hospitals</i>		<i>6,152</i>	<i>36.7</i>	<i>120</i>
<i>Un-peered and other hospitals</i>					
		Prison medical services, special circumstances hospitals, metropolitan hospitals with <2,000 separations per annum, and with more than 40% non-acute and outlier patient days of total patient days.	264	1.6	27
	Total public hospitals		16,742	100.0	377

(a) See Glossary for definitions of terms used in this table.

(b) 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 buildings or locations.

4 Palliative care separations by age and sex

In 1999–00, separations for palliative care patients accounted for 0.4% of all hospital separations. Of the total palliative care separations, 11,745 (55%) were for males and 9,596 (45%) were for females (Table 4).

For male patients, the highest proportion of separations was in the age group 65–74 years (32.6%). This was followed by the age group 75–84 years (28.7%). For female patients, the highest proportion of separations was in the age group 75–84 years (27.7%), followed by the age group 65–74 years (25.5%).

The average length of stay for palliative care patients was 12.3 days. In contrast, the average length of stay for all hospital patients was 3.8 days (AIHW 2001:47). Females stayed longer than males (13.1 days and 11.6 days respectively). For male palliative care patients, the longest average length of stay was in the age group 85+ years (13.9 days). For female patients in the age group 85+ years the average length of stay was 15.5 days. Although female patients in the age groups 5–14 years and less than 1 year had a higher average length of stay (27.9 and 16.8 days respectively), it should be noted that for these age groups the number of separations was small.

Table 4: Palliative care separations by age and sex, all hospitals, Australia, 1999–00

Age group	Separations			Per cent of separations (%)			Average length of stay		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
<1	12	5	17	0.1	0.1	0.1	10.6	16.8	12.4
1–4	5	4	9	<0.1	<0.1	<0.1	3.2	1.0	2.2
5–14	31	11	42	0.3	0.1	0.2	2.9	27.9	9.5
15–24	38	45	83	0.3	0.5	0.4	8.8	4.1	6.3
25–34	105	150	255	0.9	1.6	1.2	11.3	6.6	8.5
35–44	334	569	903	2.8	5.9	4.2	11.2	9.2	9.9
45–54	945	950	1,895	8.0	9.9	8.9	10.2	10.8	10.5
55–64	2,078	1,625	3,703	17.7	16.9	17.4	10.0	12.4	11.0
65–74	3,832	2,446	6,278	32.6	25.5	29.4	11.1	13.5	12.0
75–84	3,376	2,655	6,031	28.7	27.7	28.3	13.1	14.4	13.6
85+	989	1,136	2,125	8.4	11.8	10.0	13.9	15.5	14.8
Total	11,745	9,596	21,341	100.0	100.0	100.0	11.6	13.1	12.3

For all states and territories, with the exception of the Northern Territory for which few separations were reported, the number of separations peaked in the 60–79 years age group (Table 5).

However, when population numbers are used to derive age-specific separation rates⁵, the highest age-specific separation rate per 100,000 population occurred in the 80+ years age group for all jurisdictions (Table 5).

The four states with a crude separation rate⁶ per 100,000 population above the national rate of 112 were, from highest to lowest, Queensland (135), New South Wales (123), Western Australia (117) and Tasmania (114). The situation was different when rates were standardised to the June 1991 Australian population age structure. The four states with age-standardised separation rates above the national rate of 100 were, from highest to lowest, the Australian Capital Territory (131), Queensland (129), Western Australia (116) and New South Wales (106).

Table 5: Palliative care separations by age, all hospitals, states and territories, 1999-00

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	National
Number									
0-19	22	9	32	<5	n.p.	12	—	10	95
20-39	215	87	192	n.p.	n.p.	29	13	6	616
40-59	1,464	664	1,164	371	240	117	77	8	4,105
60-79	4,452	2,407	2,614	1,250	745	276	186	9	11,939
80+	1,804	1,050	792	516	254	106	n.p.	<5	4,583
Total	7,957	4,217	4,794	2,190	1,270	540	337	36	21,341
Per cent									
0-19	0.3	0.2	0.7	—	n.p.	2.2	—	27.8	0.4
20-39	2.7	2.1	4.0	n.p.	n.p.	5.4	3.9	16.7	2.9
40-59	18.4	15.7	24.3	16.9	18.9	21.7	22.8	22.2	19.2
60-79	56.0	57.1	54.5	57.1	58.7	51.1	55.2	25.0	55.9
80+	22.7	24.9	16.5	23.6	20.0	19.6	n.p.	—	21.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Age-specific separation rate (per 100,000 population)									
0-19	1	1	3	1	2	9	—	15	2
20-39	11	6	18	9	6	23	13	8	11
40-59	87	54	126	76	60	93	90	17	83
60-79	487	363	577	549	325	398	597	88	459
80+	935	742	853	1,138	486	712	1,178	288	840
All ages									
Crude rate	123	89	135	117	84	114	107	18	112
Age-standardised ^(a)	106	77	129	116	68	98	131	30	100

(a) Age-standardised to 30 June 1991 Australian population distribution.

- 5 An age-specific rate is the number of events for a specified age group over a specified period of time (e.g. a year) divided by the total population at risk of the event in that age group. Age-specific rates in this report were calculated by dividing the number of palliative care separations in each specified age group by the corresponding population at 31 December in the same age group.
- 6 A crude rate is the number of palliative care separations in a specified period of time divided by the population also of the same period.

5 Geographic location of patients and hospitals

In its publication on the National Palliative Care Strategy, DoHA was concerned that 'palliative care is not yet available to all and there are parts within the health care system, and areas across Australia, where palliative care is difficult to access or very limited in supply' (DoHA 2000:2). DoHA recognised that care, whether it be as admitted patient or community-based, is best provided where possible within or close to the person's local environment and community.

This chapter provides information on the geographic location of patients and hospitals which may be used as an indication of accessibility and availability of palliative care in Australia. The information on the extent of palliative care being provided outside the patient's place of residence is useful for policy and planning purposes. Two main reasons why patients are treated outside their area of residence could be patients' wishes to be close to their relatives and unavailability of care close to where they lived. There may be cost implications for patients being cared for outside their area of residence. Relatives and friends of the patients may have to pay more for each visit. Higher travelling costs may result in less frequent visits.

The analysis in this chapter uses the Rural, Remote and Metropolitan Area (RRMA) classification, which was developed in 1994 by the Department of Primary Industries and Energy, and the then Department of Human Services and Health. The classification allocates Statistical Local Areas (SLAs)⁷ in Australia to a category based primarily on population numbers and an index of remoteness. Seven categories – two metropolitan, three rural and two remote zones – are used in the national analysis (Tables 6 and 7).

Table 6: Palliative care separations and patient days by RRMA of the patient's usual residence, all hospitals, Australia, 1999–00

Area of usual residence	Separations		Patient days		Average length of stay	Population distribution (per cent)
	Number	Per cent	Number	Per cent		
Capital cities	13,153	61.7	181,256	69.2	13.8	63.9
Other metropolitan centre	1,152	5.4	14,529	5.5	12.6	7.6
<i>Total metropolitan</i>	<i>14,305</i>	<i>67.1</i>	<i>195,785</i>	<i>74.7</i>	<i>13.7</i>	<i>71.5</i>
Large rural centre	1,840	8.6	14,740	5.6	8.0	6.0
Small rural centre	1,674	7.8	15,706	6.0	9.4	6.5
Other rural area	2,944	13.8	30,071	11.5	10.2	13.1
<i>Total rural</i>	<i>6,458</i>	<i>30.3</i>	<i>60,517</i>	<i>23.1</i>	<i>9.4</i>	<i>25.6</i>
Remote centre	301	1.4	2,928	1.1	9.7	1.2
Other remote centre	261	1.2	2,774	1.1	10.6	1.8
<i>Total remote</i>	<i>562</i>	<i>2.6</i>	<i>5,702</i>	<i>2.2</i>	<i>10.1</i>	<i>3.0</i>
Total	21,325	100.0	262,004	100.0	12.3	100

Note: 16 separations with a total of 162 patient days have been excluded as these did not have area of usual residence reported.

⁷ The SLA is a general purpose spatial unit. SLAs are based on the boundaries of incorporated bodies of local government.

