research (CER) in Washington State’s Learning Healthcare System - the Comparative Effectiveness Research Translation Network (CERTAIN). METHODS: Leveraging infrastructure of the Surgical Care and Outcomes Assessment Program (SCOPA), a statewide coordinator and implementation program that tracks surgical outcomes in hospitals, we created an infrastructure for conducting CER/PCOR. We are using the CERTAIN network to conduct a pragmatic randomized multi-site, prospective, observational cohort study of patients in community settings with peripheral artery disease (PAD) treated with open surgical, endovascular, or conservatively managed care. Clinical and patient-reported outcomes (PRO) are collected at baseline, 30-days, 6- and 12-months post intervention. The primary outcome is the change in scores on the Walking Impairment Questionnaire. The SCOPA Medical Director engaged PAD-treating vascular surgeons, interventional radiologists and cardiologists. Study staff, a steering committee and a local review board oversaw the pragmatic design. SCOPA CERTAIN Survey Center administers all PRO surveys using a mode of administration of each patient’s choice (e.g. web-based, paper-pencil), and deploys a central database for scores on PRO instruments administered using various modes of administration. CONCLUSIONS: This CERTAIN PAD study illustrates the effort required to conduct a pragmatic trial. As the nation embraces the research paradigm of CER, Washington State’s Learning Healthcare System is modeling success.

PCV23 USE OF STATINS AND RISK OF DEMENTIA IN HEART FAILURE
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OBJECTIVES: Heart failure (HF) is associated with increased risk of dementia and dementia is an independent predictor of hospitalization in HF patients. Studies show dyslipidemia may be involved in the pathogenesis of dementia. However, it is unclear whether statins are associated with risk of dementia in HF patients. The present study examines the effectiveness of statins to prevent dementia in HF patients. METHODS: This retrospective, longitudinal study used a cohort of patients age 65 years or older who were diagnosed with dementia during the median follow up of 22 months. Using the time dependent Cox model, the adjusted dementia rate ratios (95% confidence interval) among current users and former users were 0.93 (0.71-1.21) and 0.99 (0.79-1.25). Use of IPTW resulted in similar findings with rate ratios (95% confidence interval) of 1.24 (0.88-1.74) among current users and 0.94 (0.67-1.31) for former users as compared with the nonusers. CONCLUSIONS: This study found no difference in risk of dementia among the current and former users of statins as compared with the nonusers in an already at-risk HF population.

PCV27 EXAMINING THE RATE OF MYOCARDIAL INFARCTION AND ASSOCIATED COSTS IN PATIENTS CONSECUTIVELY RECEIVING CLOPIDOGREL AND VARIOUS PPIs: A RETROSPECTIVE CLAIMS ANALYSIS
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OBJECTIVES: The purpose of this study was to examine the rate of myocardial infarctions (MI) and associated event costs in patients prescribed clopidogrel and a concomitant PPI. This was a retrospective study of administrative claims using the IMS Lifelink Database. Adult GERD patients concomitantly prescribed clopidogrel and ≥ 30 days from July 1, 2005-December 31, 2009 to provide comparison of frequency data. The rise in expenditure was more substantial as compared to utilization and expenditures was associated with the use of cardiovascular drugs. The rise in expenditure was more substantial as compared to utilization for patients with an event was $31,806, and the average MI-related emergency department visit cost was $1,934. CONCLUSIONS: The rate of MI was different among PPIs when used in combination with clopidogrel. These differences in MI rates may impact future clinical guidelines as well as a significant economic impact given the high cost of MI-related hospitalizations and emergency department visits. Further studies are needed to evaluate the differences between these cohorts.

