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: I20 (Heart Failure); DRG: 127 (Heart Failure
and Shock) and 445 (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 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 €35 MM, €42 MM for people aged 40-64, €72 MM for those aged 65-74, €116 MM for 75 years and 84 to €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% from 2009 (3755) to 2013 (3415). Total number of people admitted from 2009 to 2016, 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
Dewilde S1, Annemans L2, Thijis V3
1S&K Ugent, Brussel, Belgium, 2University of Ghent, Ghent, Belgium, 3Vrije Universiteit, Leuven, Belgium
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 045: CVA & Prevascular Occlusion or Infrac” between 2005-2007 admitted to the leading teaching hospital in Belgium. Each admission was assigned a primary diagnosis, followed by one or more second diagnoses. After developing an algorithm combining these diagnoses, each admission was assigned to each hospitalization, informing the payment/reimbursement for each admission. This classification allows for the relative comparison of patient groups, with each surgical complication classified as “APR-DRG 029”. Sensitivity analysis showed that the assignment of APR-DRG codes was assigned to each hospitalization, informing the payment/reimbursement for each admission. This classification allows for the relative comparison of patient groups, with each surgical complication classified as “APR-DRG 029”. Sensitivity analysis showed that the assignment of APR-DRG codes

PCV149
SIMULATING THE IMPACT OF A CARDIOVASCULAR PREVENTION PROGRAM
Leleu H1, Limbe M2, Femery V2, Blachier M1
1PUBLIC HEALTH EXPERT, Paris, France, 2MEGEN, Paris, France
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 mortality, morbidity, and associated costs. However, due to the particular demographic of the population, expected benefits of the program, given the programs parameters, is difficult to foresee. Yet, an estimation of the program effectiveness could help promote the programs importance to decision makers, motivate individuals responsible for the program implementation and encourage patient enrolment. Thus, the objective of this study was to construct a tool that could simulate the effectiveness of CHD prevention based on the demographical characteristics of the target population. METHODS: We constructed a micro-simulation model that simulated a cohort of individuals participating in a CHD prevention program. Individuals’ baseline characteristics were based on age and sex distribution. CHD risk factors including systolic arterial pressure, body mass index, total cholesterol, smoking, diabetes, stroke and CHD prevalences were fitted by age and sex for the French population. Effectiveness values for CHD prevention programs were based on the COCHRANE review. One-year and ten year CHD mortality were estimated from SCORE and 10 years CHD events from FRAMINGHAM. RESULTS: Implementing a prevention program in a population of a 100 000 representative of the insurance population with a 27% participation rate reduced CHD mortality by 9% after 1 year. The number needed to treat (NNT) was 2988. Excluding individuals with a high risk of stroke (OR: 5.54) and individuals without antithrombotic therapy due to the presence of AF increased the NNT to 947 and double the mortality reduction. CONCLUSIONS: The effectiveness and efficiency of a CHD prevention program strongly depends on the target population. Simulation tools are useful to decision makers to better specify the target population in order to optimize the program’s efficiency.

PCV150
A TRIPLE AIM FRAMEWORK FOR THE PERFORMANCE ASSESSMENT OF DISEASE MANAGEMENT PROGRAMS
Veerbeek H1, Franken ML, Trachristakis A2, Koppanghalmi M3, Rutten-van Molken MP3
1Erasmus University Rotterdam, Rotterdam, The Netherlands, 2University of Oxford, Oxford, UK
OBJECTIVES: A structured and comprehensive assessment of disease management programs is not straightforward due to the broadness of the interventions and the various evaluation possibilities. The aim of this study was to develop a comprehensive framework for outcome measurement of disease management programs based on the triple aim framework of the Institute for Healthcare Improvement (IHI) for the first time using refined ICD or diagnosis related groups (ICD10, DRG). METHODS: Based on literature review and our expertise in performing economic evaluations in disease management we identified domains of outcomes for each of the triple aim framework. For each domain we identified indicators and tools to assess the performance of disease management programs. RESULTS: The first aim of the framework, population health improvement, was subdivided into the domains health-adjusted life years, mortality, wellbeing, health-related quality of life (HRQoL) complications, clinical outcomes, healthy behaviour, knowledge, and self-management skills. The second aim, improvement of patient experience, was subdivided into patient involvement, patient centeredness, continuous monitoring and feedback, information systems, safety and access. The third aim of cost reductions distinguished program, medical and nonmedical costs. Potential Indicators of the identified sub-criteria include the ASCOT (Adult Social Care Outcomes Toolkit) for measuring wellbeing, smoking rates and quality of life, the EuroQol-5D and Short Form-36 for measuring physical, mental and social HRQoL, different dimensions of the PACIC (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 further research including a comprehensive evaluation of performance improvement with 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 SPECIALIST
Dafoe P1, Haus N2, Williams P3, Natarajan P4
1Boehringer Ingelheim, Bracknell, UK, 2University of North Midlands NHS Trust, Stoke-on-Trent, UK
OBJECTIVES: Annually in England there are 80,000 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). We identified AF patients in NICE CG 180. An AF nurse specialist reviewed each patient to ensure that they are on optimal anti-coagulation 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% 84, and 5% 22) and a HAS-BLED score of 2 (48%). The number of patients prescribed aspirin and clopidogrel has seen a decrease from 26% to 2% 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 the patients are happy with the service and fully accept the new treatment options. CONCLUSIONS: Overall, 34% of patients received a revised treatment regimen based on NICE CG 180. The result indicates that despite not being recommended in NICE CG 180, a high proportion of AF patients were currently managed with antiplatelet instead of anticoagulation. In addition, a nurse specialist service redesign has the potential to optimise AF anticoagulation services, providing long-term reductions of AF-related strokes.

PCV152
NOVEL ORAL ANTAGONIST USE IN THE EUS: HOW ARE PAYER POLICIES AND PHYSICIAN PREFERENCES SHAPING THE PRESCRIBING LANDSCAPE?
O’Connor E1, Cox J1, Fletcher-Louis M1, Ribiero A1
1Decision Resources Group, London, UK, 2Decision Resources Group, Exton, PA, USA
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 physicians 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 physicians prescribing NOACs expect to see a significant microeconomic impact due to changes in the reimbursement policy. Further excluding participants of 44 years and less reduced NNT to 947 and double the mortality reduction. CONCLUSIONS: The effectiveness and efficiency of a CHD prevention program strongly depends on the target population. Simulation tools are useful to decision makers to better specify the target population in order to optimize the program’s efficiency.

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