In 1999–00, the distribution of palliative care separations by RRMA was similar to that of the population by RRMA groups. The proportion of the Australian population living in the metropolitan areas in 1999–00 was 72% and palliative care separations in metropolitan areas accounted for 67% (14,305) of the total. Population in rural areas accounted for 26% and palliative care separations in those areas accounted for 30% (6,458). The remaining 3% lived in remote areas and almost 3% (562) of palliative care separations were in remote areas (Table 6).

Separations for patients living in metropolitan areas had the highest average length of stay of 13.7 days. Separations for patients living in remote centres had the second highest average length of stay of 10.1 days, and separations for patients living in rural areas had the shortest average length of stay of 9.4 days.

The RRMA category was not available for all private hospitals. Therefore Table 7 provides information on palliative care separations in public hospitals and looks at whether or not patients were treated in a hospital within the same RRMA category as their usual place of residence.

Table 7: Palliative care separations by patient RRMA and hospital RRMA, public hospitals, Australia, 1999–00

Patient RRMA	Hospital RRMA							Total
	Capital cities	Other metro centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area	
Capital cities	10,350	5	2	1	47	1	—	10,406
Other metro centre	19	815	—	49	1	1	—	885
Large rural centre	31	—	1,012	15	10	2	—	1,070
Small rural centre	44	30	12	1,200	29	1	—	1,316
Other rural area	209	118	342	208	1,547	1	1	2,426
Remote centre	1	1	30	—	2	212	—	246
Other remote area	10	2	16	24	8	20	122	202
Total	10,664	971	1,414	1,497	1,644	238	123	16,551
	Per cent							
Capital cities	99.5	—	—	—	0.5	—	—	100.0
Other metro centre	2.1	92.1	—	5.5	0.1	0.1	—	100.0
Large rural centre	2.9	—	94.6	1.4	0.9	0.2	—	100.0
Small rural centre	3.3	2.3	0.9	91.2	2.2	0.1	—	100.0
Other rural area	8.6	4.9	14.1	8.6	63.8	—	—	100.0
Remote centre	0.4	0.4	12.2	—	0.8	86.2	—	100.0
Other remote area	5.0	1.0	7.9	11.9	4.0	9.9	60.4	100.0

Notes

1. Hospital RRMA was reported for public hospitals only.
2. For establishments with more than one geographical location, the location was defined as that of the main administrative centre. Therefore, some inaccuracies may occur because the RRMA of some hospital establishments was coded as that of the auspicing establishment.
3. 186 separations were excluded for patients that were hospitalised in a state or territory other than their state or territory of usual residence.
4. 5 separations were excluded that did not have patient RRMA reported.

These data should be interpreted with caution because the location of a hospital with more than one geographic location is defined as that of the main administrative centre. Smaller units under the auspices of larger establishments may be geographically separate, but their RRMA classification would be reported as that of the main administrative centre.

Furthermore, even if the RRMA of the patient's usual residence is the same as the RRMA of the hospital it does not necessary mean that the patient was treated in a hospital located in

the same area where (s)he lived. Hence, the extent of palliative care being provided outside of the patient's place of residence as shown in the two tables is a conservative estimate.

The total number of separations shown in Table 7 is less than that in Table 3 as it excludes 186 separations for patients treated outside their resident state or territory and 5 separations for patients in public hospitals who did not have RRMA of usual residence reported. Hence, the analysis reported in Table 7 was on 98.9% of all palliative care separations in public hospitals.

The expected pattern of use is that there will be a strong relationship between patients' usual place of residence and the geographic location of the place of care, i.e. a high percentage of patients residing in a geographical category is treated by hospitals in the same geographical category.

More than 90% of palliative care patients residing in the Capital cities, Other metropolitan centre, Large rural centre and Small rural centre were treated at public hospitals located in the same geographical location category. For patients residing in the Capital cities the proportion was as high as 99.5%. For the Small rural centre, it was 91.2%. Hence only a relatively small proportion of those patients appears to have been treated in a hospital that did not have the same RRMA category as the RRMA category of their usual residence.

For the categories Other rural area (63.8%), Remote centre (86.2%) and Other remote area (60.4%), the proportion of palliative care patients who lived in one of these categories and were treated in hospitals in the same category was lower. This suggests that a larger proportion of patients was treated in a hospital with an RRMA category different from the category of their usual residence.

Analysis at the state and territory level is based on the three broader RRMA categories – Metropolitan, Rural and Remote – due to small cell size. The proportion of separations in each of the RRMA categories differed markedly from jurisdiction to jurisdiction. Although statistics are displayed for the Australian Capital Territory in Table 8, the following state/territory comparison excludes the Australian Capital Territory because of the unique nature of the Territory as a capital city (metropolitan area). The proportion of palliative care patients whose place of residence was in the category Metropolitan area ranged from 16.7% in the Northern Territory to 76.4% in New South Wales. The proportion of patients whose place of residence was in the category Rural area ranged from 2.8% in the Northern Territory to 46.6% in Tasmania. For the Remote area category, it ranged from 0.1% in Victoria to 80.6% in the Northern Territory (Table 8).

A high proportion of those residing in the category Metropolitan area was treated in the hospitals located in the same geographical category, ranging from 93.2% in Western Australia to 100% in Tasmania and the Northern Territory. For patients residing in the category Rural area, it ranged from 80% in Tasmania to 99.6% in Western Australia.

For people living in the category Remote area, however, there was a large variation across jurisdictions. The proportion of patients who resided in the category Remote area and were treated in public hospitals located in the Remote area category ranged between 0% to 95.3%. (excluding Tasmania where only one patient fell into this category). Care should be taken when interpreting these figures as in some jurisdictions the number of patients who resided in the category Remote area was small.

Table 8: Palliative care separations by patient RRMA and hospital RRMA, public hospitals, states and territories, 1999–00

Patient RRMA	Hospital RRMA			Total separations by patient RRMA	Patient RRMA proportion (%)
	Metropolitan	Rural	Remote		
New South Wales					
Metropolitan	99.0%	1.0%	—	5,551	76.4
Rural	11.8%	88.2%	—	1,676	23.1
Remote	14.0%	44.2%	41.9%	43	0.6
Total separations by hospital RRMA	5,701	1,551	18	7,270	100.0%
Victoria					
Metropolitan	99.0%	1.0%	—	2,763	68.6
Rural	6.5%	93.5%	—	1,260	31.3
Remote	—	100.0%	—	4	0.1
Total separations by hospital RRMA	2,817	1,210	—	4,027	100.0
Queensland					
Metropolitan	99.6%	0.4%	0.1%	1,643	54.2
Rural	8.3%	91.4%	0.3%	1,151	38.0
Remote	1.7%	20.7%	77.6%	237	7.8
Total separations by hospital RRMA	1,735	1,107	189	3,031	100.0
Western Australia					
Metropolitan	93.2%	6.0%	0.8%	133	27.5
Rural	—	99.6%	0.4%	223	46.2
Remote	—	4.7%	95.3%	127	26.3
Total separations by hospital RRMA	124	236	123	483	100.0
South Australia					
Metropolitan	99.4%	0.6%	—	725	67.6
Rural	7.0%	93.0%	—	341	31.8
Remote	—	28.6%	71.4%	7	0.7
Total separations by hospital RRMA	745	323	5	1,073	100.0
Tasmania					
Metropolitan	100.0%	—	—	182	53.1
Rural	20.0%	80.0%	—	160	46.6
Remote	—	—	100.0%	1	0.3
Total separations by hospital RRMA	214	128	1	343	100.0

(continued)

Table 8 (continued): Palliative care separations by patient RRMA and hospital RRMA, public hospitals, states and territories, 1999–00

Patient RRMA	Hospital RRMA			Total separations by patient RRMA	Patient RRMA proportion (%)
	Metropolitan	Rural	Remote		
Australian Capital Territory					
Metropolitan	100.0%	—	—	288	100.0
Rural	—	—	—	—	—
Remote	—	—	—	—	—
Total separations by hospital RRMA	288	—	—	288	100.0
Northern Territory					
Metropolitan	100.0%	—	—	6	16.7
Rural	100.0%	—	—	1	2.8
Remote	13.8%	—	86.2%	29	80.6
Total separations by hospital RRMA	11	—	25	36	100.0

Notes

1. Hospital RRMA was reported for public hospitals only.
2. For establishments with more than one geographical location, the location was defined as that of the main administrative centre. Therefore, some inaccuracies may occur because the RRMA of some hospital establishments was coded as that of the auspicating establishment.
3. 186 separations were excluded for patients that were hospitalised in a state or territory other than their state or territory of usual residence.
4. 5 separations were excluded that did not have patient RRMA reported.

