



---

# Hospital care for patients aged 85 and over, 2014-15

Web report | Last updated: 10 Mar 2017 | Topic: [Hospitals](#)

## About

Information on care for patients aged 85 years and over in public and private hospitals for the period 1 July 2014 to 30 June 2015, and comparative information for the previous 10 years.

Cat. no: WEB 92

### Findings from this report:

- In 2014-15, people aged 85 and over (2% of the total population) accounted for 7% (690,658) of all hospital separations
- The majority (55%) of separations for patients aged 85 and over were for females
- The total number of separations for patients aged 85 and over almost doubled, 359,472 in 2005-06 to 690,658 in 2014-15
- The average length of stay for overnight separations for patients aged 85 and over was 8.4 days

### Report contents:

- [How much activity was there for patients aged 85 years and over?](#)
- [Who used these hospital services?](#)
- [How long did patients aged 85 and over stay?](#)
- [How has this activity changed over time?](#)
- [What type of care did patients aged 85 and over receive?](#)
- [For what conditions did patients aged 85 and over receive care?](#)
- [What procedures did patients aged 85 years and over undergo?](#)
- [Who paid for the care of patients aged 85 and over?](#)
- [Technical notes](#)



## Summary

This spotlight report looks at the admitted patient (see [Box 1](#)) care provided for the oldest of patients in Australian hospitals in 2014-15. It presents information on the amount of activity there was for patients aged 85 years and over and how this has changed over time. It includes information on who used the hospital services, the length of stay in hospital, the overall type of care provided, the types of conditions patients received care for, the type of procedures undergone by the patients, and who funded the hospital stay.

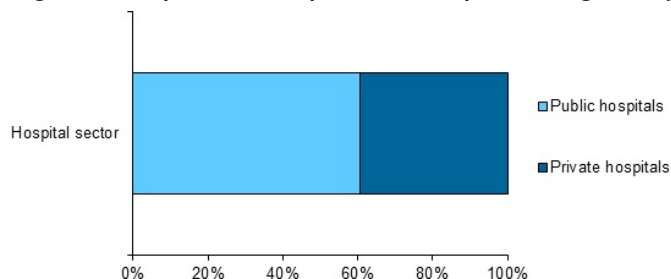
More information on admitted patient care in Australian hospitals can be found in *Admitted patient care 2014-15: Australian hospital statistics*.

---

## Summary

In 2014-15, people aged 85 and over (who make up 2% of the population) accounted for 7% (690,658) of all hospital separations (10,150,367). Sixty-one per cent (418,347) of these separations occurred in public hospitals and 39% (272,311) in private hospitals (Figure 1).

**Figure 1: Proportion of separations for patients aged 85 years and over by hospital sector, 2014-15**



Source: National Hospital Morbidity Database (NHMD).

### Box 1: Understanding admitted patient care terms

This spotlight draws on data from the National Hospital Morbidity Database (NHMD). The NHMD is based on data provided to the Australian Institute of Health and Welfare (AIHW) by state and territory health authorities for the National Minimum Data Set (NMDS) for Admitted patient care. It contains episode-level records from admitted patient morbidity data collection systems in Australian public and private hospitals and include administrative, demographic and clinical data.

#### *Admitted patient*

An admitted patient is a patient who undergoes a hospital's formal admission process. Statistics on admitted patients are compiled when an admitted patient completes an episode of admitted patient care and 'separates' from the hospital. This is because most of the data on the use of hospitals by admitted patients are based on information provided at the end of the patients' episodes of care, rather than at the beginning. The length of stay and the procedures carried out are then known and the diagnostic information is more accurate.

#### *Hospital separation*

A hospital separation is the term used to refer to the episode of admitted patient 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 care 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.

#### *Same-day separation*

A same-day separation occurs when a patient is admitted to and separated from the hospital on the same date.

#### *Overnight separation*

An overnight separation occurs when a patient is admitted to and separated from the hospital on different dates.

