medical costs of elderly Americans are forecasted using the Future Elderly Model (FEM) – an established dynamic microsimulation model of health of Americans aged over 50. The change in the health and health care costs of obesity due to the introduction and widespread use of statins are estimated by introducing a scenario in which statins have not been discovered, using well-recognized estimates of the health impact of statins. RESULTS: Simulations reveal that the life expectancy of 50-year-olds with a healthy BMI (18.5–29.2) is 9.2 years longer than it would be in a world without statins. Among the obese population, the life expectancy gains due to statin use are $18,000 for type 1 obesity, $19,100 for type 2 obesity and $19,800 for type 3 obesity. About 33% of these costs are shouldered by the Medicare program.

CONCLUSIONS: While the widespread use of statins is beneficial for individuals of all weight types, its health impact is highest among the obese population. Higher health care costs are relative to the value of life expectancy gains, and mostly paid for by individuals.

PCV52 HEALTH CARE COSTS AND RESOURCE UTILIZATION IN WORKING AGE PATIENTS WITH HIGH RISK VASCULAR DISEASE: FINDINGS FROM A MULTI-Employer CLAIMS DATABASE

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OBJECTIVES: To assess the health care costs and resource utilization of patients with high risk vascular disease (HRVD). METHODS: A retrospective cohort study was conducted using a multi-employer-based U.S. administrative claims database. The study included patients aged 18 to 64 years who had HRVD (defined as cerebrovascular disease [CVD], coronary artery disease with diabetes [CADD], peripheral artery disease [PAD], or history of acute coronary syndrome [ACS] [≥30 days through 365 days after discharge for ACS]) between 10/01/2008 and 09/30/2009, with minimum 12-month pre-index and 24-month post-index insurance eligibility. Annual health care costs and resource utilization were compared across HRVD patients with 1, 2, or 3 affected arterial beds in the first and second year follow-up periods. Results: Of 152,290 patients who met the selection criteria, 54.4% were male with mean age 54.5 (SD = 12.0) years. Among the identified HRVD patients, the first/second year, 6.8%/4.3% had ≥1 hospitalization event and 27.2%/25.1% had ≥1 ER visit. The mean annual number of physician office visits was 22/18 for the first and second year respectively. Mean total annual health care costs per HRVD patient for the first and second year were $19,033/$18,547, of which outpatient costs were $9,698/$8,530, inpatient costs were $6,286/$6,220, and pharmacy costs were $3,018/$3,797. HRVD-related costs during the first year ($8,669) and second year ($7,955) accounted for close to half of the overall total health care costs. Mean total annual costs in the first and second year were $17,820/$17,501, $28,060/$26,554, and $39,306/$38,513 for patients with 1, 2, and 3 affected arterial beds (P <0.001). CONCLUSIONS: These results show the high economic burden of HRVD and the especially high economic burden associated with HRVD patients with multiple affected arterial beds.

PCV53 HEALTH CARE COSTS AND RESOURCE UTILIZATION IN ELDERLY PATIENTS WITH HIGH RISK VASCULAR DISEASE

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OBJECTIVES: To assess the health care costs and resource utilization of elderly patients with high risk vascular disease (HRVD). METHODS: A retrospective cohort study was conducted using the Truven MarketScan® Medicare claims database and identified patients ≥65 years, who had HRVD (defined as cerebrovascular disease [CVD], coronary artery disease with diabetes [CADD], peripheral artery disease [PAD], or history of acute coronary syndrome [ACS]) between 10/01/2008 and 09/30/2009, with minimum 12-month pre-index and 24-month post-index insurance eligibility. Annual health care costs and resource utilization were compared across HRVD patients with 1, 2, or 3 affected arterial beds for the first- and second-year follow-up periods. The comparison of mean costs between cohorts was conducted using a generalized linear model with log link function and gamma distribution. RESULTS: Of 152,290 patients who met the selection criteria, 54.4% were male with mean age 64.5 (SD = 12.0) years. Among the identified HRVD patients, the first second year, 6.8%/4.3% had ≥1 hospitalization event and 27.2%/25.1% had ≥1 ER visit. The mean annual number of physician office visits was 22/18 for the first and second year respectively. Mean total annual health care costs per HRVD patient for the first and second year were $19,033/$18,547, of which outpatient costs were $9,698/$8,530, inpatient costs were $6,286/$6,220, and pharmacy costs were $3,018/$3,797. HRVD-related costs during the first year ($8,669) and second year ($7,955) accounted for close to half of the overall total health care costs. Mean total annual costs in the first and second year were $17,820/$17,501, $28,060/$26,554, and $39,306/$38,513 for patients with 1, 2, and 3 affected arterial beds (P <0.001). CONCLUSIONS: These results show the high economic burden of HRVD and the especially high economic burden associated with HRVD patients with multiple affected arterial beds.

A retrospective database analysis was conducted using Medicare data (2008-2010). Given that HRVD patients were identified using myocardial infarction (International Classification of Disease, 9th Revision, Clinical Modification [ICD-9-CM] codes 410.xx, 412.xx), unstable angina (411.1x, 411.81, 411.89), ischemic stroke (434.xx, 436.xx, 437.0x, 437.1x, 438.xx, 497.02), transient ischemic attack (433.xx), heart failure (428.xx), and pulmonary edema (414.xx, 511.xx, 512.xx, 96.07). The first diagnosis date was designated as the index date. One-year continuous enrollment pre- and post-index date was required. Charlson Comorbidity Index (CCI) scores >0 and resource utilization were examined for the baseline period. Prescribed medications were evaluated within 60 days post-diagnosis. Health care utilization and costs were measured for the follow-up period. RESULTS: A total of 203,865 patients were identified for study (mean age 78.9 years). CVD patients were divided into type 1, type 2, and type 3 obesity. Type 1 obesity was the most prevalent obesity region. (39.5%). The baseline CCI score was 1.86, and the most frequently diagnosed comorbid conditions were diabetes (32.8%), tumor (31.0%) and chronic obstructive pulmonary disease (18.4%). Furthermore, health care costs and resource utilization were relative to the value of life expectancy gains, and mostly paid for by individuals.