confirmed that patients who had a greater improvement in 6MWD (+40m) at week 12 of treatment had larger mean scores than those who did not improve. Furthermore, patients with better functional ability according to WHO classification had higher EQ-5D utility scores than those with lower ability. CONCLUSIONS: Results demonstrate the positive impact of riociguat on patient-reported health status among CTEPH patients.

PCV142
EFFECTS OF INTERVENTION BY COMMUNITY PHARMACISTS ON AWARENESS OF CONTINUING TREATMENT AMONG PATIENTS WITH HYPERTENSION
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OBJECTIVES: Hypertension has few subjective symptoms and its treatment must be continued long term, as patients may stop visiting the hospital regularly and give up on lifestyle improvements. Therefore, awareness of chronic disease management interventions is essential in community pharmacies. The objective of this study was to investigate the effect of intervention by community pharmacists on the awareness of continuing treatment among patients with hypertension.

METHODS: This study was designed as a cluster-randomized controlled trial with a 3-month intervention period. The subjects comprised adult patients with essential hypertension who had been taking antihypertensive medication for at least 3 months. Patients in the intervention group underwent a motivational interview with a pharmacist lasting around 3 minutes each time they received a prescription, while those in the observation group were provided with usual care. Both groups patients were provided with a home blood pressure monitoring device and pedometer. The study outcome measure was awareness of the continuation of regular hospital visits, healthy diet, and appropriate exercise, rated on a 10-point scale from "Extremely important" to "Not at all important".

RESULTS: Responses were obtained from 114 patients at 55 pharmacies (Intervention group: 28, observation group: 27) that had enrolled in the study. A comparison of awareness before and after intervention showed that only awareness of regular hospital visits had improved in the observation group (p = 0.04) and appropriate exercise (p = 0.02) showed improvement.

CONCLUSIONS: The findings of this study revealed that intervention by community pharmacists may contribute to raising awareness of the need to continue exercise. This result implies that pharmacist can improve patients' ability to chronic disease management.

PCV143
THE QUALITY OF LIFE IN PATIENTS 12 MONTHS AFTER AN ACUTE CORONARY SYNDROME: RESULTS FROM THE PGRX-3 REAL WORLD DATASET
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OBJECTIVES: To measure the quality of life (QoL) of patients 12 months after an acute coronary syndrome (ACS). METHODS: PGRX-3 are multiusers, multi-countries, prospective Real World Datasets assembled to describe disease risk factors, burden of disease, disease management, treatment patterns and patient quality of life; they are also used for the study of the effectiveness and relative risk of medicines. More than 15 disorders have been studied with the PGRX methodology and extensive validation studies have been published. Patients are recruited by their physician in France, UK, Italy, Germany, Spain and in the US, and interviewed and/or fill a self-questionnaire. The responses were offered through the PGRX eHealth Platform for Action (PGRX-3), October 2013, 90% of them being cardiologists. To date, 3725 patients have been included. The self-reported QoL was completed at 12 months, using the EQ-5D and SF-12 modules. The PGRX ACs completes a large quantity of health resources. Around 2% of the adult population in Europe completes a large quantity of health resources. 7% had a first-time ACS: 12 months after the ACS, the mean score of EQ-5D was 0.72 [SD = 0.24], the less favourable ratings were for pain and restriction in mobility with around 5% severe in 10% and mobility with around 5% severe in 10%. In 12 months, 65% patients rated a “good” health, 80 (47%) had limited mobility, and 70% declared some pain interfering with normal life.

CONCLUSIONS: 12 months after ACS, patients declared a rather good QoL, despite limited mobility, pain, and discomfort.

