

5.5 Re-attendances for asthma

There is evidence that early re-admission to hospital is related to the quality of in-patient care (Ashton et al. 1997). Between 9 and 48% of re-admissions were associated with evidence of substandard care during hospitalisation in one review (Benbassat & Taragin 2000). In relation to asthma, it is known that programs to improve patient care in the hospital or emergency department (ED) can result in reduced hospital re-admissions (Blais et al. 1998; Madge et al. 1997; Mayo et al. 1990; Sin & Tu 2001; Wesseldine et al. 1999). However, the likelihood of re-admission to hospital for asthma is related not only to the quality of care in hospital (Slack & Bucknall 1997) but also to the quality of care in the community (Sin et al. 2002), in particular from the patient's general practitioner or specialist (Homer et al. 1996). The absence of an asthma action plan (Adams et al. 2002; Farber 1998), not using inhaled steroids (Farber et al. 1998; Pollack et al. 2002), and discontinuity of care (Wakefield et al. 1997) are associated with increased hospital admissions and re-admissions. Hence, re-admission rates are a useful indicator of the quality of care for asthma. However, as it is difficult to partition the responsibility for re-admissions between sectors, the re-admission rate should be considered as an indicator of the quality of care for patients with asthma across the whole health care system.

Most research in this field has focussed on re-admissions to hospital. However, the ED is an important site of urgent medical care for many patients with asthma. Hence, in relation to asthma, it would be more appropriate to base the study of repeat attendance at health care facilities on both hospital admissions and ED visits.

In this report, 're-attendance' is the term used to describe repeat admissions to hospitals, visits to EDs or both. In order to monitor re-attendances for asthma, it is necessary to link data to identify multiple hospital admissions or ED visits for asthma by the same individual. This can be achieved through matching personally identifying variables such as name, date of birth and postcode, within the combined hospital and ED data to identify attendances by the same individual.

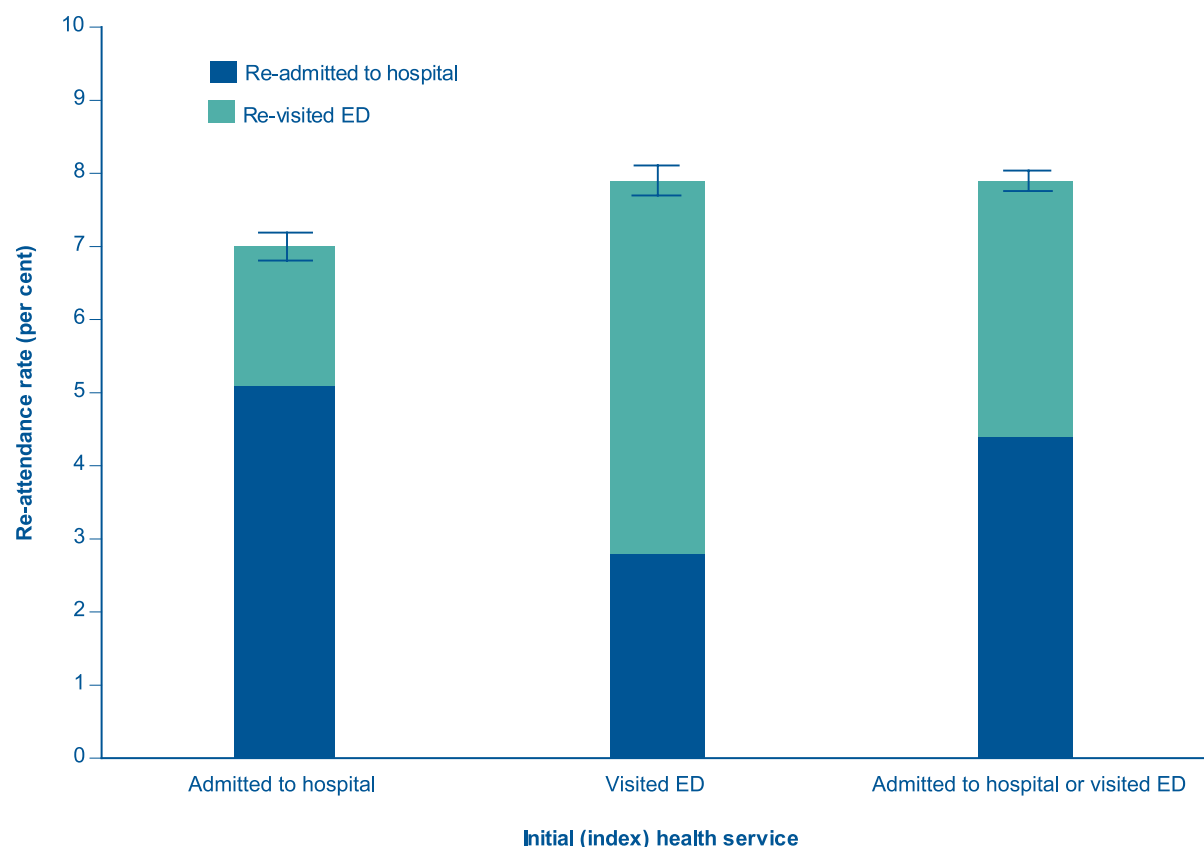
This section utilises linked hospital/ED data from two states, Victoria and New South Wales, for the period July 2000 to June 2003. In Victoria, the source datasets used in the linkage were the Victorian Admitted Episodes Dataset and the Victorian Emergency Minimum Dataset, and in New South Wales, these were the NSW Inpatient Statistics Collection and the NSW Emergency Department Data Collection. For a detailed description of the datasets and methods used in this section, refer to Appendix 1 (Section A1.9).

