## Australian hospital statistics 1998–99

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# Australian hospital statistics 1998–99

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#### Australian Institute of Health and Welfare

Board Chair Professor Janice Reid

Director Dr Richard Madden

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

Narelle Grayson (patient statistics): Phone (02) 6244 1081 Ian Titulaer (hospital statistics): Phone (02) 6244 1107 Australian Institute of Health and Welfare GPO Box 570 Canberra ACT 2601

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### Foreword

Hospitals comprise one of the largest single industries in Australia, with a total expenditure of about \$17.4 billion in 1998–99, and the equivalent of 220,000 full time employees providing almost 6 million episodes of admitted patient care each year, and a range of non-admitted patient care. The Institute is therefore pleased to be able to present this comprehensive report on Australia's public hospitals and on the admitted patient activity of the public and private sectors. It is the latest in the Institute's series of reports providing annual summaries of data collected for the six years from 1993–94 as the National Hospital Morbidity Database and the National Public Hospital Establishments Database.

For the first time, this publication presents diagnosis, procedure and external cause information using the new International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM). This classification was developed in Australia by the National Centre for Classification in Health (NCCH), with the disease and external cause classifications based on the World Health Organization's ICD-10, and the procedure classification based on the procedure lists of the Medicare Benefits Schedule. It was adopted by New South Wales, Victoria, the Australian Capital Territory and the Northern Territory in July 1998, and in the other States from July 1999. As the Head of the WHO Collaborating Centre for the Classification of Diseases in Australia, I pay credit to the efforts of the NCCH, whose work is recognised worldwide.

The split implementation of ICD-10-AM has meant that it was necessary to map data from the four States forward to ICD-10-AM for this report. The mapping has allowed the data from each group of jurisdictions to be compiled and presented as national data, at a high level of aggregation. Some information on the new classification is included to assist readers in interpreting differences compared with previous years, and the differences that remain after mapping between data compiled in ICD-10-AM and data compiled in ICD-9-CM and mapped to ICD-10-AM. Next year's report will be based on ICD-10-AM data provided by all States and Territories.

With this publication, six years of comparable data on the Australian hospital system are now available from the Institute. Provision of the data represents a major load for all involved. Full compliance with this national collection provides an opportunity to move towards a more unified hospital information system for Australia.

The publication of this report once again reflects a huge effort by Institute staff and by data providers, both in the State and Territory health authorities, and in individual public and private hospitals which are acknowledged this year by name in an appendix. The Australian Hospital Statistics Advisory Committee has also contributed, generously guiding the Institute's preparation of the report.

The report and the data that form the basis of it are under continuing review, so comments from readers are always welcome.

Richard Madden Director June 2000

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Within the Institute, the report was prepared by John Goss, Narelle Grayson, Jenny Hargreaves, James Morris, Ruth Penm, Ian Titulaer and Lucianne Vagg. Warwick Emanuel, Geoff Davis and David Hamilton prepared and managed the databases, and Jonathan Cartledge, Warwick Conn, Gillian Hall, Sharon Negri and Alannah Smith provided other assistance. Amanda Nobbs coordinated the printing and publication process.

Jenny Hargreaves and John Goss managed the project.

### Highlights

*Australian Hospital Statistics* 1998–99 is the fourth in the Australian Institute of Health and Welfare's series of annual summary reports describing the characteristics and activity of Australia's hospitals. It summarises 1998–99 data reported to the Institute's National Public Hospital Establishments Database and National Hospital Morbidity Database.

### Hospital performance indicators

- Nationally, the cost per casemix-adjusted separation in public hospitals was \$2,611. This performance indicator is a measure of the average cost of providing care for an admitted patient, adjusted for the relative complexity of the patient's condition and hospital services provided. Nursing salaries (\$706) and medical labour (\$475) were large components of the cost.
- Queensland reported the lowest cost per casemix-adjusted separation (\$2,390) and the Australian Capital Territory reported the highest (\$3,326).
- Nationally, 48% of public hospitals were accredited, and 76% of all public hospital beds were in accredited public hospitals. In the private sector, 79% of hospitals were accredited, and 89% of all private hospital beds were in accredited private hospitals.