PCV144
A SYSTEMATIC LITERATURE REVIEW ON THE IMPACT OF THERAPEUTIC INTERVENTIONS ON QUALITY OF LIFE IN SYSTOLIC HF RANDOMIZED CLINICAL TRIALS
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OBJECTIVES: Systolic heart failure (HF), in a progressive condition carrying a high risk of mortality, hospitalisation and having a significant detrimental impact on quality of life (QoL). Current therapies indicated for this purpose demonstrated beneficial effects on QoL, however the magnitudes of effects remain debatable. This review was performed to identify QoL instruments (disease specific and generic) used in systolic heart failure, to estimate the impact of various pharmacological interventions. METHODS: Publications resulting from randomised controlled trials (RCTs) as well as post-hoc analysis of RCTs from 1996 to October 21, 2016 were screened. A predefined inclusion criteria: Critical appraisal of trials, was performed using the NICE risk of bias tool. RESULTS: A total of 17 publications from 33 RCTs met the inclusion criteria. The main HF-specific QoL instruments used were the Minnesota Living with Heart Failure Questionnaire (MLHQ) (8,004 patients) used in 19 RCTs, the Kansas City Cardiomyopathy Questionnaire (KCCQ) (12,101 patients) in four trials. The generic EQ-5D (VAS) was used in three trials whereas SF-36 was used in four trials. Four studies also reported correlations between end point changes in morbidity and mortality and change in QoL. Significant changes in QoL were found in 4 active and 5 placebo-controlled trials respectively, which could be attributed to various pharmacological interventions. The critical appraisal concluded that the studies were of moderate quality. CONCLUSIONS: The majority of included RCTs used HF-specific questionnaires, to measure QoL. From 2009 onwards, the use of KCCQ increased compared to MLHQ and KCCQ was administered to a comparatively larger study population. Thus, QoL data retrieved from trials using KCCQ may be more representative of the global population as a whole. The inconsistency in reporting of QoL results in RCTs limited comparison of the treatment impact on QoL.

PCV145
APEXIS TREATMENT IN GERMAN PATIENTS WITH SEVERE HYPERCHOLESTEROLEMIA - A PSYCHODRAMA MARKET RESEARCH
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OBJECTIVES: In Germany, apexis is indicated for patients on maximally tolerated lipid-lowering therapy (max LLT) with uncontrolled low density lipoprotein (LDL) cholesterol levels over 12 months. The current application process restricts patients’ access to apексis although no other treatments are available. Despite its burdensome nature, and this procedure offers an additional LDL lowering when maximally tolerated heparin is applied before (QoL with aphesis) and after the workshop (imagination of QoL with a new therapy option).

RESULTS: Four workshops took place in October 2016 in Munich (n=2), Berlin and Frankfurt. The average age was 63 years (N=26) and patients had broad experience with aperosis. The assessment on the disease perception led to feedbacks such as, “It doesn’t hurt and that is bad!”,”My whole life changed” or “Fear of apheresis”. Perception of aperosis as ambiguous revealing cons (“invasive,” “time-consuming”) and pros (“life-saver”, “effective”). The SF-36 evaluation demonstrated an increase in the overall QoL state for the majority of patients (n=20). CONCLUSIONS: Apexis is seen as burdensome but necessary. Without alternatives, apexis is considered important by patients, however, patients are eager to try new therapies offering more efficacious disease control and thereby avoidance of aperosis.

PCV146
A DISCRETE CHOICE EXPERIMENT (DCE) TO ELICIT PREFERENCES FOR ATTRIBUTES OF A BEDSIDE PHARMACOGENETIC TEST – PRELIMINARY RESULTS
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OBJECTIVES: To quantify preference weights (including willingness to pay - WTP) for attributes of a bedside pharmacogenetic test for the CYP2C19 allele to permit personalized decision making. A multi-attribute utility instrument (MAUI) was validated. ElGammal M. Pharmacogenetic testing can result in the identification of a pharmacogenetic variant; the variant may influence the effectiveness of a drug, and thereby avoidance of apheresis. Therefore, the effective and brief coaching-style model was used to analyze the responses. The survey was disseminated to randomly selected respondents in Ontario (Canada), stratified by age, gender and education.

RESULTS: Results are generalizable to the Ontario population. Among 328 respondents who completed the survey, 219 chose the pharmacogenetic test option providing 3472 observations. Exponential coefficients (standard errors) and p values are as follows: Turnaround: 1 week = 0.009 (0.13) p<0.0001, 3 days = 0.243 (0.113) p<0.0001. Sample extraction, finger prick = 1.543 (0.104) p=0.683, cheekswab = 1.140 (0.100) < 0.19, cost = 0.63127 (0.032) p<0.001. WTP in additional annual insurance premiums is $CS.18 for one hour over a 7 day turnaround time and $CS.06 over a 3 day turnaround time.

CONCLUSIONS: Respondents were willing to accept a delay of 11 times as likely to choose a 1 hour turnaround time, and tended to prefer the cheekswab method. An incremental WTP was observed for more expedient sample turnaround time.

