



## Selective prescribing of statins and the risk of mortality, hospitalizations, and falls in aged care services – PubMed

<https://pubmed.ncbi.nlm.nih.gov/29574073/>

### Abstract

**Background:** Compared to randomized controlled trials, nonexperimental studies often report larger survival benefits but higher rates of adverse events for statin use vs nonuse.

**Objective:** We compared characteristics of statin users and nonusers living in aged care services and evaluated the relationships between statin use and all-cause mortality, all-cause and fall-related hospitalizations, and number of falls during a 12-month follow-up.

**Methods:** A prospective cohort study of 383 residents aged  $\geq 65$  years was conducted in six Australian aged care services. Data were obtained from electronic medical records and medication charts and through a series of validated assessments.

**Results:** The greatest differences between statin users and nonusers were observed in activities of daily living, frailty, and medication use (absolute standardized difference  $>0.40$ ), with users being less dependent and less frail but using a higher number of medications. Statin use was associated with a decreased risk of all-cause mortality (adjusted hazard ratio [HR] 0.58, 95% confidence interval [CI] 0.37-0.93) and hospitalizations (HR 0.67, 95% CI 0.46-0.98). After exclusion of residents unable to sit or stand, statin use was associated with a nonsignificant increase in the risk of fall-related hospitalizations (HR 1.47, 95% CI 0.80-2.68) but with a lower incidence of falls (incidence rate ratio 0.67, 95% CI 0.47-0.96).

**Conclusions:** The observed associations between statin use and the outcomes may be largely explained by selective prescribing and deprescribing of statins and variation in likelihood of hospitalization based on consideration of each resident's clinical and frailty status. Randomized deprescribing trials are needed to guide statin prescribing in this setting.