

that education, age, experiences, and department of obgyn (vs other departments) were the determinants of inefficiency. The most predominant factors contribute to the inefficiency was the obgyn department. This study recommends to adopts a single-dose prescription policy.

#### **SP-114**

##### **Pediatricians' Role of Caring Preschool Children in Taiwan under the National Health Insurance Program**

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**Background:** The National Health Insurance (NHI) covers more than 98% of the 22 million people in Taiwan. Because referral is not mandated, competition among specialties exists in caring preschool children. The aim of this study was to analyze the utility of outpatient service among preschool children to investigate the pediatricians' role in caring preschool children. We also analyzed how the density of specialists induces demand by using the NHI database.

**Methods:** We used the systematic sampling file, CD20040, from the bureau of NHI, Taiwan, as the data source for analysis. We linked the file to the registries for medical personnel and the board-certified specialists to analyze the specialty distribution. We also linked to the registry for contracted medical facilities to analyze the distribution in different levels of hospitals. **Results:** In total, 56,144 outpatient visits for preschool children were analyzed. Among them, 59.1% of outpatient services for preschool children were provided by pediatric specialists, 20.7% by otolaryngologists, 13.5% by family medicine specialists, and the other 6.7% by general practitioners. Most of the visits occurred in the primary care setting (84.1%). As children grew older, a significant decline in the pediatric specialists' visit rate and an increase in the otolaryngologists' visit rate were observed in the primary care setting. Young children visited pediatric specialists more frequently. The pediatric specialists' visit rate was higher in the northern urban areas. It was also significantly correlated with the density of pediatricians. **Conclusion:** In summary, otolaryngologists compete with pediatricians in the primary care of preschool children in Taiwan. The proportion of visits to pediatric specialists was significantly correlated with the density of pediatricians among different counties. The NHI should modify its policy to make the medical system more equitable.

#### **SP-115**

##### **Managerial Effectiveness of Universal Coverage Insurance Scheme in Thailand**

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The objective of this study is to evaluate managerial effectiveness of Universal Coverage Insurance 2006-2008. Analysis of secondary data from 3 resources (National Statistic Office, National Health Security Office and Assumption Business Administration College Poll) is the method of this study. Results indicated that 61.2 million Thai populations was covered by National Health Security Office (97.94%). Regarding quality assurance of primary care unit, there was an increase in competency of health workers and compliances with the standard of hospital assurance (HA) or ISO 9001:2000, from 91.36% to 94.33%. Even though there were health service providers for 5 work days per week, but there were problems such as standard of health care, delayed of services, follow up / referral system, refusal of treatments by providers and quality of pharmaceutical products. Analysis of the 3 data sources indicated that the universal coverage insurance was able to: 1) decrease household expenses, 2) increase quality of life for Thai population, 3) find no definite direction of other health funding, and 4) prevent litigation by paying compensation for those who received medical treatment errors. Recommendations for universal coverage insurance program are as followed, provide enough cash flow for primary care units; control cost of pharmaceutical products and increase quality by using co-payment concept, local budgeting and combining other health funds.

#### **SP-116**

##### **Did Patients and Primary Clinic Physicians in the "Family Physician Integrated Health Care Program" Have the Same Expectations of Health Care Services?** Yi-Chun Chen<sup>1</sup>, Weir-Sen Lin<sup>2</sup>, Hui-Fang Chen<sup>2</sup>, Li-Ching Chung<sup>2</sup>

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In 2003, Bureau of National Health Insurance (BNHI) promoted "the family physician integrated health care program (FPIHCP)" to offer a complete and continuous health care for patients in Taiwan. In this program, BNHI provided patients in this program with 24-hours telephone consultant, primary health care, referrals, etc. But, did the contracted clinical physicians have intentions to providing these services and can these services meet participants' expectations? The purpose of this study is to focus on what kind of health care services clinic physicians would like to provide with and how these services meet demands of patients in the program. Clinical physicians and patients involved in FPIHCP were recruited in this study. Questionnaires sent out for all of 163 clinical physicians in southern Taiwan and 106 returned. Patients were randomly selected to respond the questionnaire with consents. A total of 454 patient questionnaires were used in this study. Contents of the measurement included demographic variables, 24-hours telephone consultant, informing patients to having health checkup, etc. Data were analyzed by SPSS10.0 statistical

computer software. Differences between demographic variables and expectation items were analyzed by t-test and ANOVA. The physicians had lower willing to provide were 24-hours telephone consultant ( $3.1 \pm 1.5$ ), to inform patients to receive pap smear ( $3.7 \pm 1.2$ ), and to have health checkup ( $3.8 \pm 1.1$ ). But patients in FPIHCP have very high expectations in 24-hours telephone consultant service ( $4.4 \pm 0.9$ ) and informing them to receive Pap smear ( $4.1 \pm 1.2$ ), and to have health checkup ( $4.3 \pm 0.9$ ).

