2011. One-year costs were identified by applying cost data to medical information obtained by review of medical records. Costs included those for medications, laboratory and diagnostic tests, clinic visits, emergency room visits and hospital stays. Contemporary data were obtained from epidemiological studies, government datasets, and other sources to estimate prevalence. National costs (US dollar 2012) of treatment for PAH were estimated by extrapolation of mean cost estimate per person to national incidence data for PAH. Because of uncertainties surrounding some of our estimates such as prevalence, one way sensitivity analyses were undertaken. **RESULTS:** A total of 113 PAH patients were identified and their demographic and clinical characteristics, patterns of care were examined. The mean age was 38 years, and 83% were female. The average per patient annual cost was $ 10,869 without specific treatment (min $ 137; max $155,928). The annual cost for the treatment of a single PAH patient per year with specific therapy (Bosentan) was calculated in $31.433. Aggregate national health care expenditures for treatment of PAH were USD 46.6 million In multivariate analysis, length of hospital stay, stay in ICU, were all significant independent predictors of treatment. **CONCLUSIONS:** There is a correlation between the cost of HAP and disease severity with hospitalization owing to disease severity being a major contributor to cost. With the expected increase in the incidence of PAH in Mexico over the coming decades, these results emphasize the need for effective preventive and acute medical care.

PCV17
COST-OF-ILLNESS STUDY OF PATIENTS SUBJECTED TO CARDIAC RHYTHM MANAGEMENT DEVICES IMPLANTATION: RESULTS FROM A SINGLE TERTIARY CENTRE

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OBJECTIVES: To estimate the procedure (implantation) cost, the total hospitalization cost and annual follow-up cost, in patients subjected to pacemaker (PM) and implantable cardioverter-defibrillator (ICD) implantation. **METHODS:** A single-center, prospective, cost-of-illness study was conducted between August 2008 and July 2009. In total, 464 consecutive patients were recruited (370 were subjected to PM implantation and 94 to ICD implantation). Resource data were assessed at patients' enrolment in the study and at 6th and 12th months of patients' follow-up. Then, the procedure cost, the total hospitalization cost as well as the annual patients' follow up costs were calculated using a bottom-up approach. **RESULTS:** The mean (95% confidence interval) procedure cost of PM and ICD implantation (including the costs of devices, electrodes, other supplies, and personnel's time) was calculated to be €1803 (€1758–€1858) and €13 521 (€13 153–€13 892), respectively. The mean total hospitalization cost (including procedure cost, hospitalization cost, cost of laboratory and imaging diagnostic examinations and the indirect cost attributed to productivity lost due to patient's hospitalization) was €3926 (€3711–€4167) for PM and €17 764 (€16 852–€18 692) for ICD. The mean annual cost (direct and indirect) was €1816 (€1433–€2421) for PM and €2819 (€2115–€3703) for ICD. No difference was detected in the annual cost between patients with initial implantation and replacement. **CONCLUSIONS:** These data revealed that although these devices are associated with a relatively high upfront cost, the annual societal cost following the implantation is low. Therefore, implantation of such devices should be encouraged since these devices reduce the morbidity and mortality without a high economic burden to society.

PCV18
ECONOMIC BURDEN OF CORONARY HEART DISEASE IN THE PATIENTS ATTENDING NATIONAL HEART CENTER, KATHMANDU, NEPAL

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OBJECTIVES: To calculate cost of illness due to coronary heart disease in the patients attending National Heart Center, Kathmandu, Nepal. **METHODS:** Descriptive cross sectional survey was conducted. The total number of sample was 120. The sample was selected by non-probability purposive sampling method. Data entry and analysis was done using SPSS 16.0. Categorical variables were compared using Independent Sample t-test and cross tabulation was done and chi- square test was applied to show significant difference between variables. **RESULTS:** Agriculture was the main source of income of the coronary heart disease household and the average annual household income was NRs. 1, 54,000 (US $ 1792). The study estimated the average cost of illness to be NRs. 30,888.14 (US $ 360) for an outpatient episode of coronary heart disease which was 20.05% of the average annual income of CHD household. The average total time loss of the CHD household was 8.75 person days. The average total direct cost was NRs. 29,600 (US $ 344) of which medical cost was the largest component. The average monetary value of time loss by the household was found to be 2,981.18 (US $ 35). **CONCLUSIONS:** The study found high cost of illness due to centralised system of health care. The findings of the study showed that households struggled to cope and adopted unsustainable strategies that damaged asset and caused or sustained impoverishment. Thus, estimated cost appears to be sustained economic burden on the individual household.

PCV19
AFFORDABILITY OF ANTIHYPERTENSIVE TREATMENT IN MEXICO

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OBJECTIVES: Hypertension (HT) is one of the most prevalent chronic diseases in Mexico. In the last two decades, a substantial increase in the prevalence of HT was observed in Mexico from 25% in 1993 to 43.2% in 2006 in adult population ($\geq$20 years old). Almost 50% of population is not under a social security scheme and many patients pay for medicines out-of-pocket. This study's aim was to calculate the affordability of different kinds of antihypertensive drugs in Mexico. **METHODS:** Price data for 5 classes of antihypertensive drugs (diuretics, beta blockers, calcium channel blockers, ACE inhibitors and angiotensin II receptor antagonists or ARBs) were obtained from public internet sources, and the lowest price identified for

each generic was used to estimate one month's cost of hypertension treatment; considering the maximum and minimum dosage for each generic. The affordability of treatments was calculated by comparing the total cost of medicines to the daily official minimum wage ($63.12MXN, 2013 prices) **RESULTS:** The number of days' wages required to pay one month of antihypertensive therapy ranged from: 0.08-4.18 for diuretics, 0.67-1.90 for beta blockers, 1.7-3.99 for calcium channel blockers, 0.71-3.31 for ACE inhibitors and 2.38-8.11 for ARBs. **CONCLUSIONS:** Cost could be a substantial barrier for permanence in antihypertensive treatment, so that should be discussed measures to prevent this from happening.

