treatment. The median time to first injection was 11 months post-stroke. The rate of treatment was different between age groups, with 31% of 40-59 year olds (+/- 1.1%) treated, compared to 11% of 70-79 year olds (+/- 0.8%;). For patients with follow-up post-treatment of ≥2 years, only 9.5% were treated with ≥3 injections per year, and 29% received only one injection. For patients with ≥2 injections, the mean time between 2 injections was 198 days (standard deviation: 171 days). **CONCLUSIONS:** This analysis shows that only 1.6% of post-stroke patients were treated with BoNT. Given the impact of spasticity on the quality of life of patients, it is important that additional work is performed to identify which of the patient care pathways or clinical decisions defined a patients' care and the therapeutic interventions used.

PCV161

THE DISEASE BURDEN OF HEART FAILURE IN PORTUGAL

Jesus G[1], Fiorentino F[1], Ascenção R[1], Gouveia M[2], Costa J[3], Broeiro P[4], Fonseca C[5], Borges M[1]
[1]*Center for Evidence Based Medicine, Faculty of Medicine, University of Lisbon, Lisbon, Portugal,* [2]*Católica Lisbon School of Business and Economics, Lisbon, Portugal,* [3]*Laboratory of Clinical Pharmacology and Therapeutics, Faculty of Medicine, University of Lisbon, Lisbon, Portugal,* [4]*Agrupamento de Centros de Saúde Lisboa Central, Unidade de Cuidados de Saúde Personalizados dos Olivais, Lisbon, Portugal, Lisboa, Portugal,* [5]*Centro Hospitalar de Lisboa Ocidental, Heart Failure Unit, Department of Internal Medicine and Day Hospital – Hospital São Francisco Xavier, Lisbon, Portugal, Lisbon, Portugal*

OBJECTIVES: The objective of this study is to estimate the disease burden of Heart Failure (HF) in Portugal for 2014. **METHODS:** The HF burden was measured in Disability Adjusted Life Years (DALY) resulting from the sum of Years Lost due to Disability (YLD) and Years of Life Lost (YLL) due to premature death. YLL were estimated based on the mortality rates reported by the European Detailed Mortality Database. For YLD, the three disability weights (mild moderate and severe) presented by the Global Burden of Disease Study (2015) were considered. Patients in the first class of the New York Heart Association (NYHA) Functional Classification, where considered to have no disability associated to HF. The average total disease duration by age group and the overall incidence were estimated using the software DisMod II, calibrated with the prevalence of NYHA class II-IV, relative risk of mortality and a remission rate of zero. Prevalence was estimated using the microdata of a previously conducted national community-based epidemiological survey while relative risk of mortality came from the international literature. It was assumed that incidence by severity class followed the same pattern as prevalence and that duration was independent from severity. **RESULTS:** In 2014, HF incident cases in NYHA class II-IV were estimated to be 38,960 (394.74/100,000 inhabitants). The deaths for HF patients amounted to 4,688, 4.7% of overall deaths, with women being responsible for 66.7% of HF mortality. Overall, DALY totaled 21,162, with 53.8% due to YLL and 46.2% due to YLD. Women contributed to most of the overall disease burden in terms of DALY (57.0%) with YLL and YLD estimated at 6.944 and 5.118, respectively. **CONCLUSIONS:** Heart Failure is an important cause of disease burden in Portugal. Heart Failure should be an important target for health policy interventions.

PCV162

SOCIO-ECOLOGICAL CONTEXTUAL FACTORS ASSOCIATED WITH HYPERTENSION MEDICATION AND CONTROL AMONG THE ELDERLY IN THREE MIDDLE-INCOME COUNTRIES (ALBANIA, BRAZIL, AND COLOMBIA)

Sentell T[1], Pirkle C[1], Ylli A[2], Gómez JF[3], Guerra RO[4]
[1]*University of Hawaii, Honolulu, HI, USA,* [2]*University of Medicine of Tirana, Tirana, Albania,* [3]*Universidad de Caldas, Manizales, Colombia,* [4]*Universidade Federal do Rio Grande do Norte - UFRN, Natal, Brazil*