6 Country of birth and Indigenous status

Objective 1.1 of the National Strategy – Community awareness and capacity – aims to achieve within Australia greater community capacity in relation to dying, death and bereavement, and greater community awareness of the role and benefits of palliative care in meeting the needs of people who are dying and their families. The objective focuses on the broad range of social, cultural and spiritual needs and expectations in the multicultural Australian community. Information in this chapter therefore is useful for planning supplementary services appropriate to the patient’s ethnic background.

The data items ‘Country of birth’ and ‘Indigenous status’ are included in the Admitted Patient Palliative Care NMDS as indicators of cultural and linguistic diversity. It should be noted, however, that these two data items have only limited capacity to report on the complexities of cultural and linguistic diversity.

Data presented in this chapter provide an age-standardised separation rate per 100,000 population for people born in different countries, and for people identified as Indigenous and non-Indigenous. The overall age-standardised rate for palliative care separations was 102.3 per 100,000 population (Table 9).

Patients born in Oceania (mainly Australia) accounted for 71.4% of all palliative care separations, and had the highest rate of separations per 100,000 population (105.5). People born in the Middle East and North Africa accounted for less than 1% of separations and had the second highest rate of separations per 100,000 population (86.5).

People born in Europe and the former USSR accounted for 21.0% of all palliative care separations, and had a separation rate of 84.9 per 100,000 population. People born in Asia accounted for 2.7% of palliative care separations, and had the second lowest rate of separations per 100,000 population (69.9). Africa (excluding North Africa) had the lowest rate of separations at 69.5 per 100,000.

People born in North America, South America, Central America and the Caribbean, and Africa accounted for less than 1% of all palliative care separations (191 separations in total). Therefore, the rate of separations per 100,000 of the population for each of these three regions should be interpreted with caution, due to the small number of separations that were used to calculate the rates. For the same reason, caution should also be exercised when interpreting the rates for individual countries.

Table 10 provides information on palliative care separations for Aboriginal and/or Torres Strait Islander patients. Aboriginal and/or Torres Strait Islander patients accounted for 1% of palliative care separations.

There are quality problems with the data on Aboriginal and/or Torres Trait Islander status. Though improved in quality in recent years, statistics in Table 9 should be interpreted cautiously. Only two jurisdictions, the Northern Territory and South Australia, considered their 1999–00 data to be of acceptable quality (AIHW 2001a:79).

Table 9: Palliative care separations by selected country/region of birth, all hospitals, Australia, 1999–00

Country/region of birth	Separations	Separation rate per 100,000 population ^(a)	Per cent separations	Patient days
Oceania				
Australia	14,974	106.1	70.2	182,331
New Zealand	222	85.6	1.0	2,344
<i>Total Oceania^(b)</i>	<i>15,237</i>	<i>105.5</i>	<i>71.4</i>	<i>185,260</i>
Europe and the former USSR				
United Kingdom and Ireland	2,164	87.6	10.1	25,392
Greece	231	74.2	1.1	3,739
Italy	522	71.4	2.4	6,702
Former Yugoslavia	272	83.3	1.3	3,066
Former USSR and Baltic States	145	73.8	0.7	2,097
Poland	186	86.4	0.9	2,415
Germany	238	87.7	1.1	2,879
Netherlands	267	113.8	1.3	3,358
Europe and the former USSR	185	97.2	0.9	2,937
<i>Total Europe and the former USSR^(c)</i>	<i>4,477</i>	<i>84.9</i>	<i>21.0</i>	<i>56,016</i>
Middle East and North Africa	202	86.5	0.9	2,852
<i>Total Asia^(d)</i>	<i>580</i>	<i>69.9</i>	<i>2.7</i>	<i>7,562</i>
North America	48	74.9	0.2	596
South America, Central America and the Caribbean	61	85.0	0.3	902
Africa (excluding North Africa)	82	69.5	0.4	977
<i>Overseas (total)</i>	<i>5,713</i>	<i>84.6</i>	<i>26.8</i>	<i>71,834</i>
Not stated or inadequately described	654	..	3.1	8,001
Total	21,341	102.3	100.0	262,166

(a) The rates were directly age-standardised to the Australian population at 30 June 1991.

(b) Includes Papua New Guinea, Fiji and Other Oceania.

(c) Includes Malta, Hungary, Romania, Austria and France.

(d) China accounted for 21.9% of total palliative care separations with country of origin being Asia.

Age-standardised palliative care separation rates per 100,000 population were calculated for the Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander population. Patients identified as Indigenous had a higher separation rate of 133.0 per 100,000 population, compared to the non-Indigenous rate of 98.2 separations per 100,000 population (Table 10).

Patients identified as Indigenous and non-Indigenous had relatively similar average lengths of stay (12.2 days and 12.5 days respectively).

Table 10: Palliative care separations by Aboriginal and Torres Strait Islander status^(a), all hospitals, Australia, 1999–00

Aboriginal and/or Torres Strait Islander status	Separations	Separations per 100,000 population ^(b)	Per cent separations	Patient days	Average length of stay
Aboriginal and/or Torres Strait Islander	190	133.0	0.9	2,326	12.2
Non-Aboriginal or Torres Strait Islander	20,371	98.2	95.5	254,887	12.5
Not stated	780	..	3.7	4,953	..
Total	21,341	102.3	100.0	262,166	12.3

(a) Identification of Aboriginal and Torres Strait Islander patients is not considered to be complete.

(b) The rates were directly age-standardised to the Australian population at 30 June 1991.

7 Patient accommodation eligibility status

This chapter provides information on the source of funding for palliative care separations. For some, cost of care is met either partially or totally by Medicare or the Department of Veterans' Affairs (DVA). For others, the cost of care is met by the individual.

Of all palliative care separations, 68% (14,610) were eligible public patients, 19% (4,153) were eligible private patients and 12% (2,499) were DVA patients (Table 11).

Western Australia had the highest proportion of palliative care separations who were eligible private patients, 37% (809) of separations, compared to the overall national proportion of 19%. Western Australia also had the highest proportion of palliative care separations who were eligible DVA patients, 17% (372) of separations, compared to the overall national proportion of 12%.

Table 11: Palliative care separations by patient accommodation status, all hospitals, states and territories, 1999–00

Patient accommodation status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total separations	Total overnight separations
Eligible public patient	5,662	3,373	3,181	1,009	831	294	227	33	14,610	13,225
Eligible private patient	1,079	423	n.p.	809	313	181	n.p.	<5	4,153	3,213
Eligible Department of Veterans' Affairs patient	1,158	418	331	372	116	64	40	—	2,499	2,169
Eligible other patient	33	<5	<5	—	n.p.	<5	<5	—	50	44
Ineligible patient	25	<5	—	—	<5	n.p.	—	<5	29	24
Total	7,957	4,217	4,794	2,190	1,270	540	337	36	21,341	18,675

Note: Refer to the Glossary for more detailed definitions of each category of patient accommodation status.

Of all palliative care patient days, eligible public patients accounted for 69% (182,079), eligible private patients 17% (45,581) and eligible DVA patients 13% (33,503) (Table 12).

The average length of stay for all palliative care separations was 12.3 days (Table 13). Of all eligible patients, DVA patients had the highest average length of stay of 13.4 days. Public patients had the second highest average length of stay (12.5) days, and private patients had an average length of stay of 11.0 days. With same day separations excluded, the average length of stay for private patients exceeded that of public patients (13.9 days and 13.7 days respectively).

Of all states and territories, the Australian Capital Territory had the highest average length of stay for palliative care separations at 16.0 days, and Queensland had the lowest average length of stay at 9.4 days.

