STEEP DECLINES IN POPULATION RATES OF CORONARY REvascularization

Oral Contributions
Room 140 A
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Session Title: Stable Ischemic Heart Disease: Year in Review and Highlighted Clinical Studies
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Background: Improvements in prevention and evidence favoring an initial strategy of medical therapy alone for stable angina could lead to declines in coronary revascularization rates. Few population-based assessments of trends in revascularization have been performed.

Methods: We calculated annual age-sex adjusted rates of revascularization (PCI or CABG) among MA residents between 2003 - 2011. Annual MA population sizes for age- and sex-specific strata from the US Census Bureau were used as denominators. Trends were also examined separately for PCI vs. CABG, and those presenting with MI vs. non-acute.

Results: Between 2003 - 2011, 169,629 coronary revascularizations were performed (76.3% PCI, 23.7% CABG) among MA residents (mean adult population 5.2 M). The age-sex-adjusted rate of revascularization per 100,000 residents per year declined from 423 to 275 (P < .001 for trend, Figure). Rates of PCI declined from 318 to 213 (p < 0.001) while rates of CABG declined from 113 to 67 (p < 0.001). PCI performed for MI declined less, from 119 to 100 (p = .005), while non-urgent PCI declined sharply from 206 to 122 (p < 0.001).

Conclusion: Rates of coronary revascularization have declined by more than 35% in MA since 2003. Rates of non-urgent PCI have declined by more than 40%, compared to a < 20% decline in PCI for MI. These data have broad implications for regional health policy, training and provider accreditation, hospital resource allocation, and patient outcomes.

*Figure. Trends in Coronary Revascularization Rates Among Massachusetts Residents, April 2003 through September 2011*