#### SP-117

##### **Literature Review: Factors Which Influence the Coverage of Social Health Insurance in Mongolia** **Javkhlahbayar Dorjdagva<sup>1</sup>, Enkhjargal Batbaatar<sup>1</sup>, Tseden Purevdorj<sup>1</sup>, Amir Shmueli<sup>2</sup>**

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In Mongolia, 95 percent of SHI coverage was observed after two years of the SHI system introduction in 1994, declined to 87.6, 74 percent in 2000; 74 percent in 2006. Aim of the research is to describe factors which influence the SHI coverage in Mongolia and examine their effect on the coverage so that appropriate recommendations can be made to Policy makers. This review is based on various papers selected from a variety of Health journals, health financing documents obtained from WHO, WB and other sources. The results of this research suggest that differences in lifestyle, economic situation and administrative capacity of the SHI organizations in the urban and rural populations were the primary reasons for the existing differences in the coverage between these two populations. The cessation of insurance premium government subsidies for the students and herdsman from low income and vulnerable group is the main reason for recent decline of the SHI coverage. The decline of the SHI coverage of the country can be further explained by the marked reduction of the SHI coverage in the rural part of the country but also very low increase in rate of coverage in urban areas. Improving the management of collecting premium according to the traditional lifestyle of the people in the rural areas and including student's premium for SHI in the university's tuition fee in order to increase the SHI coverage for students are recommended strategies to increase the SHI coverage of Mongolia.

#### SP-118

##### **Physician Characteristics Associated with Repeat Use of CT and MR Imaging** **Dachen Chu<sup>1</sup>, Ran-Chou Chen<sup>1</sup>, Heng-Ching Lin<sup>2</sup>, Tom Chen<sup>3</sup>, Sheng-Tzu Hung<sup>2</sup>, Nai-Wen Kuo<sup>2</sup>, Pesus Chou<sup>1</sup>**

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**Object:** Use of high-cost imaging modalities, such as computed tomography (CT) and magnetic resonance (MR) imaging, has increased 50% between 2000 and 2004. Repeated examinations account for one-third of these high-cost radiological examinations. The purpose of this study is to evaluate the relation between physicians' characteristics and repeated CT and MR imaging within 90 days, using a nationwide population-based dataset from Taiwan's National Health Insurance system.

**Methods:** All physicians who ordered CT and MR imaging examinations between 2004-2005 were identified. We analyzed the total number of CT and MR scans, the number of repeat scans and the repeat scan rate, according to physician characteristics (specialty, age, gender, and practice hospital). A multivariate logistic regression analysis was performed to explore the adjusted relationship between physician characteristics and their rate of ordering repeat CT and MR imaging. **Results:** A total of 16,307 physicians were responsible for a total of 2,152,292 CT and MR scans during 2004-2005 in Taiwan. The repeat scans accounted for 21.5% of the total. Male physicians and physicians aged 41-50 years ordered more repeat scans. Internal medicine is the most frequent repeat users of CT/MR scans. Internal medicine physicians ordered 44.3% of all scans, and 50.6% of all repeat scans. Surgeons ordered 40.4% of total scans, and 38.5% of repeat scans. Family doctors, OBS/GYN, and pediatrics rank the last among the specialists. Physicians who practice in medical centers ordered the most CT/MR scans. **Conclusion:** Our study shows that repeat use of CT and MR scans is related to physicians' characteristics.

#### SP-119

##### **Hospitalization Costs of the Acute Hepatitis a Cases in Mongolia**

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**Background:** Hepatitis A (HAV) was reported 35 per 10 000 in Mongolia in 2008, which increased by two times in comparison with cases registered during 2003-2007. An outbreak of hepatitis A has been ongoing with 18 230 confirmed cases reported in 2007-2008.

**Objective:** The objective of this study was to analyze data of the morbidities, average stays in hospital and costs associated with the hospitalization of hepatitis in 2008.

**Methods:** Data on epidemiological characteristics of hepatitis A for children aged 0-15 who admitted to the National Center for Communicable Diseases collected by the Health info Data Set. National hospitalization rates were calculated for hepatitis A. Morbidities, mean and average length of stay to hospital, and mean medical cost of hospitalization were analyzed.

**Results:** The total number of hospitalized patients with hepatitis A diagnosis was 1291 subjects. Fifty one