### A278

had high regional prevalence of AF in 2011. Geographic variation in high risk areas can help identify important geographically connected prognostic factors, aid in targeted intervention strategies, and generate hypotheses regarding underlying causes of AF in the United States and associated territories.

#### PCV36

DISEASE BURDEN OF ATRIAL FIBRILLATION, COLOMBIA 2000-2009 Romero M, Chavez D

Fundacion Salutia, Bogota, Colombia

**OBJECTIVES:** To estimate the disease burden of atrial fibrillation and to describe its impact on Colombian population health **METHODS:** We calculated Disability Adjusted Life Year (DALYs) for atrial fibrillation, by adding years of life lost due to premature mortality (YLL) plus years lived with disability (YLD). For calculating YLL it were consulted both death registration and abridged-life tables at national statistic agency DANE for 2000-2009. For calculating YLD it were consulted individual records of service providers for 2009-2010. It were also consulted the map of weighted disability from the Global Burden of Disease study. For data processing we used a template developed in Microsoft  $\ensuremath{\mathsf{Excel}}\xspace$ according to the method described by WHO in October 2001 and taking into account the parameters and formulas that have been described by Murray and Lopez (1996) and Mathers et al (2001). **RESULTS:** In 2000, 2004 and 2009 it was lost due to atrial fibrillation 12,138; 13,188 and 15,327 DALYs in the Colombian population with a ratio of 0.30, 0.31 and 0.34 DALY per thousand people respectively. The relative weight of DALYs was given by the disability component (91.46%). Men accounted for an average of 58% of estimated DALYs; and the most affected age was that of 70-79 years old CONCLUSIONS: The estimated DALYs show that atrial fibrillation is a disease highly disabling in the Colombian population during the study period, given the predominance of the component of years lived with disability (YLD).

#### PCV37

### STUDY OF DAY-TIME RHYTHM OF STROKE ONSET IN CHINESE POPULATION

Wang YL<sup>1</sup>, Xu J<sup>1</sup>, Xie XP<sup>2</sup>, Wang YJ<sup>1</sup>

<sup>1</sup>Beijing Tiantan Hospital Affiliated to Capital Medical University, Beijing, China, <sup>2</sup>Pfizer China, Beijing, China

OBJECTIVES: Most of the studies of time distribution of stroke onset in the Chinese population have a limited number of cases, and national-level data analysis is rare. In this study, circadian rhythm of stroke onset in the Chinese patients was observed on the basis of the China National Stroke Registry (CNSR) data. METHODS: Continuous prospective registration of new-onset acute cerebrovascular events within 14 days was conducted based on nationwide multi-center, continuity, prospective stroke registry data, and 1-year follow-up was performed to analyze the differences in time pattern and prognosis of the onset of strokes of different etiological subtypes and clinical sub-types. **RESULTS:** A total of 9588 people entered the statistical description after cases with absence of time of onset and wake-up stroke were excluded from all of the stroke cases (including IS, ICH, SAH, TIA). The period from 7:00 to 12:00 appeared to be a significant peak for stroke onset. According to different stroke sub-types, onset peak in the morning was more prominent in 5796 cases of IS and 399 cases of TIA; 2,666 cases of ICH and 399 cases of SAH presented two onset peaks from 7:00 to 12:00 and from 17:00 to 19:00. The cases showed the same trend irrespective of initial onset or recurrence and with or without hypertension. Through logistic regression model analysis, gender, age, history of Arial Fibrillation, smoking history and other factors were related to the time of stroke onset to a certain extent. CONCLUSIONS: The time of stroke onset in Chinese patients is generally in the morning. The trend of IS onset is particularly evident. Therefore, paying more attention to morning care and blood pressure control during morning will be important.