#### *Length of stay*

Length of stay is measured using 'patient days'. The length of stay for an overnight patient is calculated by subtracting the date the patient is admitted from the date of separation and deducting days the patient was on leave (for example, went home for part of a day with the intention of return). A same-day patient is allocated a length of stay of 1 day.

#### *Care type*

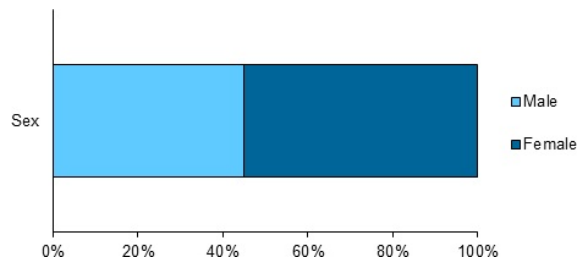
The care type describes the overall nature of a clinical service provided to an admitted patient during an episode of care. The care type can be classified as:

- Acute
- Newborn (not applicable for this spotlight)
- Sub-acute (Rehabilitation care, Palliative care, Geriatric evaluation and management, and Psychogeriatric care)
- Non-acute (Maintenance care)
- Other admitted patient care.

## Summary

The majority of separations for patients aged 85 and over (55% or 380,202) were for females (who account for 63% of the population in this age group) (Figure 2).

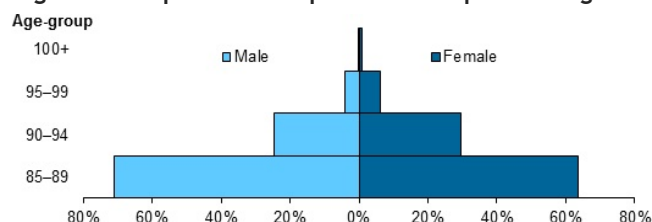
**Figure 2: Proportion of separations for patients aged 85 and over by sex, 2014-15**



Source: NHMD.

Patients aged 85-89 (who make up 64% of the population aged 85 and over) accounted for two-thirds of these separations (67%, 461,426). For patients aged over 100 there were 2.7 times as many female separations (2,686) compared to male separations (999) (Figure 3).

**Figure 3: Proportion of separations for patients aged 85 and over by age group and sex, 2014-15**



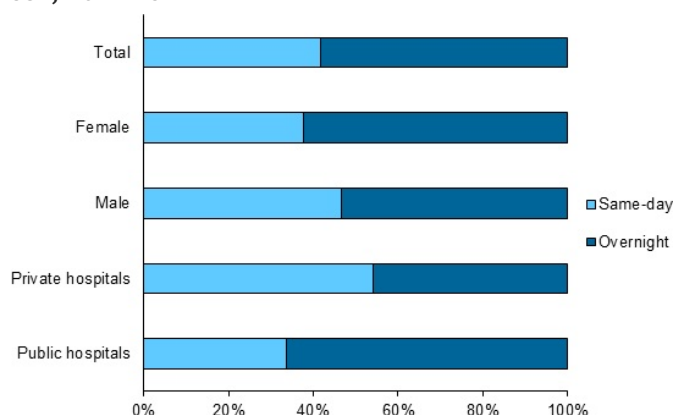
Source: NHMD.

## Summary

Forty two per cent (287,933) of separations for patients aged 85 years and over were same-day separations (see [Box 1](#)) in 2014-15. A greater proportion of separations for males aged 85 and over were on a same-day basis 47% (144,961) compared with females 38% (142,972) during 2014-15.

More than half 54% (147,294) of private hospital separations for patients aged 85 and over were same-day, compared with 34% in public hospitals (140,639) (Figure 4).

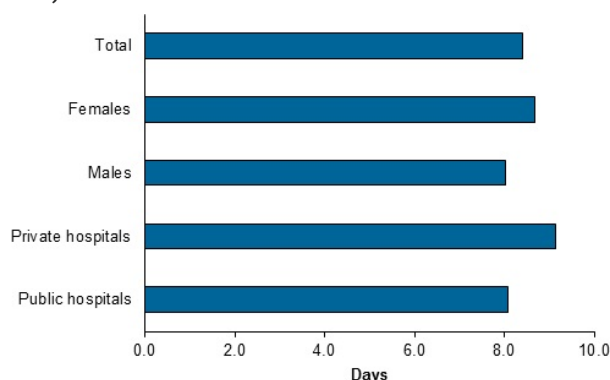
**Figure 4: Proportion of same-day and overnight separations for patients aged 85 and over, by hospital sector and by sex, 2014-15**



Source: NHMD.