OBJECTIVES: Hypertension medication and control are understudied among the elderly in middle-income countries, particularly as contextualized within social and community factors. **METHODS:** We used 2012 International Mobility in Aging Study data of community-dwelling adults 65-74 years across three study sites (Tirana, Albania n=394; Natal, Brazil n=402; Manizales, Colombia n=407; N=1,203). The study framework was the socioecological model, positing that individual-level health outcomes are influenced by interpersonal (e.g., family, friends), organizational (e.g., health system), community (e.g., neighborhood safety), and policy levels. Logistic regression models identified factors associated with uncontrolled (vs. controlled) hypertension among those with diagnosed hypertension. Of particular interest was the role of antihypertensive medication contextualized within other factors specified by the socioecological model. **RESULTS:** Among those with diagnosed hypertension, control was: Albania: 33%; Brazil: 30%; Colombia: 51%. At all sites, those not in control were less likely to have hypertension medications in their homes than those in control, but this difference only differed significantly in Brazil and Columbia. A high proportion of those not in control (>80%) had antihypertensive medications at all sites. In final models, distinct factors from the socioecological model were strongly associated with uncontrolled hypertension across sites: Perceived income insufficiency (OR:3.23;95% CI:1.79-5.82) in Tirana; hypertension medication (OR:0.38;95%CI:0.16-0.88) and religious participation (OR:0.36;95% CI:0.13-0.97) in Colombia; and hypertensive medication (OR:0.38;95%CI:0.16-0.88) and strolling shops and stores (OR:0.44;95%CI:0.21-0.94) in Brazil. No behavioral variables (e.g. smoking, exercise, alcohol) were associated with control once organizational and community factors were considered. **CONCLUSIONS:** In two of three middle-income study sites, all with low hypertension control, antihypertensive medication in the participants' homes was significantly associated with a lower likelihood of uncontrolled hypertension. However, hypertension medication use was high across both controlled and uncontrolled hypertension. Contextualizing medication use within other socioecological factors is important to understand key predictors of hypertension control generally as well as variation across communities.

PCV163

COST-EFFECTIVENESS OF MECHANICAL THROMBECTOMY COMPARED WITH STANDARD TREATMENT IN PATIENTS WITH ACUTE ISCHAEMIC STROKE

Heggie R[1], Wu O[1], White P[2], Ford G[3], Brown M[4], Clifton A[5], Wardlaw J[6], Muir K[1]
[1]*University of Glasgow, Glasgow, UK,* [2]*Newcastle University, Newcastle, UK,* [3]*Oxford Academic Health Science Network, Oxford, UK,* [4]*University College London, London, UK,* [5]*St George's University Hospitals NHS Foundation Trust, London, UK,* [6]*Edinburgh University, Edinburgh, UK*

OBJECTIVES: To determine the cost-effectiveness of mechanical thrombectomy, compared with standard treatment, from the perspective of the UK NHS and PSS. **METHODS:** We undertook a cost-effectiveness analysis alongside the Pragmatic Ischaemic Stroke Thrombectomy Evaluation (PISTE) trial. In addition, a decision-analytic model was developed to estimate the long-term cost-effectiveness of thrombectomy using all available trial evidence. Meta-analysis was used to estimate the clinical effectiveness; resource use and costs were sourced from the PISTE study and the broader literature. Value of implementation analysis was used to estimate the potential value of implementing this treatment into routine clinical practice within the UK NHS. As health budget responsibility is devolved within the UK, we plan to estimate the five-year budget impact of introducing mechanical thrombectomy into routine practice within the devolved NHS in Scotland. **RESULTS:** Compared with standard treatment, thrombectomy was not shown to be cost-effective within-trial/90-day period. However, the reverse was observed with the long-term model (ICER £3,857 per QALY gained). We estimate that 42,525 patients are potentially eligible to receive this treatment in the UK over a five year period. The net monetary benefit (health benefit in monetary terms) is £13,704 per patient. Assuming a five-year time horizon and full implementation, the value of implementation was £542 million. We estimate the "break-even" value of implementation activity point at approximately 26% implementation. **CONCLUSIONS:** Based on a lifetime horizon, mechanical thrombectomy is cost-effective compared with standard care. If implementation is greater than 26%, the value of implementation is greater than the cost of implementation.