#### PCV38

# $\label{eq:hospitalization and mortality in medicare heart failure patients \\ \underline{Hunt \ PR^1}, \ Veath \ BK^2, \ Tsintzos \ S^3, \ Burton \ ML^3, \ Mollenkopf \ SA^3$

<sup>1</sup>United BioSource Corporation, Inc., Lexington, MA, USA, <sup>2</sup>Medtronic International Ltd., Mounds View, MN, USA, <sup>3</sup>Medtronic, Inc., Mounds View, MN, USA

OBJECTIVES: Heart Failure (HF) is a leading cause of morbidity and mortality in the US, and hospitalization for HF appears to be steadily increasing. We sought to identify HF patients and understand the patterns of care for HF in a real-world setting through analysis of a retrospective observational database. METHODS: The study population consisted of patients in the Medicare 5% database with a primary inpatient diagnosis of HF (ICD-9-CM 428.0, 428.9, 428.20-23, 428.30-33, 428.40-43) during CY2005-2008. Patients were followed for up to 33 months (6 months baseline, 3 month index, 24 months follow-up. To exclude prevalent cases, patients were required to have no diagnoses of HF in the baseline period. The quarter of the initial HF inpatient diagnosis was designated the "index quarter". Each patient was followed for up to two years (8 quarters) after the index quarter, or until death or end of enrolment. Frequency of service use based on care setting, diagnosis was determined for the "index quarter" and follow-up period. **RESULTS:** A total of 43,819 patients with new primary HF inpatient claims were identified in the four year study period. Within the 27 month follow-up (includes "index"), the identified HF patients had 140,802 inpatient hospitalizations (3.2 per patient), of which 66,334 (1.5 per patient) had a primary UP discussion in the patient of the patient of the strength of the s HF diagnosis (includes index HF hospitalization). 23% of identified HF patients had one or more HF hospitalizations within two years after the "index". Annualized mortality was 26.4%/year over the first five quarters (includes "index") and 14%/year over quarters 5 through 8. Total mortality was 42.4% (18,562/43,819). **CONCLUSIONS:** Extrapolation of these results suggest that new inpatient HF admissions may account for 145,000 HF inpatient hospitalizations.

HF Mortality after the "index" admission was >40%. Our results underline HF as a major clinical and economic burden in the United States.

#### PCV39

# COMMON PREGNANCY SYMPTOMS INCREASE THE RISK OF CARDIOVASCULAR DISEASE

Zulkifly H<sup>1</sup>, Dingle KD<sup>2</sup>, Clavarino A<sup>2</sup> <sup>1</sup>Universiti Teknologi MARA, Bandar Puncak Alam, Malaysia, <sup>2</sup>University of Queensland, Woolloonqabba, Queensland, Australia

**OBJECTIVES:** To identify the long term effects of common symptoms of pregnancy and whether these increase the risk of cardiovascular disease or symptoms associated with it in women at 21 years after pregnancy. **METHODS:** 

Data used were from the Mater University Study of Pregnancy (MUSP), a community- based prospective birth cohort study begun in Brisbane, Australia, in 1983. Chi square test and logistic regression analyses were conducted. **RESULTS:** Data were available for 3692 women. In cross tabulations, morning sickness, heartburn and backache show positive association (p<0.05) with different cardiovascular outcomes. However, in the multivariate models, only those experiencing heartburn (adjusted OR 1.3, 95% CI 1.0-1.7) during pregnancy were at greater risk of having hypertension 21 years post partum. Women experiencing morning sickness (adjusted OR 1.2, 95% CI 0.8-2.0) and backache (adjusted OR 1.1, 95% CI 0.6-1.7) were not considered to be at risk for future heart disease. **CONCLUSIONS:** As a whole, our study suggests that most common symptoms of pregnancy are not associated with an increased risk of cardiovascular disease or with hypertension in the long term.