Table 12: Palliative care patient days by patient accommodation status, all hospitals, states and territories, 1999–00

Patient accommodation status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total	Overnight stay
Eligible public patient	69,690	50,540	33,119	11,445	9,426	3,707	3,641	511	182,079	180,634
Eligible private patient	15,167	6,472	n.p.	8,642	4,523	1,970	n.p.	n.p.	45,581	44,641
Eligible Department of Veterans' Affairs patient	13,993	6,975	4,303	5,194	1,404	1,052	582	—	33,503	33,173
Eligible other patient	273	n.p.	n.p.	—	n.p.	n.p.	n.p.	—	414	408
Ineligible patient	419	n.p.	—	—	n.p.	n.p.	—	n.p.	589	584
Total	99,542	64,163	45,081	25,281	15,374	6,778	5,407	540	262,166	259,500

Table 13: Palliative care average length of stay by patient accommodation status, all hospitals, states and territories, 1999–00

Patient accommodation status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total	Overnight stay
Eligible public patient	12.3	15.0	10.4	11.3	11.3	12.6	16.0	15.5	12.5	13.7
Eligible private patient	14.1	15.3	6.0	10.7	14.5	10.9	17.2	14.0	11.0	13.9
Eligible Department of Veterans' Affairs patient	12.1	16.7	13.0	14.0	12.1	16.4	14.6	..	13.4	15.3
Eligible other patient	8.3	8.0	8.0	..	2.2	49.0	12.0	..	8.3	9.3
Ineligible patient	16.8	84.0	..	..	n.p.	..	..	n.p.	20.3	24.3
Total	12.5	15.2	9.4	11.5	12.1	12.6	16.0	15.0	12.3	13.9

8 Setting prior to admission

Information on setting prior to admission is obtained from the data element 'Mode of admission' in the Admitted Patient Palliative Care NMDS.

The data item 'Mode of admission' is used largely to distinguish between patients that are transferred from another hospital, patients that are transferred from one care type to another within the same hospital stay (for example from acute care to palliative care), and all other admissions. 'Other' includes planned and unplanned admissions for people from the community and non-hospital establishments (such as residential aged care facilities). Therefore, limited information is available on the types of settings in which palliative care patients lived before admission. The addition of extra codes to 'Mode of admission' that mirror the code-list proposed for 'Mode of separation' (see Chapter 9) would provide more information about the setting from which the patient was admitted. For example, the inclusion of a code Admission from residential aged care facility would provide information about patterns of movement between residential aged care and admitted patient care. This is an area for consideration and possible development in the future.

Table 14 presents data on the mode of admission for palliative care separations by state and territory, and for all hospital separations.

Mode of admission Other accounted for 67% of palliative care separations, compared to 96% for all hospital separations. Admissions from another hospital accounted for 20% of palliative care separations, compared to 3% for all hospital separations. Thirteen per cent of palliative care separations were admitted as a statistical type change, compared to 0.8% for all hospital separations. Under the statistical type change category, comparison across jurisdictions needs to be done cautiously not only because each jurisdiction may have different coding practices but also because of the differences in the capacity to transfer patients (i.e. whether they have a separate hospice which is not under the auspice of the hospital, e.g. a community hospice).

Of all states and territories, Tasmania had the highest proportion of palliative care separations (97.0%, 524 separations) where the mode of admission was Other. The Australian Capital Territory had the highest proportion of palliative care separations (43.9%, 148 separations) where the mode of admission was Transfer from another hospital. Queensland had the highest proportion of palliative care separations (16.0%, 659 separations) where the mode of admission was Statistical admission – episode type change.

Table 14: Palliative care separations and all separations by mode of admission, all hospitals, states and territories, 1999–00

Mode of admission	Palliative care separations								Total	All separations
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT		
Number										
Admitted patients transferred from another hospital	1,931	1,279	311	430	170	n.p.	148	<5	4,281	196,306
Statistical admission—episode type change	963	659	768	124	125	n.p.	11	<5	2,662	47,709
Other ^(a)	5,054	2,279	3,715	1,636	967	524	178	28	14,381	5,642,569
Not reported	9	—	—	—	8	—	—	—	17	11,276
Total	7,957	4,217	4,794	2,190	1,270	540	337	36	21,341	5,897,860
Per cent										
Admitted patients transferred from another hospital	24.3	30.3	6.5	19.6	13.4	n.p.	43.9	<5	20.0	3.3
Statistical admission—episode type change	12.1	15.6	16.0	5.7	9.8	n.p.	3.3	<5	12.5	0.8
Other ^(a)	63.5	54.0	77.5	74.7	76.1	97.0	52.8	77.8	67.4	95.7
Not reported	0.1	—	—	—	0.6	—	—	—	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

9 Mode of separation

The primary treatment goal for palliative care patients is quality of life regardless of where the care is provided – in the person’s home or other community-based setting, palliative care unit, or acute hospital. Different types of treatment and care are required in different settings. It is also important that patients are able to move freely between these settings, in response to their changing clinical care or support needs.

The importance of the quality of care is stated in Goal 3 ‘Partnerships in care’ of the Strategy ‘to promote and support partnerships in the provision of care for people who are dying and their families, and the infrastructure for that care, to support delivery of high quality, effective palliative care across all setting’.

‘Mode of separation’ is a data element in the National Hospital Morbidity Database that categorises separations in terms of either death or destination of patients after discharge from hospital. The statistics in this chapter are useful for planning purposes as it gives an estimate of the proportion of separations by type of setting these patients move to.

‘Discharge planning’ is the term used for a process which involves working with patients and their families to help them come to terms with and adjust to their changed social and financial circumstances, negotiate benefits, and identify and consider options open to them, as well as managing the clinical aspects of care (Palliative Care Australia 2002:11).

The number of patients and the number of separations are not equal for all modes of separation, other than the mode of separation Died. This is because one person may have more than one episode of palliative care during the reporting period. Furthermore, it is likely that a (unknown) proportion of those patients who went home returned to hospital at a later stage and may have died there rather than at home. Of palliative care separations, 49% (10,515) ended with a patient dying in a hospital, compared to 1% (67,750) for all hospital separations. Of palliative care separations, 40% (8,444) had a mode of separation of Other (generally discharge to usual place of residence), compared to 92% (5,446,032) for all hospital separations.

Of all states and territories, the Australian Capital Territory had the highest proportion of palliative care separations where patients died in hospital (65%, 219 separations).

Tasmania had the highest proportion of palliative care separations where mode of separation was Discharge/transfer to an(other) acute hospital (27%, 145 separations) compared to the overall national proportion for palliative care separations with this mode of separations of 4.5%.

The AIHW has been exploring the feasibility of linking data in the National Hospital Morbidity Database with residential aged care data to investigate the movement of patients between hospitals and residential aged care facilities (AIHW forthcoming). This project was undertaken under the auspices of the Australian Health Ministers’ Advisory Council Working Group on the Care of Older Australians. It has been proposed that a new code Discharge to residential aged care facility be added to ‘Mode of separation’ to identify patients that move from hospital back into residential aged care, where this is their place of usual residence. The code list currently includes Discharge/transfer to residential aged care service, unless this is the usual place of residence, which only captures separations where the person is newly admitted to a nursing home. The addition of the new code would allow future analysis of all movements of palliative care patients from admitted patient settings to residential aged care settings.

