

after the first CV event. Hospitalization costs were estimated using the 2013/2014 HRG Reference Costs Grouper software, processed with R (version 3.2.2). Drug costs were abstracted from NHS Drug Tariff lists and applied to anti-hypertensive, anti-thrombotic, anti-diabetic, and anti-hyperlipidemic drugs at the level of the drug and dose, multiplying the cost per dose unit by the quantity provided. GP visits were categorized as clinic, surgery, or telephone and coded using Personal Social Services Research Unit 2014 unit costs. Referrals were mapped to the closest specialist visit cost from NHS Reference Costs. Challenges included handling deprecated inpatient diagnosis codes, mapping text-based drug name fields between the cost and the prescription data, categorizing physician visits, and applying a hierarchy for CV event classification. **RESULTS:** We estimated costs for 24,093 patients. We coded 94,304 hospitalizations, 1,380,858 GP visits, 71,204 referral visits, and 2,571,243 prescription fills representing 855 unique drug and dose combinations. Mapping and categorization challenges were reconciled by a panel of clinicians. The mean acute period and mean annualized long-term period costs (2014 £) were £4060 and £1433 for hospitalizations, £436 and £619 for GP and referral visits, and £98 and £208 for drugs. **CONCLUSIONS:** Detailed costing using utilization data is feasible and representative of UK clinical practice, but is labor intensive. The economic burden of cardiovascular disease is substantial.

PCV55

THE DIRECT COST COMPONENTS IN HEART FAILURE WITH REDUCED EJECTION FRACTION (HF-REF) IN TURKEY: THE RESULTS OF A DELPHI PANEL

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OBJECTIVES: The aim of the present study was to analyze the health-related direct cost components in HF-rEF in Turkey. **METHODS:** A two-round Delphi process to get the opinions of local experts (eleven cardiologists who were experienced in HF), was performed. A questionnaire with items to collect the opinions of the panelists on all cost components, including medications, surgical treatment, hospitalization and out-patient follow-up procedures were developed under supervision of one of the experts (ZÖ). End-of-2015 local prices released by Ministry of Health and Social Security Institution in Turkey were used as references. End of 2015 Euro/TL currency rate (3.065 TL/Euro) was used. **RESULTS:** Approximately 32% of average HF patients is assumed to be hospitalized 1.64 times a year, for an average of 6.77 days each time. When patients with HF-rEF are considered, annual rate of hospital stays per patient is 0.70, with an average length-of-stay of 4.58 days per year. The 39.1% of the patients, who are hospitalized at least once a year, stay at first at CCU, then are transferred to internal medicine ward. The remaining 60.9% are hospitalized directly at internal medicine ward. Estimated total annual costs of HF-rEF is calculated as 698 Euro. Main cost driver is the cost of hospital stays (476 Euro/year; 68% of the total). The estimated cost of a single hospital stay is 323 Euro and the cost of a single day of hospital stay is 115 Euro. **CONCLUSIONS:** This cost analysis confirmed that costs related with hospitalization makes the major part of total direct cost in HF-rEF. Therefore, if the disease is managed better on out-patient basis, it might be assumed that need for hospitalization will be decreased. Accordingly reducing the rate and/or length of hospitalizations, will lower the cost of disease in HF-rEF.

PCV56

THE ECONOMIC BURDEN OF MYOCARDIAL INFARCTION IN LATIN AMERICA

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OBJECTIVES: The economic burden of myocardial infarction (MI) in the Latin American region has not been previously quantified. This research assessed the economic burden of MI in Brazil, Chile, Colombia, Ecuador, El Salvador, Mexico, Panama, Peru, Venezuela. **METHODS:** To estimate the cost of MI by country, an incidence approach was used. Costs were estimated for the year 2015 and included health system expenditures, productivity losses (absenteeism, lower workforce participation, premature mortality) and informal care costs, and deadweight losses associated with government expenditures. Data inputs for costs, including prevalence and incidence, were based on secondary data sources informed by a targeted literature review including country specific grey literature and databases. The study also appraised the value of the loss of healthy life, measured in disability adjusted life years (DALYs), using global burden of disease disability weights. All inputs were triangulated using semi-structured interviews with clinicians, insurers and health administrators. **RESULTS:** MI was found to affect approximately 756,492 people (0.2% of the adult population, average of 64.2 years old) in selected Latin American countries in 2015 leading to significant wellbeing loss, estimated at 2.6 million DALYs, and economic burden, estimated at USD12.6 billion in 2015. Health system expenditures accounted for USD8.2 billion (65%) and productivity costs USD4.4billion (35%) of the total financial burden of MI. On average, health system expenditure represented 0.17% of total gross domestic product (GDP) across the nine countries with Brazil (0.29%), Colombia (0.28%) and El Salvador (0.30%) spending more than the average. Total financial costs averaged 0.28% of GDP. **CONCLUSIONS:** MI imposes a significant burden to the health system and society in Latin America. Health system expenditure accounts for the majority of the burden of MI in the region. Prevention and appropriate management of MI may result in substantial wellbeing benefits and economic savings.