#### PCV40

# WARFARIN DOSE ADJUSTMENTS DUE TO DRUG-DRUG INTERACTION WITH DRONEDARONE: A CASE-CONTROL STUDY

Yeh JY<sup>1</sup>, Parker M<sup>2</sup>

<sup>1</sup>Long Island University, Brooklyn, NY, USA, <sup>2</sup>Cleveland Clinic, Cleveland, OH, USA

**OBJECTIVES:** Dronedarone and warfarin are commonly used concurrently in the treatment and prevention of stroke caused by atrial fibrillation. Previous data from clinical trials suggest a drug-drug interaction between warfarin and dronedarone should exist. However, the dosing strategy of warfarin related to dronedarone remained unclear in real-world settings. This observational study aimed to assess the effect of starting dronedarone in patients with stable INRs in daily practice. METHODS: A case-control design was employed. Patients with prior stable INRs who started dronedarone between July 2009 and May 2011 were identified. After dronedarone was added, subjects with unstable INRs were cases and those remaining stable INRs were controls. Data were retrospectively collected via charts review. Primary outcomes were pharmacist-judged unstable INR status and required warfarin dose adjustments to reach stable INRs again. Secondary outcomes were post-INRs and safety measures. Pre-post changes were assessed using paired t-tests. Exploratory logistic and linear regression models were used to identify predictors for primary outcomes. **RESULTS:** Of 131 subjects, 44 (33.6%) were cases. A difference in baseline characteristics between groups was a target INR range not 2.0-3.0 (p=0.030), which remains a predictor of unstable INRs after adjustments for confounders (OR=7.95, 95% CI 1.58-40.09, p=0.012). Forty subjects (30.5%) had increased INRs >0.5, and two (1.5%) had ER visits. No dose adjustment was made in controls. Compared to pre-doses, postdoses were significantly reduced in cases (-5.14 mg or -14.3%, p<0.001). Absolute dose changes were associated with pre-dose (p<0.001), INR target not 2.0-3.0 (p=0.028) and degree of post-INRs deviated from the target (p<0.001). When the outcomes were dose changes in percentage, only the latter remained a predictor (p < 0.001). **CONCLUSIONS:** After dronedarone was added, warfarin doses were downward adjusted in about one-third of patients. The potential drug-drug interaction between dronedarone and warfarin should be considered in clinical practice

CARDIOVASCULAR DISORDERS - Cost Studies

#### PCV41

BUDGET IMPACTS OF POTENTIAL MODIFICATION OF RISK FACTORS FOR HEART FAILURE HOSPITALIZATIONS: A CONTEMPORARY MEDICAID COHORT ANALYSIS

Shaya FT<sup>1</sup>, Breunig IM<sup>1</sup>, Mehra MR<sup>2</sup>

<sup>1</sup>University of Maryland School of Pharmacy, Baltimore, MD, USA, <sup>2</sup>Harvard Medical School, Boston, MA, USA

**OBJECTIVES:** Increasing prevalence of heart failure (HF), increasing enrollment in state programs, and the economic burden of hospitalization among Medicaid patients necessitate an assessment of the budget impact of key risk factors for HF patients in a contemporary Medicaid population. **METHODS:** Claims from Maryland Medicaid, for 14,149 non-dual enrolled, 18-64 year olds with an HF diagnosis between July 1, 2005- December 31, 2009, follow-up >=six months. Weighted Cox Regression estimated average risk of any hospitalization attributable to various comorbidities and first-line therapy use, controlling for confounders. Noting the prevalence of comorbidity and therapy use, and mean cost of primary HF hospitalization for non-dual enrolled Maryland Medicaid patients in 2010 (\$16,963 in 2011 dollars), numbers-needed-to-treat (NNT) were used to conservatively estimate the expected annual impact to the Maryland Medicaid budget attributable to 20% increases in prescribing rates (comorbidity prevalence) and associated reduction (increase) in hospitalization rates. **RESULTS:** Most patients were >45 years (71%), female (56%), and black (60%). Use prevalence was: beta-blockers (26%), ACE-inhibitors/ARB (29%), aldosterone antagonists (AA, 5%), and others including nitrates+hydralazine (37%). Comorbidity prevalence: hypertension (73%), psychological disorder (55%), chronic ischemic heart disease (CIHD, 43%), diabetes (41%), hyperlipidemia (37%).