Table 15: Palliative care separations and all separations by mode of separation, all hospitals, states and territories, 1999–00

Mode of separation	Palliative care separations									All hospital separations
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total	
Discharge/transfer to an(other) acute hospital	408	162	116	98	27	145	n.p.	<5	971	220,315
Discharge/transfer to a residential aged care facility ^(a)	284	66	92	29	26	n.p.	5	<5	509	48,063
Discharge/transfer to an(other) psychiatric hospital	<5	—	n.p.	<5	—	—	—	—	7	5,373
Discharge/transfer to other health care accommodation ^(b)	34	—	51	14	<5	n.p.	<5	<5	112	26,692
Statistical discharge – type change	98	165	194	33	n.p.	60	<5	—	567	43,974
Left against medical advice/discharge at own risk	n.p.	8	n.p.	<5	<5	—	—	<5	44	29,807
Statistical discharge from leave	161	—	—	5	—	—	—	—	166	6,845
Died	3,988	2,563	1,751	1,102	681	200	219	11	10,515	67,750
Other (usual residence/own accommodation/welfare institution) ^(c)	2,961	1,253	2,575	906	514	124	98	13	8,444	5,446,032
Unknown	—	—	—	—	<5	—	—	n.p.	6	3,009
Total	7,957	4,217	4,794	2,190	1,270	540	337	36	21,341	5,897,860
	Per cent									
Discharge/transfer to an(other) acute hospital	5.1	3.8	2.4	4.5	2.1	26.9	n.p.	<5	4.5	3.7
Discharge/transfer to a residential aged care facility ^(a)	3.6	1.6	1.9	1.3	2.0	n.p.	1.5	<5	2.4	0.8
Discharge/transfer to an(other) psychiatric hospital	<5	—	n.p.	<5	—	—	—	—	—	0.1
Discharge/transfer to other health care accommodation ^(b)	0.4	—	1.1	0.6	<5	n.p.	<5	<5	0.5	0.5
Statistical discharge – type change	1.2	3.9	4.0	1.5	n.p.	11.1	<5	—	2.7	0.7
Left against medical advice/discharge at own risk	n.p.	0.2	n.p.	<5	<5	—	—	<5	0.2	0.5
Statistical discharge from leave	2.0	—	—	0.2	—	—	—	—	0.8	0.1
Died	50.1	60.8	36.5	50.3	53.6	37.0	65.0	30.6	49.3	1.1
Other (usual residence/own accommodation/welfare institution) ^(c)	37.2	29.7	53.7	41.4	40.5	23.0	29.1	36.1	39.6	92.3
Unknown	—	—	—	—	<5	—	—	n.p.	—	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Includes new discharges to a nursing home only. People whose usual residence is a nursing home are coded to Other.

(b) Includes hospices, where the hospice is a separate establishment and not a unit under the auspice of the hospital (in which case the Statistical discharge—type change code would be used).

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

10 Principal and additional diagnoses

The Admitted Patient Palliative Care NMDS collection includes data on principal diagnosis and additional diagnoses. 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. Additional diagnoses include comorbidities (coexisting conditions) and/or complications which may contribute to longer lengths of stay, more intensive treatment or the use of greater resources (AIHW 2001a). Diagnoses in the Admitted Patient Palliative Care NMDS for 1999–00 are classified according to the ICD-10-AM.

10.1 High-volume principal diagnoses

Sixty-nine per cent of palliative care separations had a principal diagnosis in the neoplasm (cancer) chapter reported (Table 16). Of these separations with a principal diagnosis under the neoplasm chapter, Malignant neoplasms of ill-defined, secondary and unspecified sites accounted for the largest proportion (28%), followed by neoplasms associated with the digestive organs (21%) and those associated with the respiratory and intrathoracic organs (17%) (Table 17).

Factors influencing health status and contact with health services was the diagnostic group reported as the principal diagnosis for a further 11% of palliative care separations. Of these separations, 45% had Chemotherapy session for neoplasm coded as the diagnosis chiefly responsible for their episode of care. The ICD-10-AM coding standards require that same-day patients who are receiving chemotherapy have this code reported as their principal diagnosis, with the type of neoplasm associated recorded as an additional diagnosis.

10.2 Separations with HIV as additional diagnosis

The National Palliative Care Strategy also identifies people with HIV/AIDS as a particular need group. This disease is usually not coded as the principal diagnosis, but as an additional diagnosis. Of the 21,341 palliative care separations, 65 (0.3%) were reported to have HIV as an additional diagnosis.

10.3 Number of diagnoses

Table 18 presents information on the number of diagnosis codes reported for palliative care separations by states and territories, and for all hospital separations. These counts represent only a very crude measure of complexity. The mean number of diagnoses per separation for palliative care patients was 6.2 in public hospitals and 5.2 in private hospitals (Table 18). These are higher than the mean numbers of diagnosis codes reported for all hospital separations, which were 3.1 for public hospitals and 2.5 for private hospitals.

Table 16: Palliative care separations, patient days and average length of stay by principal diagnosis in ICD-10-AM chapter groupings, all hospitals, Australia, 1999-00

ICD-10-AM codes	Principal diagnosis	Separations	Per cent separations	Patient days	Per cent patient days	Average length of stay
A00-B99	Certain infectious and parasitic diseases	137	0.6	1,723	0.7	12.6
C0-D48	Neoplasms	14,704	68.9	200,930	76.6	13.7
D5-D89	Diseases of blood and blood-forming organs and certain disorders involving the immune mechanisms	254	1.2	1,227	0.5	4.8
E0-E90	Endocrine, nutritional and metabolic diseases	143	0.7	1,647	0.6	11.5
F0-F99	Mental, behavioural disorders	91	0.4	1,692	0.6	18.6
G0-G99	Diseases of the nervous system	261	1.2	3,887	1.5	14.9
H0-H59	Diseases of the eye and adnexa	10	<0.1	40	<0.1	4.0
H6-H95	Diseases of the ear and mastoid process	7	<0.1	67	<0.1	9.6
I0-I99	Diseases of the circulatory system	768	3.6	7,497	2.9	9.8
J0-J99	Diseases of the respiratory system	731	3.4	6,943	2.6	9.5
K0-K93	Diseases of the digestive system	583	2.7	5,625	2.1	9.6
L0-L99	Diseases of the skin and subcutaneous tissue	58	0.3	699	0.3	12.1
M0-M99	Diseases of the musculoskeletal system and connective tissue	245	1.1	2,531	1.0	10.3
N0-N99	Diseases of the genitourinary system	256	1.2	2,484	0.9	9.7
O0-O99	Pregnancy, childbirth and the puerperium	16	0.1	44	<0.1	2.8
P0-P96	Certain conditions originating in the perinatal period	10	<0.1	63	<0.1	6.3
Q0-Q99	Congenital malformations, deformations and chromosomal abnormalities	14	0.1	184	0.1	13.1
R0-R99	Symptoms, signs and abnormal clinical and laboratory findings, nec.	522	2.4	4,928	1.9	9.4
S0-T98	Injury, poisoning and certain other consequences of external causes	148	0.7	1,256	0.5	8.5
Z0-Z99	Factors influencing health status and contact with health services	2,378	11.1	18,645	7.1	7.8
	Not reported	5	<0.1	54	<0.1	10.8
Total		21,341	100.0	262,166	100.0	12.3

Table 17: Palliative care separations, patient days and average length of stay for separations with a principal diagnosis of neoplasm, all hospitals, Australia, 1999-00

Principal diagnosis	Separations	Per cent separations	Patient days	Per cent patient days	Average length of stay
ICD-10-AM disease groupings					
C00-C14 Lip, oral cavity and pharynx	261	1.8	3,884	1.9	14.9
C15-C26 Digestive organs	3,018	20.5	42,256	21.0	14.0
C30-C39 Respiratory and intrathoracic organs	2,520	17.1	31,319	15.6	12.4
C40-C41 Bone and articular cartilage	28	0.2	314	0.2	11.2
C43-C44 Skin	209	1.4	2,771	1.4	13.3
C45-C49 Mesothelial and soft tissue	279	1.9	3,198	1.6	11.5
C50 Breast	693	4.7	9,958	5.0	14.4
C51-C58 Female genital organs	368	2.5	5,876	2.9	16.0
C60-C63 Male genital organs	843	5.7	13,162	6.6	15.6
C64-C68 Urinary tract	651	4.4	7,624	3.8	11.7
C69-C72 Eye, brain and other parts of central nervous system	604	4.1	13,243	6.6	21.9
C73-C75 Thyroid and other endocrine glands	60	0.4	621	0.3	10.4
C76-C80 Malignant neoplasms of ill-defined, secondary and unspecified sites	4,049	27.5	53,679	26.7	13.3
C76 Malignant neoplasms of other and ill-defined sites	44	0.3	615	0.3	14.0
C77 Secondary and unspecified malignant neoplasm of lymph nodes	148	1.0	1,676	0.8	11.3
C78 Secondary malignant neoplasm of respiratory and digestive organs	1,634	11.1	17,824	8.9	10.9
C79 Secondary malignant neoplasm of other sites	2,001	13.6	30,920	15.4	15.5
C80 Malignant neoplasm without specification of site	222	1.5	2,644	1.3	11.9
C81-C96 Malignant neoplasms, stated or presumed to be primary, of lymphoid, haematopoietic and related tissue	953	6.5	11,406	5.7	12.0
D00-D09 In situ neoplasms	15	0.1	266	0.1	17.7
D10-D36 Benign neoplasms	13	0.1	300	0.1	23.1
D37-D48 Neoplasms of uncertain or unknown behaviour	140	1.0	1,053	0.5	7.5
Total	14,704	100.0	200,930	100.0	13.7