PCV164

VENOUS THROMBOEMBOLISM PROPHYLAXIS: RISK ASSESSMENT COMPLIANCE WITH RESPECTED PATIENT RISK

Alsoweed R
Princess Noura University, Riyadh, Saudi Arabia

OBJECTIVES: VTE prophylaxis implementation remains to be a challenge at KFSH with deterrent patient risk and death. The purpose of this study is to measure the degree of physician compliance to KFSH 2013 VTE prophylaxis protocol and to identify the percentage of patients at risk of VTE. **METHODS:** 103 patients admitted to various medical wards were reviewed of which 69 were included in our study. Their risk was measured using the risk assessment sheet in accordance to KFSH VTE prophylaxis protocol. Physicians' compliance was assessed on their degree of compliance to KFSH 2013 VTE prophylaxis policy. **RESULTS:** The overall compliance rate with 2013 VTE prophylaxis among physicians was 1.4% in the 69 hospital admissions that were reviewed. The majority of our patients 56.5% received prophylaxis but not in accordance to policy. 41.7% of our patients had highest risk of VTE (>5) according to their calculated risk. The highest risk 66.7% was observed in the Intensive Care Unit. **CONCLUSIONS:** There is no adherence to VTE protocol among KFSH physicians which stresses the importance of awareness of VTE implications to patient well-being across KFSH medical staff. Patient risk of VTE is high and proper implementation is a must to reduce overall risk.

PCV165

EVALUATING THE IMPACT OF PCSK9 INHIBITORS ON CARDIOVASCULAR DISEASE

Karcher H[1], Wiecek W[1], Casciano R[2], Coeytaux E[2], Bixer S[1], Amzal B[1], Abenhaim L[3]
[1]*Analytica Laser, London, UK,* [2]*ANALYTICA LASER, New York, NY, USA,* [3]*London School of Hygiene and Tropical Medicine, London, UK*

OBJECTIVES: Several outcome-based agreements (OBA) have been signed in the past years with health plans in the Unites States for the reimbursement of the PCSK9 inhibitor evolocumab. We developed a model to determine what factors may impact the outcome measured under these OBAs in patients with athereosclerotic cardiovascular disease. **METHODS:** A Bayesian model was built in HOPE (Health Outcomes Performance Estimator), a tool that predicts drug outcomes under different real world scenarios. Assumptions on efficacy of evolocumab versus placebo in terms of hazard ratio to time to first cardiovascular event, defined as cardiovascular death, myocardial infarction, stroke, hospitalization for unstable angina, or coronary revascularization, came from a phase 3 randomised clinical trial (RCT) . Two virtual cohorts of 10,000 patients: one approximating the health plan population, one with characteristics as in the RCT, were created with different distributions of baseline age, weight, smoking status, LDL and HDL cholesterol levels, type of atherosclerosis, use of cardiovascular medications,and other factors including adherence. The impact of factors on baseline risk was extracted from the literature. To account for variability in inputs, we performed 1,000 simulations of cardiovascular events in each of the virtual cohorts. **RESULTS:** The model estimates provided a good fit to time to cardiovascular event reported in the RCT. The estimated event rate 6 months after drug initiation in the health plan population was predicted to be higher than in the Phase 3 trial on average, with more variability due to higher variability in drug use and population characteristics. **CONCLUSIONS:** We investigated how outcomes chosen to define the OBA terms on evolocumab could be affected in the population of health plan subscribers. Additional variability in population factors impacted the event rates which may in turn impact the financial results of the OBA, depending on the financial terms that were used.

PCV166

REAL-WORLD TREATMENT PATTERNS AMONG PATIENTS INITIATING ON STATINS IN ENGLAND

Lambrelli D[1], Merinopoulou E[1], Donaldson R[1], Mardekian J[2], Hlavacek P[3], Tarasenko L[3], Masseria C[3], Hobbs FD[4]
[1]*Evidera, London, UK,* [2]*Pfizer Inc., New York, PA, USA,* [3]*Pfizer Inc., New York, NY, USA,* [4]*Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford, UK*

OBJECTIVES: This study aimed to describe real-world patterns of statin use in England. **METHODS:** Patients in the Clinical Practice Research Datalink linked