In 2014-15, the average length of stay for overnight separations (see [Box 1](#)) for patients aged 85 and over was 8.4 days, about three days longer than the average for all overnight separations (5.5 days) [1]. Female patients (8.7 days) spent almost 1 day longer than male patients (8.0 days) for overnight separations. Overnight separations for patients aged 85 and over were longer in private hospitals (9.1 days) than in public hospitals (8.1 days) (Figure 5).

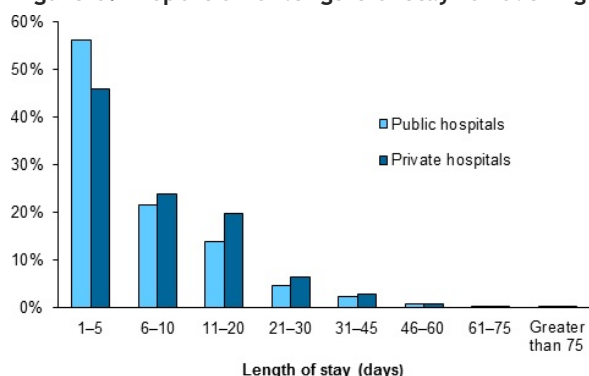
**Figure 5: Average length of stay for overnight separations for patients aged 85 and over, by hospital sector and by sex, 2014-15**



Source: NHMD.

In 2014-15, more than half (56%, 156,465) of overnight separations in public hospitals for patients aged 85 and over had a length of stay between 1 and 5 days (Figure 6). In contrast, private hospital overnight separations for patients aged 85 and over lasting between 1 and 5 days represented less than half (46%, 57,534) of overnight separations.

**Figure 6: Proportion of lengths of stay for overnight stays for patients aged 85 and over by hospital sector, 2014-15**



Source: NHMD.

---

© Australian Institute of Health and Welfare 2023

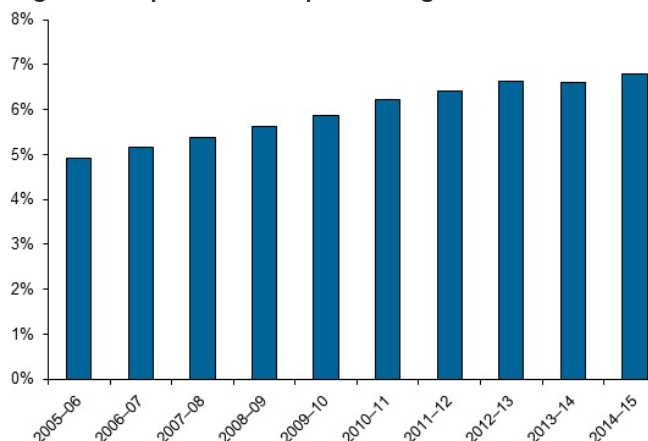


## Summary

The total number of separations for patients aged 85 and over almost doubled from 359,472 in 2005-06 to 690,658 in 2014-15.

Separations for patients aged 85 and over increased as a proportion of all separations, from 4.9% in 2005-06 to 6.8% in 2014-15 (Figure 7).