Table 18: Palliative care separations and all separations by number of diagnoses^(a) reported and hospital sector, states and territories, 1999–00

Hospital sector	Palliative care separations										All separations	
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total	Total		
Public hospitals												
Separations ^(b)	7,361	4,058	3,041	488	1,077	339	337	36	16,737	3,872,198		
One diagnosis code only	165	64	45	32	n.p.	28	0	<5	353	1,072,649		
Two diagnosis codes only	477	210	173	78	126	52	32	6	1,154	1,114,769		
Three diagnosis codes only	793	398	423	76	n.p.	31	62	<5	1,940	560,795		
Four diagnosis codes only	963	544	424	89	144	34	88	5	2,291	365,348		
Five or more diagnosis codes	4,963	2,842	1,976	213	637	194	155	19	10,999	765,795		
Mean diagnosis codes per separation	6.5	6.0	6.1	4.6	5.9	6.1	4.6	5.2	6.2	3.1		
Maximum number of diagnosis codes	20	12	31	18	20	20	12	14	31	31		
Private hospitals												
Separations ^(b)	596	158	1,753	1,702	193	197	—	..	4,599	2,025,662		
One diagnosis code only	13	<5	44	22	15	18	—	..	113	712,928		
Two diagnosis codes only	41	6	319	53	14	47	—	..	480	576,819		
Three diagnosis codes only	98	17	523	136	38	51	—	..	863	315,943		
Four diagnosis codes only	113	19	380	172	34	40	—	..	758	172,340		
Five or more diagnosis codes	331	115	487	1,319	92	41	—	..	2,385	244,395		
Mean diagnosis codes per separation	5.1	6.1	3.8	6.9	4.5	3.4	..	..	5.2	2.5
Maximum number of diagnoses	20	11	14	21	10	9	..	..	21	31

(continued)

Table 18 (continued): Palliative care separations and all separations by number of diagnoses ^(a) reported and hospital sector, states and territories, 1999-00

Hospital sector	Palliative care separations							All separations		
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total	Total
Public hospitals										
One diagnosis code only	2.2	<5	1.5	6.6	n.p.	8.3	—	<5	2.1	27.7
Two diagnosis codes only	6.5	5.2	5.7	16.0	11.7	15.3	9.5	16.7	6.9	28.8
Three diagnosis codes only	10.8	9.8	13.9	15.6	n.p.	9.1	18.4	<5	11.6	14.5
Four diagnosis codes only	13.1	13.4	13.9	18.2	13.4	10.0	26.1	13.9	13.7	9.4
Five or more diagnosis codes	67.4	70.0	65.0	43.6	59.1	57.2	46.0	52.8	65.7	19.6
Private hospitals										
One diagnosis code only	2.2	0.6	2.5	1.3	7.8	9.1	—	—	2.5	35.3
Two diagnosis codes only	6.9	3.8	18.2	3.1	7.3	23.9	—	—	10.4	28.5
Three diagnosis codes only	16.4	10.8	29.8	8.0	19.7	25.9	—	—	18.8	15.6
Four diagnosis codes only	19.0	12.0	21.7	10.1	17.6	20.3	—	—	16.5	8.5
Five or more diagnosis codes	55.5	72.8	27.8	77.5	47.7	20.8	—	—	51.9	12.1

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

(b) Excludes 5 separations for which no diagnosis was reported.

11 Procedures

The *National Health Data Dictionary* Version 8 (AIHW 1999) defines a procedure as a clinical intervention that is surgical in nature, and/or carries a procedural risk, and/or carries an anaesthetic risk, and/or requires specialised training, and/or requires special facilities or equipment only available in an acute care setting. Procedures therefore include surgical procedures and also non-surgical therapeutic procedures such as allied health interventions. For 1999–00, procedures were classified according to the ICD-10-AM.

One or more procedures can be reported for each separation in the National Hospital Morbidity Database but as procedures are not undertaken during all hospital admissions, so only a proportion of the separation records include procedure data. Procedures were reported for 60% (12,803) of all palliative care separations.

There are two types of data on procedures presented in this chapter:

- data on the separations for which there was one or more procedures reported within the group of procedures (an ICD-10-AM procedure block, group of blocks or chapter) being considered. Because more than one procedure from within a group of procedures can be reported for each separation, the total number of procedures within a group of procedures will generally exceed the total number of separations involving procedures from that group
- data on the total number of procedures reported (there was a total of 29,326 procedures reported for the 21,341 palliative care separations in 1999–00). For these data, all procedures within a group of procedures being considered are counted, even if more than one is reported for a separation.

11.1 High-volume procedures

Table 19 provides a count of all palliative care separations and procedures. Of palliative care separations where at least one procedure was reported, the ICD-10-AM procedure chapter with the highest number of separations was Chapter 21, Allied health interventions (9,241 separations). Of these, social work procedures were reported for 5,248 separations, physiotherapy for 4,938 separations, occupational therapy for 2,628 separations and dietetics for 2,010 separations (Table 21).

The ICD-10-AM procedure chapter with the second highest number of separations was Chapter 19, Miscellaneous procedures (2,313 separations). Of these, the highest number of separations were for transfusion of blood and gamma globulin (1,368 separations), and injection or infusion of therapeutic or prophylactic substance (816 separations) (Table 20).

The number of procedures in Chapter 19, Miscellaneous non-operative procedures, performed was 2,585. Of these, 55% (1,420) were transfusion of blood and gamma globulin, and 37% (947) were injection or infusion of therapeutic or prophylactic substance.

Table 21 provides counts of the number of procedures reported for procedures in Chapter 21, Allied health interventions, by states and territories. This was the chapter with the highest number of procedures reported for palliative care patients.

Nationally, the highest proportion of allied health interventions was for social work (34%). Physiotherapy was the allied health intervention with the highest proportion of procedures reported for half the states and territories (Victoria, South Australia, Tasmania and the Australian Capital Territory) and with the second highest proportion of procedures reported nationally.

11.2 Number of procedures

The mean number of procedures per palliative care separation, for those separations with a procedure reported, was 2.4 in public hospitals and 1.8 in private hospitals (Table 22). In the public sector, the mean number of procedures reported for palliative care separations (2.4) was higher than that for all hospital separations (1.8), whereas in the private sector the mean number of procedures for palliative care separations (1.8) was similar to that for all hospital separations (1.7). As the types of procedures reported can range from substantial surgical interventions (less likely in palliative care) to allied health interventions, the count of procedures would not necessarily include similar types of procedures for palliative care separations compared to all separations.

In both public and private hospitals, 40% (8,538) of palliative care separations did not have a procedure reported. This compared to 27% (1,052,212) for all hospital separations in public hospitals, and 11% (231,540) for all hospital separations in private hospitals (Table 22). The relatively high proportion of palliative care separations without a procedure reported may be because many palliative care episodes follow an acute care episode, where an intensive round of treatment (such as chemotherapy) is carried out. The person is then transferred to palliative care when treatment is no longer effective or appropriate. The emphasis may then be on making the person as comfortable as possible and administering medication for pain relief. The administration of oral medications is not generally coded as a procedure, whereas intravenous medication as part of a pain management program would generally be coded.

The mean number of procedures per palliative care separation varied somewhat between jurisdictions. For public hospitals, New South Wales reported the highest mean number of procedures per separation (2.9) and South Australia reported the lowest mean number of procedures per separation (1.4).

For private hospitals, the variation between jurisdictions was greater, with New South Wales again reporting the highest mean number of procedures per palliative care separation (3.2) compared to the lowest mean number of 1.3 reported by both Victoria and Queensland.