PCV20
TREATMENT COSTS OF ISCHEMIC STROKE PREVENTION AND MANAGEMENT IN PATIENTS WITH ATRIAL FIBRILLATION (AF) IN LATIN AMERICA: ARGENTINA, BRAZIL, CHILE, AND VENEZUELA

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OBJECTIVES: AF is the most common chronic cardiac arrhythmia worldwide. Most patients with AF need life-long treatment to be protected from ischemic stroke. The aim was to conduct a high level cost assessment for stroke prevention and management in patients with AF [SPAF & SMAF] in 4 Latin American countries. **METHODS:** Overall the costs of SPAF & SMAF were determined through 59 face-to-face interviews with cardiologists in Argentina, Brazil, Chile and Venezuela. Treatment costs were estimated using benchmarks from major private and public hospitals in each country. **RESULTS:** On average, the largest component of real-life medical expenditures for SPAF, under appropriate treatment given CHADS2 scores, was prescription drugs, which ranged from 68% in private to 75% in public. Annual SPAF treatment ranged in price from US$425 in Argentina to US$1,935 in Chile in private institutions and US$85 in Brazil to US$1,199 in Venezuela in public institutions. Moreover, overall treatment costs in Chile were 5X higher than the least expensive country in each sector. For SMAF, using rivaroxaban vs the common Vitamin K antagonists resulted in a 24%-46% cost reduction for disease treatment at a national level due to better patient adherence. This would decrease the stroke incidence/year, which would translate to US$143 M /yr in savings. **CONCLUSIONS:** AF is an important source of health care resource utilization because of repeated medical examinations, extensive use of laboratory tests and pharmacological treatments. Private and public institution cost differences are common in all 4 countries. Improving access to novel drugs, such as rivaroxaban, could help improve cost allocation, inducing a savings opportunity in each country.

PCV21
HEALTH-ECONOMIC ASSESSMENT OF THE USE OF CATHETER-BASED RENAL DENERVATION IN PATIENTS WITH RESISTANT HYPERTENSION IN MEXICO

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OBJECTIVES: Catheter-based renal denervation (RDN) is a new therapy for resistant hypertension, a condition that affects approx. 10-15% of hypertensive patients, in which blood pressure is uncontrolled despite the simultaneous use of three or more antihypertensive drugs. Our objective was to assess clinical and cost-effectiveness of RDN compared to standard of care (SoC) from the Mexican public payer perspective. **METHODS:** A previously published lifetime Markov model was adapted to the Mexican setting to predict clinical endpoints (death, myocardial infarction, stroke, heart failure, coronary heart disease, end-stage renal disease) and costs - based on Mexican epidemiological and cost data. We evaluated the impact of a 32 mmHg reduction in systolic blood pressure, from a baseline of 178 mmHg, in a 58-year old 43% female, 34% diabetic, and 16% smoking cohort, as observed in the Symplicity HTN-2 randomized controlled trial. Direct public health care costs were estimated from the published literature and from governmental databases. The incremental cost-effectiveness ratio (ICER) was computed as incremental costs per life-year gained, discounted at 3%. Deterministic sensitivity analyses were performed. **RESULTS:** RDN was projected to reduce cardiovascular endpoints by 22-32% over 10 yrs., and 7-17% over lifetime. The lifetime ICER was estimated at MXN$ 194,128 (US$ 14,750) per LY gained, and had an incremental cost of MXN$ 117,916 (US$ 8,959) compared to SoC. Application of higher discount rates led to a measured increase in the ICER. **CONCLUSIONS:** Our model projections suggest that RDN reduces and delays cardiovascular events and is a cost-effective therapy in Mexico when considering most international willingness-to-pay thresholds, but remains above the current national government threshold of one GDP/capita of MXN$ 139,900 (US$ 10,630) per additional life year.

PCV22
COST-EFFECTIVENESS OF TRANSCATHETER AORTIC-VALVE IMPLANTATION FOR SEVERE SYMPTOMATIC AORTIC STENOSIS IN INOPERABLE PATIENTS IN THE BRAZILIAN PUBLIC HEALTH CARE SYSTEM

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OBJECTIVES: Aortic stenosis is the most common valvular heart disease in the elderly – its prevalence is estimated to be up to 5% in individuals over 75 years. Surgical replacement of the aortic valve is considered the standard care and in the absence of serious coexisting conditions, the procedure is associated with low operative mortality. However, a significant proportion of patients can not undergo surgery due to a high surgical risk associated with advanced age or with the presence of multiple coexisting conditions. Treatment with transcatheter aortic-valve implantation (TAVI) is a therapy with potentially lower peri-procedure risk and has been used as a therapeutic option in this group of patients considered inoperable. Therefore, this study aims to develop a cost-effectiveness analysis of TAVI in patients with severe aortic stenosis who are not suitable for surgical treatment. **METHODS:** A Markov model was developed to compare the TAVI *versus* standard therapy (drug treatment