PCV28 CLINICAL IMPACT OF TREATMENT PERSISTENCE IN PATIENTS WITH ATRIAL FIBRILLATION
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OBJECTIVES: Discontinuation rates for vitamin K antagonists (VKAs) are high in patients with atrial fibrillation (AF). The aim of the current study was to assess the impact of VKA persistence compared to that of rivaroxaban, a new oral anticoagulant (NOAC) taken once daily and requiring no monitoring, on the incidence of ischemic strokes in patients with AF. METHODS: Data relating to persistence rates of warfarin and rivaroxaban over 18 months of patient follow-up was derived from the literature. A model was developed synthesizing these data with published ischaemic stroke rates and the effect of switching to an alternative treatment. The model assumed an annual risk of ischaemic stroke of 1.65% and 5.00% for patients receiving warfarin or no treatment, respectively. To obtain the rate of risk for patients receiving rivaroxaban, a relative risk of 0.94 was applied to the warfarin risk giving an annual probability of 0.55%. Publications suggest that persistence after 180 days is 44% for warfarin and 78% for rivaroxaban. Sensitivity analyses on persistence rates of rivaroxaban were conducted to account for uncertainties. RESULTS: Patients starting with a VKA stayed on treatment for an average of 226 days. In contrast, patients starting on rivaroxaban stayed on treatment for approximately 412 days. The total annual stroke risk was 0.93% among current users and 0.48–4.07% for patients initiating therapy with warfarin or rivaroxaban, respectively. For a hypothetical cohort of 10,000 patients with AF the sensitivity analyses showed that the greater persistence with rivaroxaban would translate to 108-167 strokes avoided. CONCLUSIONS: Our model indicates that starting patients on rivaroxaban may decrease the number of total ischaemic strokes relative to warfarin treatment. Moreover, this may correspondingly reduce the burden of stroke-related costs borne by health care systems.

PCV29 ACUTE PHARMACOLOGICAL TREATMENT GIVEN TO OLDER ADULTS WITH ACUTE MYOCARDIAL INFARCTION: A NATIONWIDE EMERGENCY DEPARTMENT STUDY, 1992-2010
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OBJECTIVES: To determine the pattern and predictors of use of acute pharmacological treatment (anti-platelet agents and beta-blockers) given in the emergency department (ED) to older adults with acute myocardial infarction (AMI). METHODS: Data from the National Hospital Ambulatory Medical Care Survey (NHAMCS) ED component from years 1992 to 2010 were used for the study. Patients were selected if they had a diagnosis of AMI (ICD-9-CM code 410.xx) and were ≥55 years. Drug users were divided into 4 groups: anti-platelet agents only, beta-blockers only, anti-platelet agents & beta-blockers, and non-users. Survey logistic regression was used to examine the trend of use of drugs across the years and whether age predicted drug use. All the visits were weighted to obtain national estimates. All the analyses were carried out in SAS 9.3. RESULTS: A total of 17711 visits (weighted: 6.1 million visits) by patients ≥55 years were selected for the study. Almost 54% [95% CI: 51.7% to 57.1%] of our population are females with a mean age of 72 (SE=0.33) years. This population is 87% white [95% CI: 84.9% to 89.1%] and 94% non-Hispanic [95% CI: 91.8% to 95.3%]. Both anti-platelet agents and beta-blockers showed to have a positive trend across the years (OR=1.09 [95% CI: 1.07 to 1.19] and OR=1.16 [95% CI: 1.13 to 1.19], respectively). Age was a significant predictor of anti-platelet agents use (OR=0.76 [95% CI: 0.62 to 0.93]), older adults (≥65) were less likely to receive an anti-platelet agent than younger adults; however, age was not considered to be a significant predictor of beta-blocker use. CONCLUSIONS: This study displayed a positive pattern across the years in the use of acute pharmacological treatment given for older AMI patients. It also suggested that older adults were less likely to be treated acutely with anti-platelet agents.

PCV30 TRENDS OF CARDIOVASCULAR DRUG UTILIZATION AND EXPENDITURES IN QATAR (2007-2011)
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OBJECTIVES: This study was conducted from the Hamad Medical Corporation (HMC) setting, whereby utilization and expenditures data were obtained from HMC drug databases that are based on the 2007-2011 period. Data were categorized by drug class, concentration, score, and therapeutic index. Publications were used to illustrate distributions of variables, and cross-tabulation was used to provide comparison of frequency data. RESULTS: An increasing trend in utilization and expenditures was associated with the use of cardiovascular drugs. The rise in expenditure was more substantial as compared to utilization.