

**Title: Nationwide Trends in Cardiovascular Disease Spending among the Elderly, 2000-2009**

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Background/Aims: One in every six health care dollars is spent on individuals with cardiovascular disease (CVD), and this spending will likely increase as the U.S. population ages. In order to understand the value of our substantial investment in CVD care, it is important to understand trends in CVD spending and, because value varies by patient risk, whether these trends vary across subpopulations with different CVD risk. The aim of this study was to assess national trends in CVD spending among different CVD risk subgroups.

Methods: We examined trends during 2000-2009 in CVD-related and inflation-adjusted average spending using Medicare Current Beneficiary Survey data. We studied a total sample of 35,378 non-institutionalized, fee-for-Service Medicare beneficiaries 65 years or older. Analyses were conducted overall and stratified according to presence of CVD and, in those without CVD, level of CVD risk (high versus low).

Results: From 2000 to 2009, among patients with CVD, overall annual spending increased by 29% (95%CI: 20-39), from \$11,726 to \$15,109. Medicare and out-of-pocket (OOP) spending increased by 39% (95%CI: 26-51), from \$7,017 to \$9,741 and by 14% (95%CI: 1-26), from \$1,800 to \$2,047 respectively. In individuals with high CVD risk, overall spending, Medicare, and out-of-pocket spending increased by 44% (95% CI: 12-76), from \$7,204 to \$10,404; by 75% (95% CI: 22-129), from \$3,789 to \$6,657; and by 12% (95% CI: -14-37), from \$1,328 to \$1,484 respectively. For those at low CVD risk, changes in spending were not statistically significant. Per capita averages in 2009 were: overall: \$7,938 (SE=608), Medicare: \$4,444 (SE=512), and OOP: \$1,567 (SE=107).

Conclusions: We observed significant increases in spending, especially among patients with pre-existing CVD and those at high CVD risk. More research is needed to investigate whether these increases in spending impacted health-related outcomes and whether different CVD subpopulations benefited differently from this spending growth.

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