PROGRESS trial. Cost for stroke-related hospitalization and re-hospitalization, rehabilitation, nursing home, and ambulatory care derived from national data and published literature. Historical cost data was inflation-adjusted to 2001 values, savings in the 2nd and 3rd year were discounted at 3%, and health care CPI inflation-adjusted at 4.7%. Treatment and control group (no SSP medication) were replenished after the 1st and 2nd year in equal numbers with newly SSP eligible patients (new first stroke survivors of the HMO population). Drug prices were defined as WAC-20% plus $5 co-pay. Sensitivity analysis on stroke incidences, selected transition probabilities and costs will be presented. RESULTS: SSP with perindopril/indapamide saved 28 lives and 110 strokes in the first year (after 3 years 169 and 325 respectively). Treatment achieved a net benefit of $803,000 in the first, $3,267,253 in the second and $6,207,814 by the third year. The cost per stroke prevented was $24,648 and $47,412 per death averted over the three year period. CONCLUSIONS: SSP with perindopril/indapamide saves lives and healthcare costs.

**PVE24**

**RATES OF HOSPITALIZATIONS FOLLOWING ATEROTHROMBOTIC STROKE AND ASSOCIATED COSTS**

Caro J1, Migliaccio-Walle K1, Ishak K2, O’Brien JA1

1Caro Research Institute, Concord, MA, USA; 2Caro Research Institute, Dorval, QC, Canada

OBJECTIVES: To estimate the rate of hospitalizations due to cardiovascular disease and other causes following an acute atherothrombotic stroke and the associated costs. METHODS: We evaluated hospitalization rates (cumulative number divided by the patient time in a given period) following a diagnosis of acute stroke using the health care records of residents of Saskatchewan, Canada who were diagnosed between 1990–1995. Data on patient characteristics and medical history were available from January 1980 and follow-up was complete to December 2000. Costs (2002 Canadian dollars) were also estimated. Reasons for hospitalization were classified on the basis of primary diagnosis, into atherothrombotic (stroke, TIA, myocardial infarction, angina, or other cardiovascular disease), gastrointestinal (GI) bleeding and other. RESULTS: The 18,704 patients with stroke (48% male) tended to be elderly (mean age 70.5 years). Nearly two-thirds died during follow-up. At least 1 hospitalization occurred in 13,952 (72.7%), a hazard of 36.2/100 person years and those hospitalized had 3.9 admissions on average. Atherothrombotic causes were most frequent (82.4%), the majority were stroke and TIA (53.2%), but length of stay was longest for GI bleeds (mean 17.1 days vs 16.1 for atherothrombotic disease). The admission rates due to atherothrombotic disease were 3 times higher in the month following stroke than after the first year; and higher with age greater than 65 years (hazard ratio 1.8, 95% CI 1.69–1.83), diabetes (1.7, 1.62–1.86), atrial fibrillation (2.1, 1.96–2.30), hypertension (1.8 1.65–1.86), heart failure (2.1, 1.97–2.21) and prior atherothrombotic events (1.2, 1.17–1.32). Atherothrombotic hospitalizations accrue costs between $442 per patient per month in the first month to $39 per patient per month after 5 years. CONCLUSIONS: Patients surviving a stroke are frequently readmitted, mostly for atherothrombotic problems, and these events accrue substantial costs, especially early on in the course post-stroke.

**PVE25**

**AN INVESTIGATION OF THE CARE NEEDS AFTER ACUTE ISCHEMIC STROKE: AN ANALYSIS OF THE DATA COLLECTED IN THE ERLANGEN STROKE PROJECT**

Ward AJ1, Payne KA2, Caro J1, Heuschmann PL1, Kolominsky-Rabas P1

1Caro Research Institute, Concord, MA, USA; 2Caro Research Institute, Montreal, QC, Canada; 3University of Erlangen, Erlangen, Germany

OBJECTIVE: To determine the functional outcome, location of care and economic consequences three months following hospitalization for first ischemic stroke. METHODS: As part of the Erlangen Stroke Project (ESPro), information was collected on patients diagnosed as having a stroke between April 1994 and March 1996. Barthel Index (BI), Functional Independence Measure (FIM) and location of care were determined three months after the stroke. A subset of eight items from the FIM was used to define patients as independent or dependent on caregivers. BI scores three months after the stroke were divided into three categories low (0–55), medium (60–90) and high (95–100). Data collected about health and social services used by these patients were combined with estimates of costs for these services in Germany. Costs were estimated in 2000 DM (1 = $ 0.53 USD, €0.51), undiscounted. RESULTS: Information was recorded on 379 patients, half of whom had not fully recovered at 3 months (27% medium BI, 24% in low category). The majority (79%) was residing in the community, 43% remained dependent but 61% of them still returned to the community. Cumulative costs of care over 3 months for institutionalized patients with high BI were DM35, 100, and with medium BI DM55,000; about 1.5 fold those of patients in the same category residing in the community. Costs for patients with low BI were higher whether in the community (DM51,600) or in institutional care (DM53,400). CONCLUSION: Many patients were left with a level of disability that required a substantial amount of support from caregivers. In Germany, location of care has an impact on the economic consequences at higher levels of BI only.