Only hospital admissions and ED visits with a principal diagnosis of asthma were included in these analyses, and multiple visits by the same individual within the re-attendance period (28 days or 3 months) were only counted once. People who were admitted to hospital as a result of a visit to an ED were counted as hospital admissions only.

Figure 5.40 provides a comparison of re-attendance rates for asthma within 28 days for hospital admissions and ED visits, separately and combined. People who re-attended after either visiting an ED or being admitted to hospital for asthma are represented in the third column. Approximately 8% re-attended, including subsequent hospital admission (5%) or ED visit (3%) for asthma within 28 days.

Among people who had been admitted to hospital for asthma, approximately 5% were re-admitted to hospital for asthma and a further 2% visited an ED for asthma within 28 days. Among people who had initially only visited an ED for asthma, approximately 5% re-visited the ED without a hospital admission, and nearly 3% were subsequently admitted to hospital for asthma within 28 days.

Figure 5.40
Re-attendance rate for asthma within 28 days, all ages, New South Wales and Victoria, 2000–03

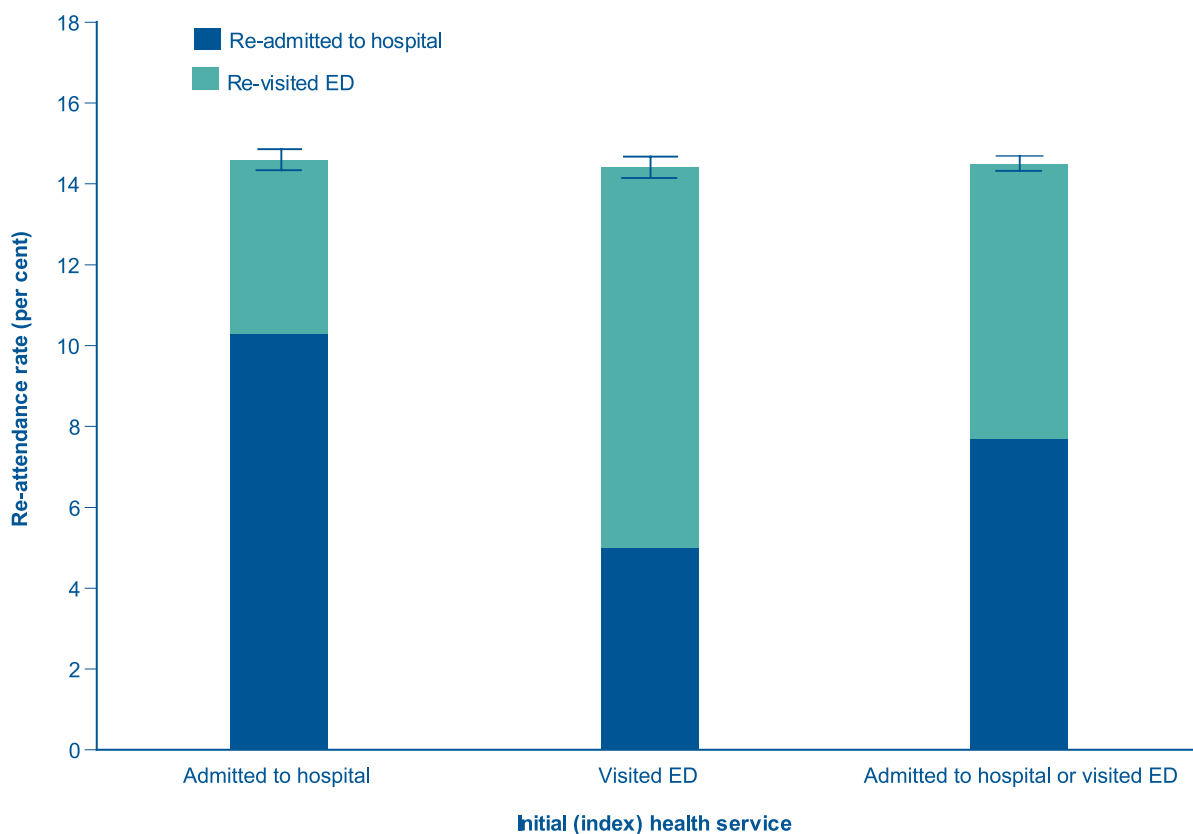


Note: Asthma classified according to ICD-10-AM codes J45 & J46.

Sources: NSW Inpatients Statistical Collection and NSW Emergency Department Data Collection, Centre for Epidemiology and Research, NSW Department of Health; Victorian Admitted Episodes Dataset (VAED) and Victorian Emergency Minimum Dataset (VEMD), Victorian Department of Human Services.

A similar pattern is observed when considering the re-attendance rate within 3 months (Figure 5.41). Approximately 14% of people who were either admitted to hospital or visited an ED for asthma subsequently re-attended for asthma within 3 months. Approximately 10% of people who had been admitted to hospital for asthma were re-admitted, and a similar proportion who visited an ED subsequently returned to the ED within 3 months for asthma.

Figure 5.41
Re-attendance rate for asthma within 3 months, all ages, New South Wales and Victoria, 2000–03

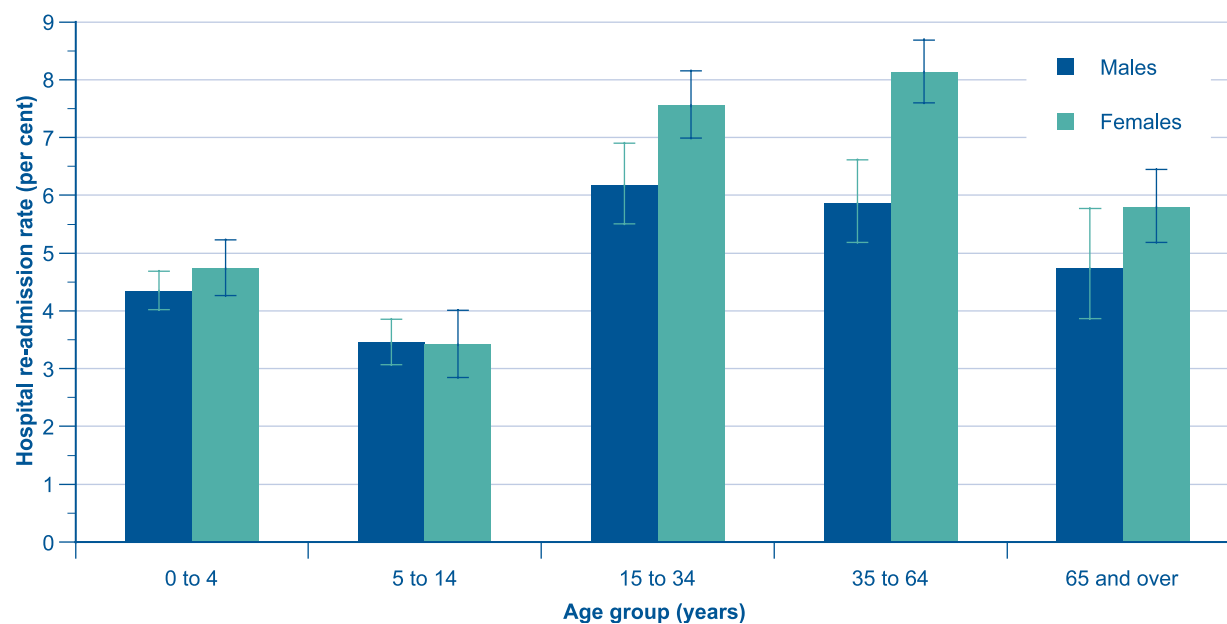


Note: Asthma classified according to ICD-10-AM codes J45 & J46.