CARDIOVASCULAR DISORDERS – Health Care Use & Policy Studies
PCV147
IMPACT OF HEART FAILURE ON HOSPITAL ADMISSIONS AND MORTALITY IN CANADA IN THE PERIOD 2009-2013
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OBJECTIVES: PCV147 is an important public health problem that depletes a large quantity of health resources. Around 2% of the adult population in developed countries suffers from HF. The high prevalence of HF in Spain, around 5%, is mostly determined by its population’s progressive ageing. This study describes the impact of HF on hospital admissions, length of stay, hospitalization
costs and age adjusted mortality in Spain in 2009-2013. METHODS: Statistical
mining of data stemming from the Spanish Ministry of Health’s heart failure related hospital admissions and mortality databases, which are classified by International Classification of Disease (ICD) or Diagnosis Related Group (DRG) codes. ICD9: 428 (Heart Failure), ICD10: 1007 (Heart Failure), DRG: 127 (Heart failure and Short Term Heart Failure), 146 (Congestive heart failure and cardiac arrhythmia) for the period 2009 to 2013. RESULTS: Hospital admissions due to HF increased 14.39% from 2009 (89,126) to 2013 (101,953). Yet, the average length of stay in a hospital decreased by 7.84% (9.17 vs. 8.41 days). The average cost per admission decreased by 9.74%, from €4,434.50 in 2009 to €4,002.44 in 2013. The total cost increased from €395 MM to €408 MM. In regards to age, in 2009, the total cost for those under 40 years amounted to €3,52 MM for people aged 40-64, €72 MM for those aged 65-74, €116 MM for 75 years to 84 and €113 MM for 85 years or older. A positive trend was observed in the total cost of the eldest patients, reaching €131 MM in 2013. Age-adjusted mortality rate decreased from 19.21 to 15.90 per 100,000 population or 30% between 2009 and 2013. Total number of deaths decreased from 4,434.50 in 2009 to 16,888 in 2013. CONCLUSIONS: The total cost of hospital admissions for HF increased in 2013 compared to 2009, while mortality experienced a slight decrease.

PCV148
ANALYSIS OF PRIMARY AND SECONDARY APR-DRG CODES OF AN ISCHEMIC STROKE ADMISSION
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OBJECTIVES: To investigate the factors influencing the Severity of illness index of the All Patient Refined DRGs (APR-DRG) classification of patients experiencing an ischemic stroke. METHODS: We conducted a retrospective analysis of ischemic stroke patients classified as APR-DRG 454: Stroke Prehospital Or Emergency Room InaF” between 2005-2007 admitted to the leading teaching hospital in Belgium. Each admission was assigned a primary diagnosis, followed by one or more secondary diagnoses. In an algorithm to define these diagnoses, the code was assigned to each hospitalization, informing the payment/reimbursement for each admission. This classification allows for the relative comparison of patient subgroups within each APR-DRG and severity subclass, and was designed to reflect the resource consumption and to aid treatment coding for the case-mix adjustments of the payment/reimbursement system. RESULTS: 1,107 stroke admissions were recorded during the study period, distributed across four SOI categories: 2% minor, 44% moderate, 36% major, 18% severe. No relationship was found between the type of primary diagnosis and the SOI level. Of the 1,407 secondary diagnoses assigned in the dataset, only half (783) were specific to one single SOI category; all others were found in 2, 3 or even 4 SOI levels. However a significantly positive relationship was found between the average number of secondary diagnoses of a patient and the SOI: on average 5.9, 11.3, 19.4 and 25.6 secondary diagnoses were allocated for increasing levels of SOI. Secondary diagnoses such as MI, diabetes, atrial fibrillation, hypertension, hypercholesterolemia, smoking, arteriosclerosis were individually not linked to more severe levels of SOI, however the combination of these factors did affect a patient’s SOI. CONCLUSIONS: Payment/reimbursement decisions for patients experiencing an ischemic stroke will be based on the resource consumption and severity of illness index of the patient and the SOI: on average 5.9, 11.3, 19.4 and 25.6 secondary diagnoses were allocated for increasing levels of SOI. The relative resources required for treatment, enabling for the casemix adjustment of the payment/reimbursement system.