**Figure 7: Separations for patients aged 85 and over as a proportion of all separations, 2005-06 to 2014-15**

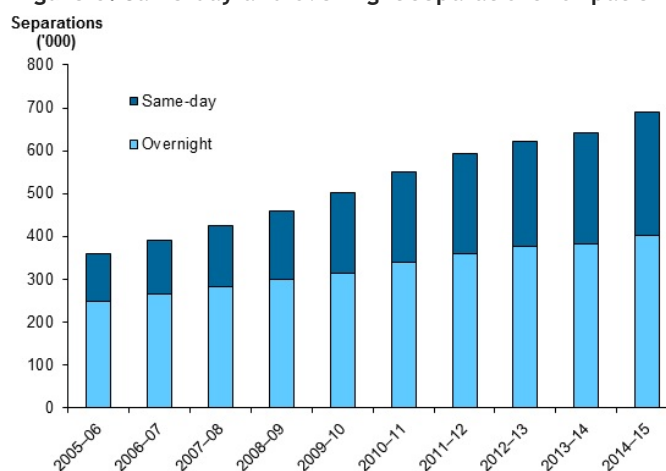


Source: NHMD.

As the numbers of separations for patients aged 85 and over increased, the mix of same-day and overnight separations changed.

In 2005-06, same-day separations represented 31% (110,910) of all separations for patients aged 85 and over, increasing to 42% (287,933 separations) in 2014-15. The proportion of separations that were overnight fell, even though they increased in volume over the period (Figure 8).

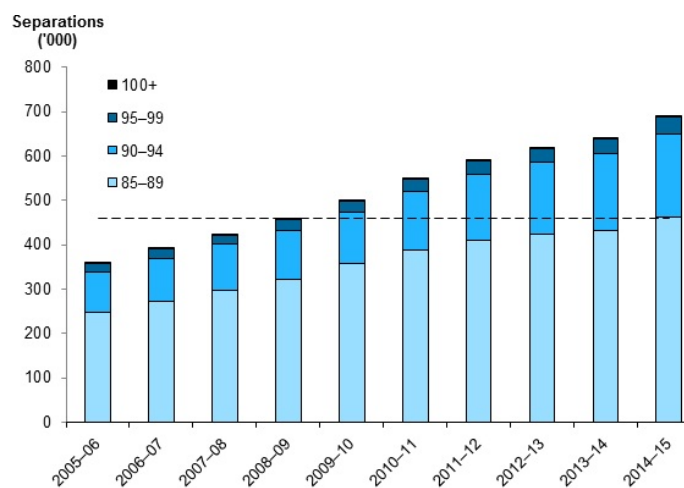
**Figure 8: Same-day and overnight separations for patients aged 85 and over, 2005-06 to 2014-15**



Source: NHMD.

In 2014-15, the number of separations for people aged 85-89 outnumbered all separations for people aged 85 and over for each year in the period 2005-06 to 2008-09 (Figure 9).

**Figure 9: Separations for patients aged 85 and over by age-group, 2005-06 to 2014-15**



Source: NHMD.

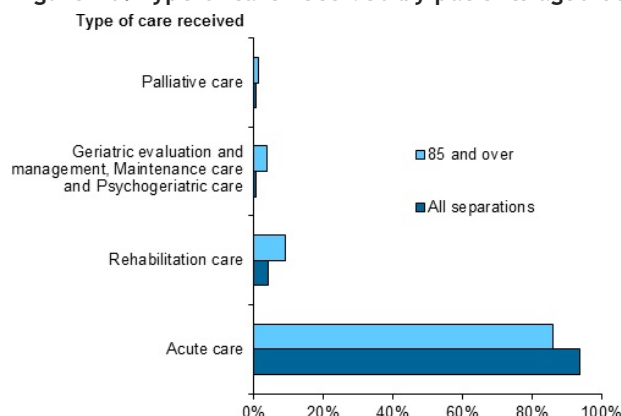


## Summary

In 2014-15, *Acute care* was the most common type of care (see [Box 1](#)) received by patients aged 85 and over (86%, 594,544), as it was for all separations for all ages (94%, 9,534,700) (Figure 10). Examples of acute care include curing illness or providing definitive treatment of an injury, and performing surgery or diagnostic or therapeutic procedures.

Fourteen per cent of separations for patients aged over 85 received sub-acute and non-acute care—9.0% were for *Rehabilitation care* (62,001 separations), 3.7% were for *Geriatric evaluation and management, Maintenance care and Psychogeriatric care* (25,265 separations), and 1.3% were for *Palliative care* (8,841) (Figure 10).

