The prevalence of MS in the United States: A population-based estimate using health claims data

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Study objective and summary result
This study aimed to calculate a national multiple sclerosis (MS) prevalence estimate for the US, and it estimated that the 2010 MS prevalence cumulated over 10 years was 309.2 cases per 100,000 adults.

What is known and what this paper adds
Current estimates of the national MS prevalence in the US are largely revisions of estimates from older data and do not reflect changes in demographics and diagnostic criteria. This study provides an updated estimate based on recent data.

Participants and setting
This study used administrative health claims (AHC) datasets for the 2008–2010 period from 2 private insurers (Optum, Truven Health), Medicare, Medicaid, and the Veterans Affairs healthcare system. Together, these datasets provided data on 125 million adult US residents.

Design, size, and duration
This study detected cases of MS based on the accumulation of ≥3 MS-related hospitalizations, outpatient visits, or prescription-fillings within a 1-year period. This study estimated overall and sex-, age-, and census region–stratified MS prevalence estimates cumulated over 3 years. This study used these estimates and 2010 US census data to develop national prevalence estimates that were then pooled. Undercount adjustments were used to estimate the 2010 MS prevalence cumulated over 10 years.

Primary outcome measures
The primary outcome was the estimated 2010 national MS prevalence cumulated over 10 years.

Main results and the role of chance
The estimated 2010 national MS prevalence cumulated over 10 years was 309.2 cases (95% confidence interval, 308.1–310.1) per 100,000 adults representing 727,344 cases.

Bias, confounding, and other reasons for caution
This study could not obtain more than 3 years of AHC data.

Figure
Age-stratified and sex-specific estimates for the 2010 national MS prevalence cumulated over 10 years

Generalizability to other populations
The generalizability of this study’s results may be limited by the exclusion of children, the Indian Health Service, prison healthcare systems, and undocumented US residents.

Study funding/potential competing interests
This study was funded by the National MS Society (NMSS). Some authors report serving on advisory committees for the NIH, the NMSS, and NeuroPace; receiving funding, consulting fees, and travel expenses from various healthcare companies, various foundations and institutes; US and Canadian agencies; and Thai government affiliates; serving as investigators on industry-sponsored studies; holding endowed chairs; and being employed by the NMSS. Dr. Marrie serves on the editorial board of Neurology®. Go to Neurology.org/N for full disclosures.

A draft of the short-form article was written by M. Dalefield, a writer with Editage, a division of Cactus Communications. The authors of the full-length article and the journal editors edited and approved the final version.
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Out-of-pocket costs are on the rise for commonly prescribed neurologic medications

In the article “Out-of-pocket costs are on the rise for commonly prescribed neurologic medications” by Callaghan et al., first published online May 1, 2019, the 2004 out-of-pocket costs for MS medications (mean [SD]) in the Abstract and Results should be $33 ($50) rather than $15 ($23), and the 2004 median/IQR in the Results should be $25 ($20–$32) rather than $14 ($10–$16). The authors regret the errors.

Reference

The prevalence of MS in the United States
A population-based estimate using health claims data

In the article “The prevalence of MS in the United States: A population-based estimate using health claims data” by Wallin et al., first published online February 15, 2019, the text regarding the lower bound for MS prevalence in a paragraph in Results should read: “After adjustment for the uninsured and application of the lower-bound inflation factor to account for undercounting due to the limited period of observation, the estimated 2010 prevalence for MS cumulated over 10 years was 288.2 per 100,000 (95% CI 287.4–289.0), corresponding to 623,437 people with MS.” This is correctly represented in table 2. The authors regret the error.

Reference

Epidemiology of NMOSD in Sweden from 1987 to 2013
A nationwide population-based study

In the article “Epidemiology of NMOSD in Sweden from 1987 to 2013: A nationwide population-based study” by Jonsson et al., in figure 5, the incidence of NMOSD in Australia and New Zealand should have been 0.37/1,000,000 person-years (CI: 0.35–0.39). The figure should also have included A and B labels for the panels and a label for the first panel’s x-axis, “Incidence rate (per 1,000,000 individuals).” The authors and the editorial office regret the errors.

Reference