New South Wales had the highest proportion of palliative care separations with five or more procedures reported, for both the public and private sectors (10.9 and 13.9% of palliative care separations respectively). Nationally, the proportions for palliative care separations with five or more procedures reported in the public and private sectors were 5.9 and 3.3% of palliative care separations, respectively.

Table 19: Palliative care separations and procedures by ICD-10-AM procedure chapters, all hospitals, Australia, 1999–00

ICD-10-AM procedure chapters		Separations ^(a)	Procedures
1	Procedures on nervous system	109	137
2	Procedures on endocrine system	1	1
3	Procedures on eye and adnexa	4	5
4	Procedures on ear and mastoid process	10	10
5	Procedures on nose, mouth and pharynx	10	17
6	Dental services	4	4
7	Procedures on respiratory system	204	245
8	Procedures on cardiovascular system	193	202
9	Procedures on blood and blood-forming organs	31	31
10	Procedures on digestive system	500	603
11	Procedures on urinary system	635	717
12	Procedures on male genital organs	9	9
13	Gynaecological procedures	13	16
14	Obstetric procedures	6	9
15	Procedures on musculoskeletal system	54	63
16	Dermatological and plastic procedures	103	123
17	Procedures on breast	11	12
18	Chemotherapeutic and radiation oncology procedures	1,453	1,537
19	Miscellaneous non-operative procedures	2,313	2,585
20	Imaging services	1,051	1,341
21	Allied health interventions	9,241	21,659
	No procedure reported	8,538	..
Total		21,341	29,326

(a) As more than one procedure can be reported for each separation, the total is not the sum of the rows of the table

Table 20: Palliative care separations and procedures in ICD-10-AM Chapter 19, Miscellaneous non-operative procedures, all hospitals, Australia, 1999–00

Procedure blocks		Separations	Procedures	Per cent procedures
1861	Transfusion of blood and gamma globulin	1,368	1,420	54.9
1892	Injection or infusion of therapeutic or prophylactic substance	816	947	36.6
1820–1899	Total miscellaneous non-operative procedures	2,313	2,585	100.0

Table 21: Palliative care procedures and separations for procedures grouped in ICD-10-AM Chapter 21, Allied health interventions, all hospitals, states and territories, 1999-00

Procedure blocks and codes	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total separations ^(a)
2050-2053, 2140 (9555000) Dietetics	1,174	538	411	85	47	21	71	6	2,353
2054-2058, 2140 (9555001) Social work	4,934	1,103	829	345	82	n.p.	108	<5	7,409
2059-2063, 2140 (9555002) Occupational therapy	1,524	624	175	342	97	n.p.	74	<5	2,848
2064-2074, 2140 (9555003) Physiotherapy	3,972	1,248	689	284	100	36	167	5	6,501
2075-2079, 2140 (9555010) Psychology	116	n.p.	<5	—	<5	<5	—	—	127
2080-2092, 2140 (9555004) Podiatry	n.p.	53	7	8	<5	—	n.p.	—	146
2093-2097, 2140 (9555005) Speech pathology	483	218	124	55	22	n.p.	—	<5	911
2136-2139, 2140 (9555009) Pharmacy	317	13	16	—	12	—	—	—	358
2140 (9555006) Generalised allied health — audiology	<5	—	—	—	—	—	—	—	<5
2140 (9555008) Generalised allied health — prosthetics & orthotics	—	<5	—	—	—	—	—	—	<5
2140 (9555011) Other generalised allied health	858	111	<5	25	—	—	<5	—	1,001
Total	13,447	3,918	2,259	1,144	362	77	431	21	21,659

(continued)

Table 21 (continued): Palliative care procedures and separations for procedures grouped in ICD-10-AM Chapter 21, Allied health interventions, all hospitals, states and territories, 1999-00

Procedure blocks and codes	NSW	Vic	Qld	WA	Per cent						Total separations ^(a)
					SA	Tas	ACT	NT	Total		
2050-2053, 2140 (9555000) Dietetics	8.7	13.7	18.2	7.4	13.0	27.3	16.5	28.6	10.9	..	
2054-2058, 2140 (9555001) Social work	36.7	28.2	36.7	30.2	22.7	n.p.	25.1	<5	34.2	..	
2059-2063, 2140 (9555002) Occupational therapy	11.3	15.9	7.7	29.9	26.8	n.p.	17.2	<5	13.1	..	
2064-2074, 2140 (9555003) Physiotherapy	29.5	31.9	30.5	24.8	27.6	46.8	38.7	23.8	30.0	..	
2075-2079, 2140 (9555010) Psychology	0.9	n.p.	<5	—	<5	<5	—	—	0.6	..	
2080-2092, 2140 (9555004) Podiatry	n.p.	1.4	0.3	0.7	<5	—	n.p.	—	0.7	..	
2093-2097, 2140 (9555005) Speech pathology	3.6	5.6	5.5	4.8	6.1	n.p.	—	<5	4.2	..	
2136-2139, 2140 (9555009) Pharmacy	2.4	0.3	0.7	—	3.3	—	—	—	<5	..	
2140 (9555006) Generalised allied health — audiology	<5	—	—	—	—	—	—	—	—	..	
2140 (9555008) Generalised allied health — prosthetics & orthotics	—	<5	—	—	—	—	—	—	<5	..	
2140 (9555011) Other generalised allied health	6.4	2.8	<5	2.2	—	—	<5	0.0	4.6	..	

(a) As more than one procedure can be reported for each separation, the total is not the sum of the rows of the table.

Table 22: Palliative care separations by number of procedures reported and hospital sector, states and territories, 1999–00

Hospital sector	Palliative care separations							All separations		
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total	Total
Public hospitals										
Separations ^(a)	7,361	4,059	3,041	488	1,077	343	337	36	16,742	3,872,198
No procedure reported	2,287	1,764	1,372	335	591	266	106	21	6,742	1,052,212
One procedure code only	1,803	934	976	95	350	58	89	8	4,313	1,800,227
Two procedure codes only	1,131	686	353	27	93	n.p.	77	<5	2,382	517,936
Three procedure codes only	828	398	186	16	33	<5	48	<5	1,516	227,023
Four procedure codes only	508	172	83	10	n.p.	<5	n.p.	—	796	118,549
Five or more procedure codes	804	105	71	5	<5	<5	<5	<5	993	156,251
Mean procedure codes per separation ^(b)	2.9	2.1	1.8	1.7	1.4	1.5	2.0	2.3	2.4	1.8
Maximum number of procedure codes	20	10	15	8	8	8	5	11	20	31
Private hospitals										
Separations ^(a)	596	158	1,753	1,702	193	197	—	—	4,599	2,025,662
No procedure reported	225	105	443	851	131	41	—	—	1,796	231,540
One procedure code only	135	42	1,049	350	38	90	—	—	1,704	1,122,969
Two procedure codes only	89	9	166	258	13	45	—	—	580	405,906
Three procedure codes only	38	<5	55	138	n.p.	13	—	—	254	145,246
Four procedure codes only	26	<5	n.p.	60	<5	n.p.	—	—	115	62,142
Five or more procedure codes	83	—	n.p.	45	0	<5	—	—	150	57,865
Mean procedure codes per separation ^(b)	3.2	1.3	1.3	2.1	1.6	1.6	..	..	1.8	1.7
Maximum number of procedure codes	17	4	12	10	4	7	..	..	17	31

(continued)

Table 22 (continued): Palliative care separations by number of procedures reported and hospital sector, states and territories, 1999-00

Hospital sector	Palliative care separations							All separations		
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total	Total
Public hospitals	Per cent									
No procedure reported	31.1	43.5	45.1	68.6	54.9	77.6	31.5	58.3	40.3	27.2
One procedure code only	24.5	23.0	32.1	19.5	32.5	16.9	26.4	22.2	25.8	46.4
Two procedure codes only	15.4	16.9	11.6	5.5	8.6	3.5	22.8	8.3	14.2	13.4
Three procedure codes only	11.2	9.8	6.1	3.3	3.1	1.2	14.2	8.3	9.1	5.9
Four procedure codes only	6.9	4.2	2.7	2.0	0.6	0.3	4.7	0.0	4.8	3.1
Five or more procedure codes	10.9	2.6	2.3	1.0	0.4	0.6	0.3	2.8	5.9	4
Private hospitals										
No procedure reported	37.8	66.5	25.3	50.0	67.9	20.8	..	..	39.1	11.4
One procedure code only	22.7	26.6	59.8	20.6	19.7	45.7	..	..	37.1	55.4
Two procedure codes only	14.9	5.7	9.5	15.2	6.7	22.8	..	..	12.6	20
Three procedure codes only	6.4	<5	3.1	8.1	n.p.	6.6	..	..	5.5	7.2
Four procedure codes only	4.4	<5	n.p.	3.5	<5	n.p.	..	..	2.5	3.1
Five or more procedure codes	13.9	—	n.p.	2.6	0.0	<5	..	..	3.3	2.9