**Figure 10: Type of care received by patients aged 85 and over and all separations, 2014-15, per cent**



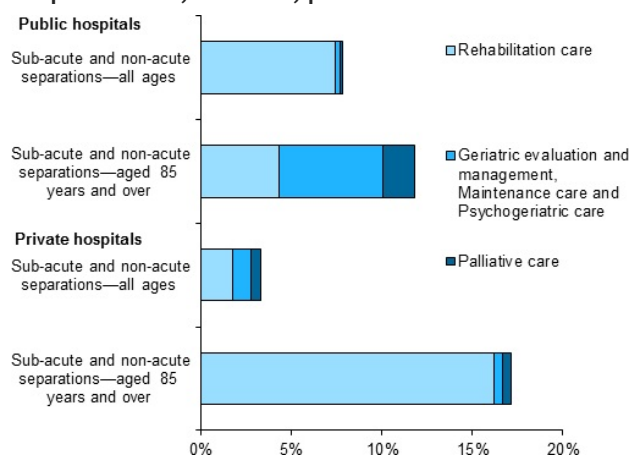
Source: NHMD.

In 2014-15, there was a greater proportion of patients aged 85 and over receiving acute care in public hospitals (88%, 368,977) compared to private hospitals (83%, 225,567).

In private hospitals, *Rehabilitation care* (16.2%) was the second most frequent type of care received by these patients, and in contrast, accounted for 4.3% of the care received in public hospitals.

In public hospitals, *Geriatric evaluation and management, Maintenance care and Psychogeriatric care* together represented 5.7% of the care received by patients aged 85 and over, compared to 0.5% in private hospitals (Figure 11).

**Figure 11: Type of sub-acute and non-acute care, received by patients aged 85 and over and all separations, by hospital sector, 2014-15, per cent**



Source: NHMD.

## Summary

Figure 12 illustrates the ten most common disease groups reported as the patient's principal diagnosis using ICD-10-AM (Box 2) for which patients aged 85 and over received care in hospital.

For patients aged 85 and over, the most common ICD-10-AM principal diagnosis chapter was *Factors influencing health status and contact with health services* (26.3%, 181,677 separations), which was also the most common ICD-10-AM principal diagnosis chapter for all separations (27.7%). This chapter includes care involving dialysis, the use of rehabilitation procedures, radiotherapy, chemotherapy and palliative care.

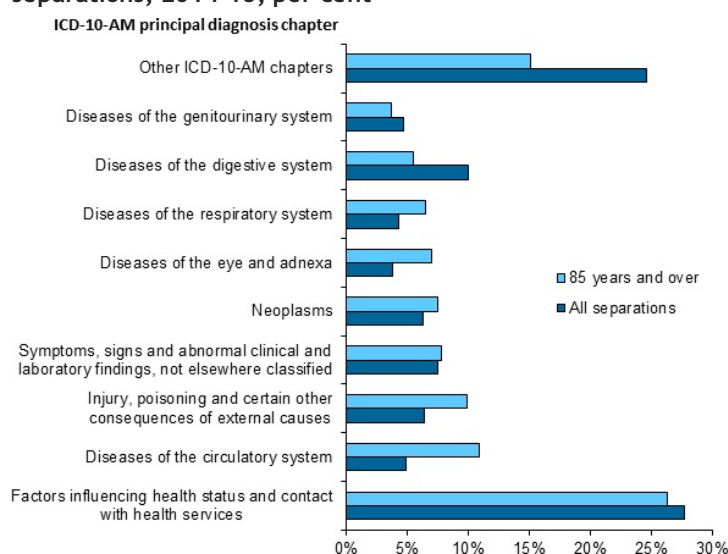
About 10.8% (74,814 separations) of patients aged 85 and over had a principal diagnosis in the ICD-10-AM chapter *Diseases of the circulatory system*, compared with 4.8% for all separations. There were also higher proportions of separations for patients aged 85 and over for *Injury, poisoning and certain other consequences of external causes* (68,155 or 9.9% compared with 6.4% for all separations) and *Diseases of the eye and adnexa* (48,269 or 7.0% compared with 3.8% for all separations).

