

## Elderly Women Experience Lower Rates of 5-Year Mortality Following Stroke in the United States

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**Background.** Little information exists on whether there are gender differences in long-term mortality among elderly stroke survivors. We sought to compare 5-year mortality rates among elderly American men and women following an ischemic stroke.

**Methods.** We examined 5-year mortality rates among all fee-for-service Medicare patients >65 years of age hospitalized with an ischemic stroke diagnosis (ICD-9 434, 436) from 1993 to 1999. Cox proportional hazards models censored for deaths and adjusted for covariates (year of discharge, demographic characteristics, and clinical history within the 12 months prior to the index stroke event).

**Results.** A total of 1,919,963 stroke hospitalizations were identified from 1993-1999 (mean age 78 years, 58% women, and 86% White). The crude 5-year mortality was 55% for women and 64% for men. In risk-adjusted analyses, women had lower mortality rates than men (HR 0.72, [95% CI 0.72-0.73]), and the mortality risk decreased further for women with advancing age (HR 0.72, [0.72-0.73]; HR 0.70, [0.69-0.71]; HR 0.69, [0.68-0.69] respectively for ages 65-74, 75-84, and 85+). In risk-adjusted analyses stratified by race, the gender patterns for Whites were comparable with the patterns for the total sample, however, among Blacks, women had consistently lower risk-adjusted mortality rates as compared with men in all age groups (HR 0.69 [0.67-0.71], HR 0.68 [0.67-0.70], and HR 0.69 [0.67-0.70] respectively for age groups).

**Conclusion.** Our data demonstrates gender differences for long-term mortality, and raises interesting questions about the etiology and other potential factors that may be responsible for the observed gender difference in stroke outcomes.