## Abstracts

2013. Seven other countries were excluded as either there was incomplete information (n = 4) or information was partially in their native language (n = 3). Parameters evaluated were: number of diseases monitored, case definition, presentation of data, and periodicity of data presentation. Websites were accessed from December 4 - December 7, 2008. RESULTS: Information on the number of diseases monitored varied across countries, namely, 64 (U.S.), 66 (Canada), 66 (Australia), and 51 (New Zealand), respectively. There was lack of consistency in case definitions, data presentation, and the type of data accessed on their websites. The US presented raw data in the form of 'Morbidity and Mortality Weekly Report' and elaborated annual reports, available unto 2006. Canada reported raw data monthly and annual reports available until 2004. Australia reported raw data fortnightly and annual reports available into 2006. No such detailed information was available on the surveillance website for New Zealand. CONCLUSIONS: There exists discrepancy in the disease surveillance websites for the countries, in reporting surveillance data and related information. Infectious diseases can achieve epidemiological proportions, hence, there needs to be more concerted efforts in harmonizing structure of the surveillance networks and data presentation. Harmonization efforts taken by the 'European Centre for Disease Prevention and Control' once published, may be considered by other countries.

#### FACTORS ASSOCIATED WITH REPEAT ATTENDANCE AT EMERGENCY DEPARTMENT (ED) OF A SECONDARY CARE HOSPITAL IN SINGAPORE Paul P<sup>1</sup>, Heng BH<sup>1</sup>, Tay SY<sup>2</sup>, Seow E<sup>3</sup>

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**OBJECTIVES:** To determine factors associated with repeat attendance at emergency department (ED) of a secondary care hospital in Singapore. METHODS: An analysis of data from the EDWeb of all patients who attended ED between January 1, 2005 and December 31, 2007 was performed. Variables considered in the analysis were age, gender, race, date of attendance, and diagnosis based on ICD-9CM code. Frequency of ED attendance was categorized into index attendance, repeat attendance and high impact attendance. Index attendance refers to the first visit by the patient to the ED. Repeat attendance refers to more than one visit by the same patient. High impact attendance refers to patients with >5 ED visits. RESULTS: There was a total of 141,642, 142,820, 160,096 ED attendances in 2005, 2006, and 2007, respectively. Of these, 22-24% were by elderly patients (65+ years), and 27%-28% were repeat attendance. Repeat attendance rate increased with age, with highest rates among those aged 75+ years (36%-38%) and significantly higher among young males, older females, and those presenting with chronic obstructive pulmonary disease, respiratory infections, pneumonia, diabetes and heart failure. High impact attendance comprised 7-11% of total attendance and have increased by 12% among persons aged 75+ over the period 2005-2007. Majority (60%) were males. CONCLUSIONS: Repeat attendance constitute more than one fourth of total ED attendance and is marked among the elderly. Singapore's aging population with its complex health needs is likely to make up an increasing proportion of the workload of ED staff in the coming years.

#### INCIDENCE AND OUTCOMES OF POTENTIAL DRUG-DRUG INTERACTIONS AMONG MEDICARE PART D PATIENTS Mendonca C, Lobb WB, Banahan BF, Wilkin NE, Pace PF

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**OBJECTIVES:** To examine the incidence of Medicare Part D enrollees potentially affected by drug-drug interactions (DDI) and associated hospitalization, ER visits and death. METHODS: A retrospective cohort study of 2006 Medicare Part D enrollees from six states (Alabama, California, Florida, Mississippi, New York, and Ohio) was conducted. Enrollees with Part D claims for either the object or precipitant (precipitant alters the effects/pharmacokinetics of object) drug identified to result in a drug-drug interaction were included. Enrollees were identified as having a DDI if the object and precipitant drug were taken during overlapping dates, with the first day of overlap being the DDI event date. Medicare Part A records for 2006 were evaluated to examine hospitalizations and ER visits within 30 days of an object drug precipitation of the potential DDI. The Medicare beneficiary file was used to examine death. RESULTS: Data were available for 2,707,769 enrollees. Overall, 15.3% of enrollees were taking an object and precipitant drug, thus being at risk for a potential DDI. After controlling for age, gender, ethnicity, and comorbidities, the odds ratio for hospitalization and for ER visits when comparing enrollees with a DDI to enrollees taking an object drug without DDI potential were: 1.57 and 1.57 for warfarin DDI's; 1.28 and 1.48 for digoxin DDI's; 1.37 and 1.04 for beta-blocker DDI's; 1.27 and 1.09 for ACE/ARB inhibitor DDI's; 2.20 and 1.90 for methotrexate DDI's; 1.37 and 1.23 for clonidine DDI's, Significant outcomes were not found for pimozide, MAOI/SSRI, and thiopurine DDI's. There was no increase in risk of mortality. CONCLUSIONS: Potential DDIs are still a significant problem among the elderly. Intervention strategies to reduce the incidence of potential DDI's should be a priority in CMS quality assurance activities.