### Box 2: What are the principal diagnosis and ICD-10-AM?

The principal diagnosis is the diagnosis established after study to be chiefly responsible for occasioning the patient's episode of admitted patient care.

In 2014-15, principal diagnoses were reported using the Eighth edition of the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM). ICD-10-AM groups together similar conditions, organised in a hierarchy of chapters, subchapters and specific categories.

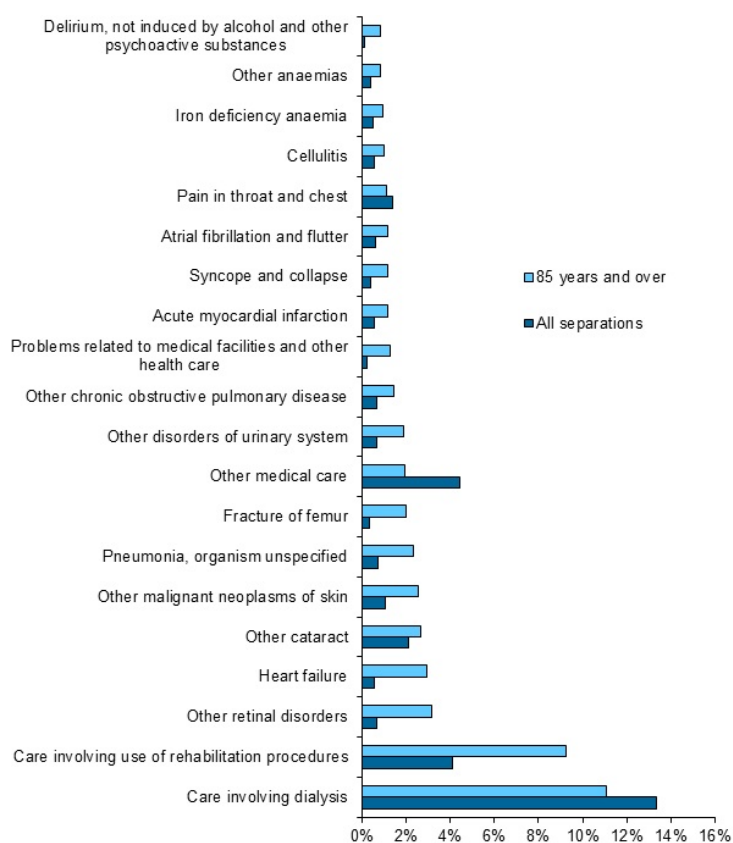
**Figure 12: Proportion of separations by ICD-10-AM principal diagnosis chapter for patients aged 85 and over and all separations, 2014-15, per cent**



Source: NHMD.

In 2014-15, the top 20 principal diagnoses (at a more detailed level, see Box 2) for separations for patients aged 85 and over represented 51% (349,644) of all separations for this age group. *Care involving dialysis* was the most common principal diagnosis, with 76,678 separations (11.1%); *Care involving use of rehabilitation procedures* 63,890 separations (9.3%) was the second most common principal diagnosis. Figure 13 presents the proportion of separations for the 20 most common principal diagnoses for those aged 85 and over compared with all hospital separations.

**Figure 13: The 20 most common 3-character principal diagnoses for patients aged 85 years and over and all separations, 2014-15, per cent**



Source: NHMD.

## Summary

In 2014-15, 72% (1,080,473) of procedures for patients aged 85 and over were *Non-invasive, cognitive and other interventions n.e.c.* (such as diagnostic, therapeutic, anaesthesia, pharmacotherapy and allied health interventions), compared with 53% (10,867,197) of procedures for all patients (see Box 3). *Dermatological and plastic procedures* (5.1%, 77,040) and *Procedures on eye and adnexa* (4.1%, 61,816) were also proportionally more common for patients aged 85 and over compared with all patients (Figure 14).