Sources: NSW Inpatients Statistical Collection and NSW Emergency Department Data Collection, Centre for Epidemiology and Research, NSW Department of Health; Victorian Admitted Episodes Dataset (VAED) and Victorian Emergency Minimum Dataset (VEMD), Victorian Department of Human Services.

The highest overall rate of re-admissions occurred among people aged 15 to 64 years for both males and females. Generally, more females were re-admitted to hospital for asthma within 28 days than males. This was apparent in all age groups except those aged 5 to 14 years where the rates were very similar. The gender difference was most pronounced among people aged 35 to 64 years (Figure 5.42).

Figure 5.42
Hospital re-admission rate for asthma within 28 days, by age group and sex, New South Wales and Victoria, 2000–03

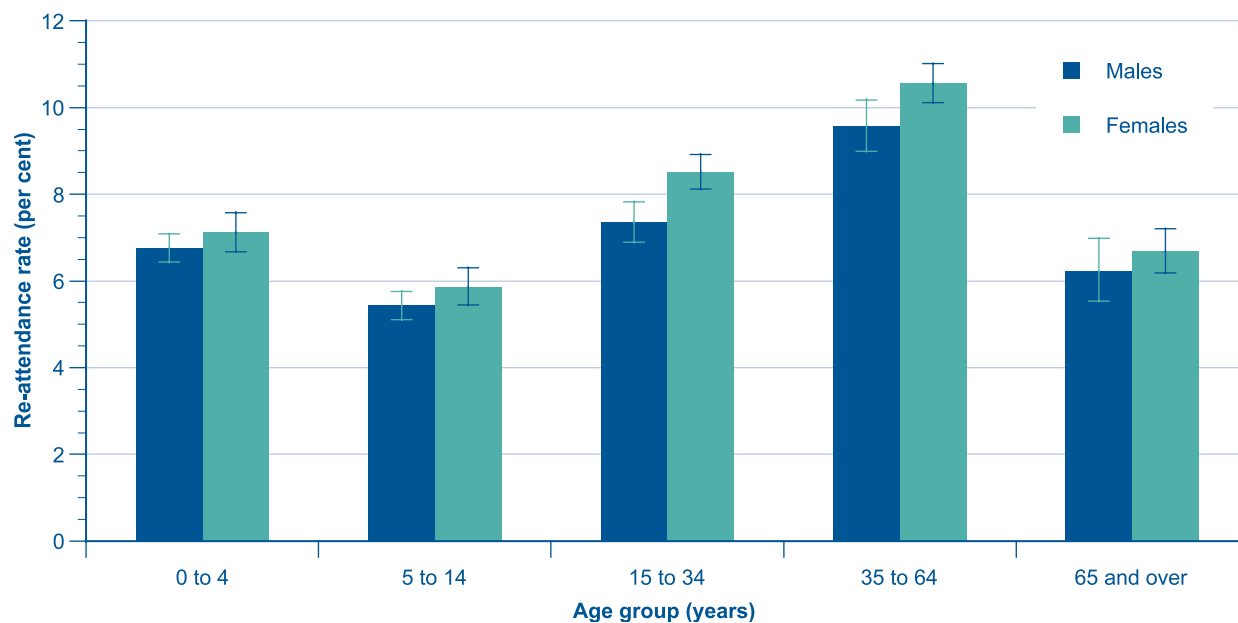


Note: Asthma classified according to ICD-10-AM codes J45 & J46.

Sources: Inpatients Statistical Collection, Centre for Epidemiology and Research, NSW Department of Health; Victorian Admitted Episodes Dataset (VAED), Victorian Department of Human Services.

A similar pattern was observed in re-attendances to hospitals or EDs within 28 days. As for hospital re-admissions, the highest rates of re-attendances occurred among people aged 15 to 64 years. However, the difference between genders was diminished (Figure 5.43).

Figure 5.43
Re-attendance rate for asthma within 28 days, by age group and sex, New South Wales and Victoria, 2000–03



Note: Asthma classified according to ICD-10-AM codes J45 & J46.

Sources: NSW Inpatients Statistical Collection and NSW Emergency Department Data Collection, Centre for Epidemiology and Research, NSW Department of Health; Victorian Admitted Episodes Dataset and Victorian Emergency Minimum Dataset (VEMD), Victorian Department of Human Services.

Summary

Approximately 8% of people who either visited an ED or were admitted to hospital for asthma re-attended these services within 28 days in New South Wales and Victoria. Re-attendances were more common among females than males, particularly among those aged 15 to 64 years.