DECLINE IN HOSPITALIZATIONS FOR ACUTE MYOCARDIAL INFARCTION IN A METROPOLITAN POPULATION OVER PAST DECADE

ACC Poster Contributions
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Background: Population studies indicate declines in cardiovascular mortality yet hospitalizations for acute myocardial infarction (AMI) rose from 1970-2000. There is emerging evidence from hospital data that the AMI epidemic is waning in the 21st century. We hypothesized a decline in the number and rate of hospitalizations for AMI over the past 10 years which paralleled mortality declines.

Methods: Utilizing data provided by the Minnesota Hospital Association, we identified patients age 30 - 74 discharged from the 20 acute care hospitals within the Minneapolis-St. Paul (MSP) metropolitan area (2.85 million) between January 1999 and December 2007 with a primary discharge diagnosis of AMI (ICD-9 410). AMI cases were restricted to residents of the MSP area. Census estimates were available through 2007. AMI rates were calculated and standardized to the 2000 U.S. Census.

Results: A total of 42,850 AMI were identified in the Twin Cities over the past 10 years. There was a modest decline in hospitalizations for AMI in MSP during this time, 10.1% in men and 18.3% in women [Figure A]. After accounting for the increase in size of the MSP adult population, the rate of AMI declined significantly for men (34.1%) and women (27.4%) [Figure B].

Conclusions: From 1999-2007, the number of AMI hospitalizations fell in the MSP area. Consideration of population growth increased the magnitude of the decline. These changes have important implications for medical resource allocation and may be the result of improved care and prevention.