### Box 3: Understanding the classification of hospital procedures

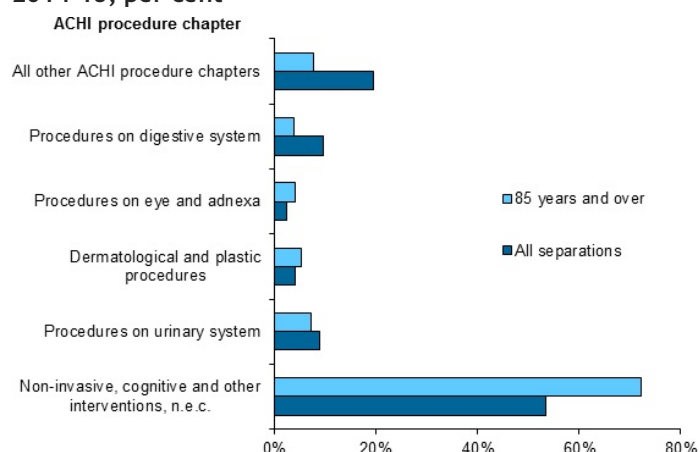
A procedure is a clinical intervention that is surgical in nature, carries an anaesthetic risk, requires specialised training and/or requires special facilities or services available only in an acute care setting. Procedures therefore encompass surgical procedures and non-surgical investigative and therapeutic procedures, such as X-rays. Patient support interventions that are neither investigative nor therapeutic (such as anaesthesia) are also included.

One or more procedures can be reported for each hospital admission, but procedures are not undertaken for all admissions, so only some records include information on procedures.

In 2014-15, procedures were reported for hospital patients using the Eighth edition of the Australian Classification of Health Interventions (ACHI) that groups together similar interventions.

The ACHI classification is divided into 20 chapters by anatomical site, and within each chapter by a 'superior' to 'inferior' (head to toe) approach. These subchapters are further divided into more specific procedure blocks, ordered from the least invasive to the most invasive. The blocks, which are numbered sequentially, group the very specific procedure information.

**Figure 14: Proportion of separations by ACHI procedure chapters for patients aged 85 and over and all separations, 2014-15, per cent**

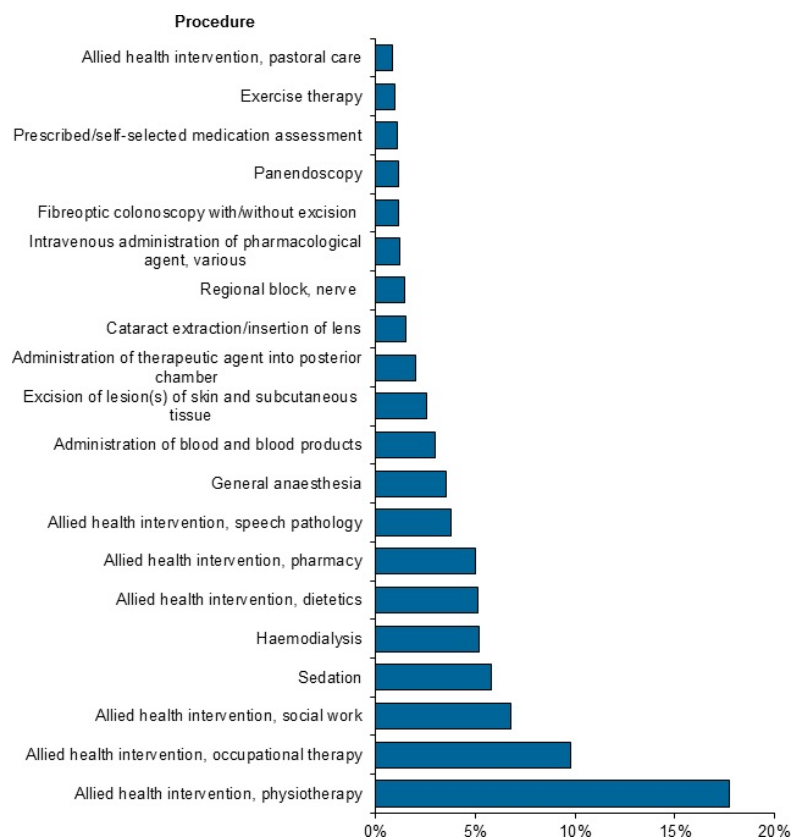


Note: n.e.c. not elsewhere classified.