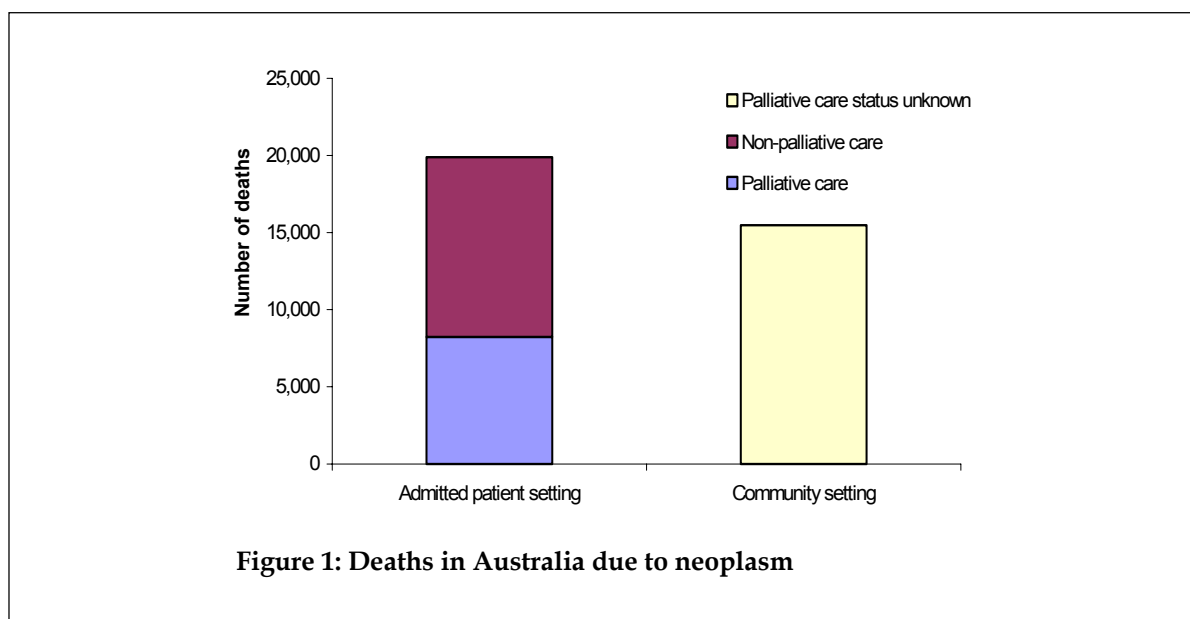
(a) Includes separations for which no procedure codes were reported.

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

12 Deaths in Australia due to neoplasm

Neoplasm (or cancer) is the most common condition for people receiving palliative care as an admitted patient. Of all palliative care admitted patient separations in 1999–00, 69% had a principal diagnosis of neoplasm (Table 16).

The total number of deaths caused by neoplasm (or cancer) in Australia for the financial year 1999–00 was 35,350.⁹ In 1999–00, 19,872 people with a principal diagnosis of neoplasm died in an admitted patient setting. Death due to neoplasm in a community setting, derived by subtraction, was 15,478 or 44% of total deaths due to neoplasm. This included those who died either at home or in residential aged care facilities. Of those who died of neoplasm in an admitted patient setting, 8,237 (41%) patients were receiving care in a palliative care episode (Figure 1). The proportion of people who died in a community setting and received community-based palliative care is currently unknown. The development of a community-based palliative care data collection in the future would provide this information.



Underlying cause of death in the AIHW National Mortality Database has been coded according to ICD-10 and is defined as ‘the disease or injury which initiated the train of morbid events leading directly to death’. Principal diagnosis from the Admitted Patient Care NMDS is coded according to ICD-10-AM, which is consistent with and mappable to ICD-10. It is defined as ‘the diagnosis established after study to be chiefly responsible for occasioning the patient’s episode of care in hospital (or attendance at the health care facility)’. Although the definitions are not the same, it can be reasonably assumed that most people with a principal diagnosis of cancer who died in hospital died due to their cancer.

⁹ The sum of the number of deaths due to malignant neoplasm reported each month from July 1999 to June 2000 in the AIHW National Mortality Database.

Glossary

The terms used in this report refer to the definitions in use in the *National Health Data Dictionary*, Version 10 (AIHW 2001). In some cases, the definition was expanded and simplified for ease of understanding.

<i>Aboriginal or Torres Strait Islander status</i>	<p>Aboriginal or Torres Strait Islander status of the person according to the following definition:</p> <p>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>Acute care</i>	<p>Care in which the clinical intent or treatment goal is to manage labour (obstetric); cure illness or provide definitive treatment of injury; perform surgery; relieve symptoms of illness or injury (excluding palliative care); reduce severity of an illness or injury; protect against exacerbation and/or complication of an illness and/or injury which could threaten life or normal function; and/or perform diagnostic or therapeutic procedures.</p>
<i>Additional diagnosis</i>	<p>Conditions or complaints either coexisting with the principal diagnosis or arising during the episode of care. Additional diagnoses give information on factors that may result in increased length of stay, more intensive treatment or the use of greater resources.</p>
<i>Admitted patient</i>	<p>A patient who undergoes a hospital formal admission process to receive treatment and/or care. This treatment and/or care is provided over a period of time and can occur in hospital and/or in the person home (for hospital in the home patients).</p>
<i>Average length of stay</i>	<p>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.</p>
<i>Care type</i>	<p>The care type defines the overall nature of a clinical service provided to an admitted patient during an episode of care (admitted care), or the type of service provided by the hospital for boarders or posthumous organ procurement (other care).</p>
<i>Department of Veterans' Affairs (DVA) patient</i>	<p>A person whose charges for the 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 DVA patient may not necessarily have been confirmed by the DVA.</p>

<i>Eligible person</i>	A person entitled to receive health services which either partly or totally paid for by Medicare as specified under the Commonwealth <i>Health Insurance Act 1973</i> . Under the Australian Health Care Agreements, 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 and their families and persons visiting Australia are excluded.
<i>Eligible private patient</i>	An eligible person who: <ul style="list-style-type: none"> • 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 • 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.
<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>Episode of care</i>	The period of admitted patient care between a formal or statistical admission and a formal or statistical separation, characterised by only one care type (see Care type and Separation).
<i>Hospice</i>	An establishment dedicated to providing palliative care to terminally ill patients.
<i>Ineligible patient</i>	A patient who is not eligible under the Australian Health Care Agreements to receive health services which are paid for by Medicare.
<i>Multi-purpose service (MPS)</i>	Based on a legal definition rather than an operational one. The hospitals in this category are classified as such because they are part of a multi-purpose service health program. As a result some of the hospitals are whole MPSs, some are only the hospital part of an MPS and some are hospitals that are part of networks that are MPSs. This leads to some inconsistencies across jurisdictions.
<i>Patient days</i>	The total number of days for patients who were admitted for an episode of care and who separated during a specified reference period. A patient who is admitted and separated on the same day is allocated one patient day.
<i>Principal diagnosis</i>	The diagnosis established after study to be chiefly responsible for occasioning the patient episode of care in hospital.

<i>Private hospital</i>	A 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 care and psychiatric hospitals are included, as are private free-standing day hospital facilities.
<i>Procedure</i>	A clinical intervention that is surgical in nature, carries a procedural risk, carries an anaesthetic risk, requires specialised training and/or requires special facilities or equipment only available in the acute care setting.
<i>Same-day patients</i>	Same-day patients are admitted patients who are admitted and separated 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 (statistical separation).

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