PCV149
SIMULATING THE IMPACT OF A CARDIOVASCULAR PREVENTION PROGRAM
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OBJECTIVES: MGEN, a health insurance covering mainly teachers in France, is looking to set up a coronary heart diseases (CHD) prevention program in order to reduce CHD morbidity, mortality, and associated costs. However, due to the particular demographics of the members of MGEN, this study was based on the resource consumption and severity of illness index of the patient and the SOI: on average 5.9, 11.3, 19.4 and 25.6 secondary diagnoses were allocated for increasing levels of SOI. The third aim of cost reductions distinguished program, medical and non-medical costs. Potential Indicators of the identified sub-criteria include the ASCOT (Adult Social Care Outcomes Toolkit) for measuring wellbeing, smoking rates and BMI (Body Mass Index) to measure healthy behaviour, the EuroQol-5D and Short Form-36 for measuring physical, mental and social health, different dimensions of the PAGIC (Patient Assessment of Chronic Illness Care) and CAHPS (Consumer Assessment of Healthcare Providers and Systems) for measuring patient experience and several measurement tools for measuring friction costs and costs of informal care.
CONCLUSIONS: In designing a structured outcome-based framework for the performance evaluation of disease management programs we paved the way for future research with a standardized evaluation framework including MCDA. MCDA not only requires measurement of indicators but also weighting of their relative importance.

PCV151
ATRIAL FIBRILLATION AND ANTI-COAGULATION SERVICE RUN BY A CLINICAL PHARMACIST
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METHODS: Annually in England there are 89,000 strokes. 18% of patients presenting with stroke are in AF at presentation, equating to some 16,000 strokes, of which 12,500 are thought to be directly attributable to AF. OBJECTIVES: Reduce the number of AF related strokes by optimal anticoagulation according to NICE CG 180. Provide education and support to GP practices around identification of patients with AF as well as appropriate anticoagulation. METHODS: In this analysis, a total of 5 GP practices ran the Guidance on Risk Assessment and Stroke Prevention for Atrial Fibrillation (GRASP-AF) audit tool to identify AF patients. AN AF nurse specialist reviewed each patient to ensure that they are on optimal anticoagulation based on clinical characteristics and NICE CG 180. RESULTS: A total of 374 patients have been reviewed with an average age of 77 and an equal proportion of males. The majority of patients are diagnosed with permanent AF (54%), have a CHADS2-VASc score between 3 and 5 (3% 18%, 4% 20%, and 5% 22%) and a HAS-BLED score of 2 (48%). The number of patients prescribed aspirin and clopidogrel has been reduced from 26% to 0% and the number of patients treated with non-vitamin K antagonist oral anticoagulants (NOACs) increased from 2% to 19% after treatment review. Patient satisfaction survey results revealed that patients are happy with the service and fully expect the improvements in treatment options. CONCLUSIONS: Overall, 34% of patients received a revised treatment regimen based on NICE CG 180. The results indicate that despite not being recommended in NICE CG 180, a high proportion of AF patients are currently managed with antiplatelet instead of anticoagulation. In addition, a nurse-led service redesign has the potential to optimise AF anticoagulation services, providing long-term reductions of AF-related strokes.

PCV152
NOVEL ORAL ANTICOAGULANT USE IN THE EUS: HOW ARE PAYER POLICIES AND PHYSICIAN PREFERENCES SHAPING THE PRESCRIBING LANDSCAPE?
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OBJECTIVES: EUS reimbursement authorities are promoting cost-effective treatment practices against a backdrop of tightening healthcare budgets. However, label expansions for novel oral anticoagulants (NOACs) threaten to dramatically increase expenditure for the treatment of atrial fibrillation (AF), venous thromboembolism (VTE), and acute coronary syndrome (ACS). This study explores the impact of payer policies and physician preferences on prescribing for these indications.
METHODS: In December 2014/January 2015, 252 cardiologists across the EUS were surveyed regarding their current and expected prescribing of the NOACs for AF, VTE, and ACS. In addition, 15 payers who influence reimbursement at national/regional level were interviewed. RESULTS: The impact of cost-containment strategies on NOACs uptake varies across the EUS, but is most notable in Spain, where over one third of purchasing entities are expected to delay adoption of NOACs. In the EUS, 49-61% of NOAC prescriptions are expected to be for AF patient with ACS, and 48-71% of their AF patients currently receive a NOAC. Uptake is highest in France (VTE) and Italy (AF), and lowest in the UK. By 2018, over 60% of physicians in each EUS country anticipate increased use of rivaroxaban and apixaban for both AF and VTE, and 80% of physicians anticipate increased use of dabigatran. However, label is least likely for VTE. Interviewed payers caution that pressure on physicians to prescribe cheaper vitamin K antagonists (VKAs) will likely increase, as will negotiations with manufacturers to secure lower NOAC prices. CONCLUSIONS: Surveyed EUS cardiologists expect to increase their use of NOACs by 2018, however,