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## Multiple sclerosis

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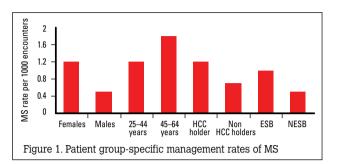


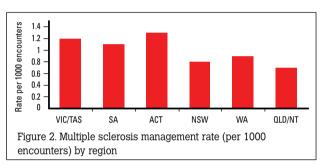
From April 2001 to March 2011 in BEACH, multiple sclerosis (MS) was managed at a rate of 0.9 per 1000 general practice encounters, suggesting an average 98 000 multiple sclerosis general practice patient encounters per year nationally.

Women accounted for about 80% of the 909 patients at encounters for MS, being managed at a rate of 1.2 per 1000 female encounters, significantly more often than males (0.5 per 1000). Patients aged 25-64 years accounted for 84% of all recorded MS encounters, the highest management rate being for those aged 45-64 years (1.8 per 1000 encounters with patients in this age group). Multiple sclerosis was managed significantly more often among patients who held a Commonwealth healthcare card (HCC) than those who did not, and significantly more often among patients from an English speaking background (ESB) than a non-English speaking background (Figure 1).

Multiple sclerosis was managed most often as an ongoing problem for the patient, and new cases were rarely recorded. Rates of medications prescribed and other treatments performed differed little from the BEACH average. Interferon beta was prescribed or supplied for 22 per 100 MS problems managed and accounted for over a third of the medications, while baclofen made up 6% and diazepam, 5% of medications for MS. Two-thirds of the clinical treatments provided involved counselling, and injections accounted for 80% of the procedural treatments recorded. Referrals to specialists were provided more often than average (12.1 compared with 5.6 per 100 problems managed) and almost all were to a neurologist.

The prevalence of MS has been linked to geographic distribution (the latitude gradient). Research suggests lower prevalence in regions closer to the equator; thought to be associated with high vitamin D levels. Region of residence of patients managed for MS in BEACH was examined to test this hypothesis. We combined the tropical/subtropical states of Northern Territory and Queensland, and grouped the cool climate regions of Victoria and Tasmania. Results in Figure 2 show region specific rates over the decade. The rate of MS was significantly higher at encounters with patients from Victoria/Tasmania (1.2 per 1000 encounters; 95% CI: 1.1–1.4) than with those living closer to the equator (Queensland/Northern Territory) (0.7 per 1000; 95% CI: 0.6-0.8). However,





the management rate in the Australian Capital Territory was even higher than in southern states. These results did not change after adjustment for age/gender standardisation to patients at all recorded encounters in Australia over the decade. Our findings on gender, ethnicity and geographic distribution of patients support other results in MS research.<sup>1</sup>

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