PCV57

THE DIRECT COST COMPONENTS IN PULMONARY ARTERIAL HYPERTENSION: AN EXPERT PANEL APPROACH FOR ESTIMATION OF COSTS

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OBJECTIVES: To estimate the direct cost components of pulmonary arterial hypertension (PAH) in a Turkish setting. **METHODS:** Delphi-technique was used. An expert-panel consisting of members from cardiology, pulmonology and cardiovascular surgery met to discuss the disease management processes in PAH. The global and local-literature and guidelines have been reviewed and local clinical practices questionnaires (separately for functional classes (FC)) have been completed. All cost-components, including medications, surgical treatment, hospitalization, screening and outpatient follow-up procedures were reviewed. February-2016 local prices released by Ministry of Health and Social Security Institution in Turkey were used as references. February-2016 currency rate was used. **RESULTS:** The total costs, excluding disease-specific medications, of PAH/year for patients in FC-II, FC-III and FC-IV were calculated as 576€, 1,005€ and 5,542€, respectively. The corresponding costs of disease-specific medications were 8,864€, 17,920€ and 17,920€ (panel experts noted that disease-specific drugs are given in similar combinations and doses in FC-III and FC-IV). Therefore, the total annual-costs of PAH in FC-II, FC-III and FC-IV were estimated as 9,440€, 18,925€ and 23,462€, respectively. Costs of other components per annum, used in calculating the total-cost in FC-II, FC-III and FC-IV were as follows: follow-up: 101€, 199€ and 1,355€; medications for palliation: 116€, 156€ and 1,867€; non-pharmacologic treatment: 126€, 366€ and 366€; laboratory tests: 232€, 283€ and 1,211€, respectively. Cost of lung-transplantation was found as 742€ in FC-IV (percentage of FC-IV patients assumed to be transplanted “lung” and “heart-lung” is 2.5% and 0.1%, respectively and price of each operation is 28,550€ [28,550x2.5%+28,550x0.1%=742€]). **CONCLUSIONS:** The main driver of direct cost components in PAH is the cost of disease-specific drugs. The total direct cost components increase when the functional class of the patients progresses from FC-II to FC-IV. Consequently, improving diagnosis rate and ensuring to start appropriate treatment in early stages in PAH patients may help to decrease the costs of treatment.

PCV58

THE ECONOMIC BURDEN OF ATRIAL FIBRILLATION IN LATIN AMERICA

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OBJECTIVES: The economic burden of atrial fibrillation (AF) in the Latin American region has not been previously quantified. This research assessed the economic burden of AF in Brazil, Chile, Colombia, Ecuador, El Salvador, Mexico, Panama, Peru, Venezuela. **METHODS:** To estimate the cost of AF by country, a prevalence approach was used. Costs were estimated for the year 2015 and included health system expenditures, productivity losses (absenteeism, lower workforce participation, premature mortality) and informal care costs, and deadweight losses associated with government expenditures. Data inputs for costs, including prevalence and mortality were based on secondary data sources informed by a targeted literature review including country specific grey literature and data sources. The study also appraised the value of the loss of healthy life, measured in disability adjusted life years (DALYs), using global burden of disease disability weights. **RESULTS:** AF was found to affect approximately 2.7 million people (0.8% of the adult population, average of 69.5 years old) in selected Latin American countries in 2015. This leads to significant wellbeing loss, estimated at 664,460 DALYs, and economic burden, estimated at USD2.4 billion in 2015. Health system expenditures accounted for USD2.3billion (95%) and productivity costs USD115million (5%) of the total financial burden of AF. On average, health system expenditure represented 0.06% of total gross domestic product (GDP) across the nine countries with Brazil (0.07%), Chile (0.08%), Colombia (0.07%), Ecuador (0.06%) and El Salvador (0.13%) spending more than the average. Total financial costs averaged 0.06% of GDP. **CONCLUSIONS:** AF imposes a significant burden to the health system and society in Latin America. Health system expenditure accounts for the majority of the burden of AF in the region. Prevention and appropriate management of AF may result in substantial wellbeing benefits and economic savings.

PCV59

THE COST OF HYPERCHOLESTEROLAEMIA IN IRELAND

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OBJECTIVES: Hypercholesterolaemia is a common condition in Ireland with over 70% of people aged 55 and older being found to have high cholesterol levels. The purpose of this paper is to estimate the total healthcare costs of hypercholesterolaemia in Ireland. **METHODS:** A prevalence-based approach was used with the most up-to-date data from 2012. Estimates of the prevalence of hypercholesterolaemia in Ireland and for parameters relating the condition with major adverse cardiac events including acute coronary syndrome (ACS), stroke, peripheral arterial disease (PAD), and chronic heart disease (CHD) were obtained from relevant literature found on Medline (PubMed). The cost of treating major adverse cardiac events was estimated by calculating the amount of inpatient care such events required and applying an appropriate unit cost for each episode of care. Unit costs for inpatient care were obtained from Hospital In-Patient Enquiry (HIPE) data. The cost of treating hypercholesterolaemia by GPs at the community level was estimated by calculating the number of GP visits to treat hypercholesterolaemia and applying an appropriate unit cost to these visits. **RESULTS:** In 2012, the cost of inpatient care for major adverse cardiac events attributable to hypercholesterolaemia was €165.5 million. The cost of community care for hypercholesterolaemia was over €72 million. Drug costs for treating hypercholesterolaemia were estimated to be €181.9 million. The total healthcare cost of hypercholesterolaemia was estimated to be €419.7 million. **CONCLUSIONS:** Hypercholesterolaemia and its associated diseases result in a significant financial burden to the Irish healthcare system, estimated to be