## A89

# PHP60

#### OVERVIEW OF POST-MARKETING DRUG SAFETY SURVEILLANCE IN SOME DEVELOPING COUNTRIES AND WELL DEVELOPED REGIONS Vaidya S<sup>1</sup>, <u>Guo II</u><sup>1</sup>, Heaton PC<sup>1</sup>, Steinbuch M<sup>2</sup>

University of Cincinnati, Cincinnati, OH, USA, <sup>2</sup>P&G Pharmaceuticals, Inc, Mason, OH, USA OBJECTIVES: The pharmacovigilance guidances have been implemented in many well developed countries, but in the developing countries it remains largely unclear. The purpose of this study was to review the current status of post-marketing drug safety surveillance in developing countries as defined by low and lower-middle-income economies and to compare it with some of the developed countries as defined by high-income economies. METHODS: Using Pubmed, EMBASE, Cochrane, textbooks, and Internet search engines, an extensive literature review on post-marketing drug safety surveillance systems were reviewed in terms of regulatory policy, organizational structure, adverse drug reaction (ADR) reports, and safety monitoring system. The available data in the developing countries namely India, Zambia, Tanzania, China, Cuba, Ukraine, Malaysia, Chile and South Africa were then compared with that in the developed countries namely Netherlands, UK, and the United States. RESULTS: Some developing countries like China and India are establishing pharmacovigilance centers and appear to be actively involved in post marketing surveillance. A handful of developing countries have a well planned strategy for pharmacovigilance. Many countries such as Kenya and Ethiopia do not have an ADR reporting system. Paucity of trained and experienced personnel, financial resources, and availability and irrational use of herbal medicines are some of the major obstacles in planning a well organized and structured ADR reporting system. The developing countries also lack well defined guidelines on risk management. CONCLUSIONS: There is a definite need for drug safety programs in the developing countries given the fact that these countries differ markedly in terms of type of disease prevalence, patient genotype and environment. A cooperative and exhaustive effort by the regulatory authorities, physicians, as well as the pharmaceutical industry will be needed in order to create a functioning pharmacovigilance system in these countries.

PHP61

# INFLUENCE OF HEALTH-RELATED QUALITY OF LIFE ON HEALTH SERVICE UTILIZATION IN ADDITION TO SOCIO-DEMOGRAPHIC AND MORBIDITY VARIABLES AMONG PRIMARY CARE PATIENTS IN CHINA Chen T

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PHP58

PHP59

OBJECTIVES: We aimed to investigate associations between health-related quality of life (HRQoL) and health service utilization and to investigate whether HRQoL has an independent influence on health service utilization in addition to socio-demographic and morbidity variables. METHODS: A retrospective cross-sectional design was carried out among primary care patients in mainland China. Health services utilization was measured by the number of monthly outpatient consultation and the annual hospitalization rate. HRQoL was measured by the SF-36. The clustered regression model was adopted to calculate the independent influence of HROoL on health service utilization in addition to socio-demographic and morbidity variables. A total of 733 valid subjects were eventually recruited in this study. RESULTS: Three of the SF-36 subscales were reversely associated with the outpatient consultation, whereas two of the SF-36 subscales were reversely associated with inpatient consultation. In addition to socio-demographic and morbidity variables, one subscale of the SF-36 (mental health) was reversely associated with the outpatient consultation with independent influence of 11.8 %; whereas one subscale of the SF-36 (general health) was reversely associated with the inpatient consultation with independent influence of 26.0%. CONCLUSIONS: HRQoL was reversely associated with health services utilization and the independent influence of HRQoL on health services utilization was smaller than that of socio-demographic and morbidity variables among primary care patients in mainland China.

## PHP62

# THE PRELIMINARY IMPACT OF HOSPITAL GLOBAL BUDGETING ON THE QUALITY OF CARE

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OBJECTIVES: To investigate the preliminary impact of hospital global budgeting on the quality of care in Taiwan. METHODS: The logistic regression analysis was employed to explore, after adjusting for case-mix using Charlson Comorbidity Index score, SARS effect and time trend, the impact of global budgeting on the mortality 30 days after admission, readmission 30 days after discharge and infection. Hospital inpatient claims of National Health Insurance from 2000 to 2004 were used. Global budgeting implemented on July 1, 2002 was represented by a dummy variable in the model. RESULTS: The mortality rates 30 days after admission were 3.81, 3.87, 3.8, 4.11 and 3.91 respectively; while the readmission rates 30 days after discharge were 17.3, 18.1, 18.5, 18.8 and 19.5. The corresponding infection rates were 0.76, 0.78, 0.75, 0.83 and 0.79. After the implementation of hospital global budgeting, patients in district hospitals had lower readmission possibilities and insignificant difference in infection. However, patients in medical centers and regional hospitals had higher readmission but lower infection probabilities. Patients in all hospitals had lower probability of death. CONCLUSIONS: Since the sector global budgeting in the first two years incurred stronger competition among hospitals, larger hospitals such as medical centers and regional hospitals generated higher readmission rates, resulting in lower readmission rates for district hospitals. Nevertheless the mortality rates as well as the