Source: NHMD.

Examining specific procedures, in 2014-15, 51% (758,866) of procedures for patients aged 85 and over were allied health interventions (such as social work, physiotherapy, occupational therapy, dietetics and diabetes education), compared with 21% for all separations. The most common allied health intervention was *Physiotherapy*, followed by *Occupational therapy* and *Social work* (Figure 15). *Sedation* and *General anaesthesia*, which are companion procedures for many other procedures, together accounted for 9.3% (139,446) of procedures for patients aged 85 years and over.

**Figure 15: The 20 most common procedures reported for separations of patients aged 85 and over, 2014-15, per cent**



Source: NHMD.

## Summary

In 2014-15, public and private hospitals had different patterns of funding for separations for patients aged 85 and over (Figure 16).

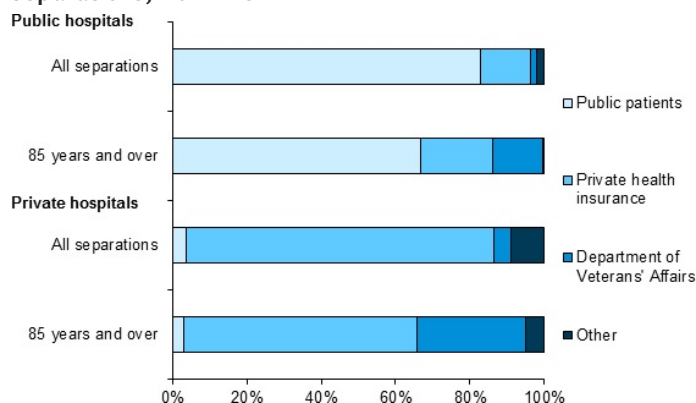
In public hospitals:

- two thirds (67%, 279,399) of separations for patients aged 85 and over were publically funded—a lower proportion than for all separations (83%) (Figure 15)
- private health insurance funded a further 19% (80,215) of separations for patients aged 85 and over, compared with 14% for all separations
- the Department of Veterans' Affairs funded 13.5% (56,335) of separations for patients aged 85 and over, compared with 1.5% for all separations (1.5%).

In private hospitals:

- private health insurance funded the majority (63%, 170,682) of separations for patients aged 85 and over—a lower proportion than for all separations (83%)
- the Department of Veterans' Affairs funded 29.3% (79,808) of separations for patients aged 85 and over, compared with 4.3% for all separations (4.3%)
- 3.0% (8,281) of separations for patients aged 85 and over were public patients—similar to the proportion for all separations (3.7%).

**Figure 16: Proportion of separations by funding source and by hospital sector, patients aged 85 and over and all separations, 2014-15**



Source: NHMD.

## Summary

### Data source

These data are from the National Hospital Morbidity Database (NHMD). For more information on the data drawn from the NHMD, please refer to *Admitted patient care 2014-15: Australian hospital statistics*.

Two NHMD data items—Care type and Additional diagnosis—capture information on palliative care. In this spotlight and the *Admitted patient care* series of reports Palliative care refers to separations with a Care type of *Palliative care*. More detailed information on the provision of palliative care is available in the AIHW's online *Palliative care services in Australia* publication which includes both separations with a Care type of *Palliative care* and/or an Additional diagnosis of *Palliative care*.

### References

1. Australian Bureau of Statistics (ABS) 2016. Deaths 2014. Canberra: [Australian Bureau of Statistics](#).
2. Australian Institute of Health and Welfare (AIHW) 2016. *Admitted patient care 2014-15: Australian hospital statistics*. Health services no. 68. Cat. no. HSE 172. Canberra: AIHW.

## Related material

### Related topics

- [Older people](#)
-