### Hospitals, beds, staff and expenditure

- There were 726 public acute hospitals and 29 public psychiatric hospitals in Australia in 1998–99, a total of 755 public hospitals. There were 190 free-standing day hospital facilities and 312 other private hospitals, making a total of 502 private hospitals.
- Numbers of hospitals can vary from year to year, often because of changes in administrative arrangements. A more useful indicator of the quantum of hospital services is the number of available beds. In 1998–99 there were 53,885 public hospital beds, a decline from the 55,735 beds reported in the previous year. The number of private hospital beds rose from 24,439 in 1997–98 to 25,206 in 1998–99.
- Nurses made up 45% of total full time equivalent staff of public hospitals. Salaried medical officers comprised 9% of the staff, diagnostic and allied health professionals comprised 13%, and 15% were administrative and clerical staff.
- Total recurrent expenditure of public hospitals in Australia in 1998–99 was \$13,677 million, or about \$726 per person. Salaries and wages totalled \$8,552 million.

### Patient numbers and lengths of stay

- The throughput of patients of both public and private hospitals in Australia continues to increase from year to year. There was a total of 5.7 million separations in 1998–99.
- Between 1997–98 and 1998–99, separations from public acute hospitals increased by 2.4% to 3.8 million, and from private hospitals increased by 4.6% to 1.9 million. The private hospitals' share of overall patient separations was 33% in 1998–99.
- Numbers of patient days in public acute hospitals declined by 1% compared with 1997–98, to 15.0 million. Private hospital patient days increased by 1%, to 6.0 million and were 27% of all patient days.

- The average length of stay in hospitals decreased in 1998–99, to 3.9 days from 4.1 days in 1997–98, following the overall pattern of decline shown in previous years. Private hospital stays averaged 3.2 days compared with 3.9 in public acute hospitals. A major factor in the shorter lengths of stay was an increased number of same day separations, now close to half of all separations (47.9%). For patients staying at least one night, average lengths of stay have fallen more slowly over recent years.
- About one in 12 public acute hospital patients were private patients in 1998–99, compared with one in seven in 1994–95.

### **Patient characteristics**

#### Age, sex and Aboriginal and Torres Strait Islander status

- Females accounted for 54% of separations in 1998–99 although they comprised 50.2% of the population. There were more separations for females than males in all age groups from 15 to 54 years (which include child-bearing ages for women) and in the 75 years and over age groups, in which women outnumber men in the population.
- Australians aged over 65 years, comprising 12% of the total population, accounted for 32% of total hospital separations and 46% of patient days. The average length of stay for these patients was 5.8 days, compared with 3.9 days for all patients.
- Aboriginal and Torres Strait Islander peoples had twice the age-adjusted separation rate of other persons. This higher rate is likely to be an underestimate because the identification of Aboriginal and Torres Strait Islanders as patients is incomplete.

#### **Diagnoses, procedures and AN-DRGs**

- Principal diagnoses in the National Health Priority Areas of cardiovascular health, cancer control, injury prevention and control, mental health, diabetes and asthma accounted for over 1.5 million separations and almost 9 million patient days in 1998–99. Cardiovascular disease accounted for the highest number of separations (426,000) and mental disorders accounted for the highest number of patient days (nearly 3 million).
- Fewer patient days were associated with diabetes as a principal diagnosis (167,184) than for other Priority Areas. However, when diabetes as an additional diagnosis was counted, the number of associated patient days increased to 2.2 million.
- For 75% of separations, there was an operation or other procedure reported. In public hospitals, procedures on the digestive system and the urinary system were the most common. In private hospitals, procedures on the digestive system were the most common, followed by procedures on the musculoskeletal system.
- In public hospitals, *Admit for renal dialysis* was the most common AR-DRG, accounting for 11.3% (422,846) of separations. Other leading AR-DRGs included *Chemotherapy* with 3.3% (122,355), and *Vaginal delivery without complicating diagnosis* with 2.9%.
- The corresponding top three AR-DRGs in the private sector were *Other colonoscopy*, *sameday* with 6.5% (119,459) of separations, *Other gastroscopy for non-major digestive disease*, *sameday* with 4.9% (89,032), and *Chemotherapy* with 4.1% (74,658).