OBJECTIVE: The objective of this study was to estimate rates of venous thromboembolism (VTE) and inpatient healthcare utilization following total hip replacement (THR) or total knee replacement (TKR) surgery.

METHODS: Using a retrospective cohort approach and inpatient data from a large Midwestern integrated healthcare organization, we evaluated all patients who underwent a THR or TKR procedure between January 1, 1998 and September 30, 2000 and who received warfarin or low-molecular-weight heparin (LMWH) prophylaxis against deep vein thrombosis (DVT) during the initial hospitalization. VTE rates (based on ICD-9-CM diagnoses for pulmonary embolism or DVT) during the index stay were estimated along with the associated incremental length of stay (LOS) and total charges. Time to VTE occurrence within 90 days following index hospitalization also was evaluated along with the associated LOS.

RESULTS: We identified 1411 patients who underwent THR (N = 605) or TKR surgery (N = 806). For both procedures, warfarin was used 57% of the time versus 36% for LMWH, while 7% of patients received both. The mean LOS (±SD) for the initial hospitalization was 4.4 ± 2.0 days and mean charges were $22,150 ± $12,250. The rate of VTE during the initial hospitalization was 1.1% (15/1411) leading to an extra 3.7 ± 0.5 days (p < 0.01) in hospital and $11,269 ± $3,168 in additional charges. Following discharge, another 14 patients (1%) were readmitted for treatment of VTE with a mean LOS of 6.1 ± 7.8 days. Most of the readmissions for VTE (10 of 14) occurred within 30 days. CONCLUSIONS: We found that approximately 2% of patients receiving DVT prophylaxis in this high-risk population were diagnosed with thromboembolic events, which resulted in a significant health care burden and cost extending at least 90 days beyond surgery. Whether this failure rate represents inadequate anti-coagulation or other risk factors requires further study.

OBJECTIVES: To estimate the resource use and costs associated with atherothrombotic events following the diagnosis of peripheral arterial disease (PAD).

METHODS: We evaluated resource use and costs following a recorded diagnosis (identified using ICD-9 codes) of PAD using the healthcare records of residents of Saskatchewan, Canada who were diagnosed between 1985–1995. Data on patient characteristics and medical history were available from January 1980 and follow-up was complete to December 2000. Rates of resource use (hospitalizations, visits, procedures) were determined by dividing the cumulative amount of use by the patient time in a given period. Unit costs (2002 Canadian dollars) were applied to the corresponding resource use to obtain the mean costs. In this paper, the impact of atherothrombotic (myocardial infarction, angina, stroke, TIA) hospitalizations is considered and compared to that in patients with myocardial infarction and stroke.

RESULTS: Among 16,440 patients with PAD, 54.9% were male, mean age was 67.3 years, 58% died during follow-up, 85.8% were hospitalized at least once and one third (37.1%) had at least one atherothrombotic-related hospitalization, a hazard of 6.5/100 person-years. Among those hospitalized, there were 2.1 atherothrombotic hospitalizations on average. The hazard was highest immediately following diagnosis (30.5/100PY) but dropped rapidly to 25.3 in the second month, 16.8 by month 6 and 13.7 by the end of the first year. This translated to a monthly cost of $80.40 per patient in the first month (66.3% of total hospitalization cost), dropping to $45.70 at year end (77.1% of total). These atherothrombotic event costs amounted to $28.3 million in years 2–5; whereas, patients suffering a myocardial infarction or stroke incurred $28.2 million and $31.0 million, respectively. CONCLUSIONS: Hospitalizations for atherothrombotic events account for a substantial portion of the costs of managing patients with PAD.

OBJECTIVES: To describe costs and utilization associated with common inpatient treatments for deep venous thrombosis (DVT) and pulmonary embolism (PE).

METHODS: Data from medical records were collected for DVT and PE admissions (identified using Diagnostic Related Group [DRG] or All Patient Refined DRG codes) from 132 hospitals between January 1999 and December 2000. Admissions were classified by treatment, including unfractionated heparin (UFH) and low-molecular-weight heparin (LMWH) monotherapies, UFH with LMWH,