sary antibiotic use. Public health campaigns may have an important role in improving appropriate antibiotic prescribing.

**PHP1**

**ASSESSMENT OF DIAGNOSTIC NEED FOR MAGNETIC RESONANCE IMAGING IN MEDICARE PATIENTS WITH PACEMAKER IMPLANTS**

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OBJECTIVES: To estimate the potential unmet need for Magnetic Resonance Imaging (MRI) among Medicare patients with pacemaker implants, via the prevalence of diagnoses and conditions for which MRI is the preferred investigation method.

METHODS: The data analyzed comprised of fee-for-service portion of the 2008 Medicare patient population. Using this sample, two issues were examined: the prevalence of the diagnoses for which MRI is the preferred imaging modality, and the uptake of MRI modalities for Medicare-implanted cardic patients compared with those having no implants. For each of those diagnoses for which MRI is the preferred modality, we also identified any trade-offs between lower MRI rates and higher rates for other imaging modalities in pacemaker-implanted patients compared with non-implanted patients.

RESULTS: There was almost no use of MRI in the pacemaker-implanted population, whereas 13% of patients without any kind of implant received an MRI in 2008. Clinical practice appears in line with the contraindication for MRI in pacemaker-implanted patients. Cancer of the CNS and suspected Stroke are conditions which require timely and good therapeutic decision making. A total of 73% and 41% of non-paced subjects received whole body MRI for these conditions respectively. MRI was used in less than 9% of paced subjects for each diagnosis. Similar diagnostic discrepancies were observed for other cardiac conditions. Pacemaker-implanted patients also had high rates of co-morbidities. CONCLUSIONS: There seems to be a large unmet clinical need for pacemakers and other implanted cardiac devices which allow MRI to be used as a diagnostic method. The very high rate of MRI use in non-implanted patients with acute, progressive and often fatal conditions of stroke and cancer, and its absence in the same patient groups with implants is a concern. The use of MRI conditional cardiac devices would facilitate greater diagnostic method choice.

**PHP2**

**THE EVALUATION OF VACCINE REFRIGERATOR TEMPERATURE SURVEY CONDUCTED BY PRIMARY CARE UNITS OF SONGKHLA HOSPITAL**

Sae Wong A, Kulthavaporn S

OBJECTIVES: To evaluate the quality and improve the quality control of vaccine refrigerators at primary care units. PCU. METHODS: It was a quasi-experimental study; pre-post intervention descriptive design was studied. Computerized Transitor temperature data loggers were used to monitor vaccine refrigerator temperatures at 19 PCU under the authority of Songkhla hospital. Data loggers, monitoring temperatures from 40-4°C were programmed to record every 15 minutes for 30 days. Percentage of frequency which temperatures were out of 2-8°C range and maximum/minimum temperatures had been used for this evaluation. Results of the study were sent back to PCU for adjustment. Post-adjustment data were collected. RESULTS: Vaccine Refrigerators at PCU were household models Refrigerator ages average is 7.37 years. Before intervention, average percentage of frequency, which temperatures were <2°C and > 8°C, was 13.76% and 2.03% (range 0%-81% and 0%-11.25% respectively). 19 units recorded temperatures below 2°C at one point. The lowest and highest temperatures recorded were 26.2°C and -7°C. After assessment, 8 units required modifications and 11 units got new refrigerators. Refrigerators age average was 2.68 years. Average percentage of frequency, temperatures <2°C and > 8°C was, 3.31% and 0.30% (range 0%-5.6% and 0%-0.5% respectively), 6 units had no out of range temperatures. Lowest and highest temperatures were 25.2°C and 10°C. The percentage of frequency was decreased in 13 units but not statistically significant. However, the lowest and highest temperatures were statistically significantly decreased (p-value = 0.004, 0.013 respectively) CONCLUSIONS: Using data logger and this method could help maintain vaccine quality. Data logger should be used continually to monitor temperature in a vaccine refrigerator.

**PHP3**

**AFFORDABILITY OF ANTIBACTERIAL MEDICINES IN IRAN DURING 2001-2010**

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OBJECTIVES: Affordability is one of the main objectives of national drug policies but there are no clear indicators to determine whether a medicine is affordable. The objective of this study was to determine the current status, determinants and affordability of antibacterial medicines in Iran. Specifically, we explored how economic conditions in Iran have affected the affordability of antibacterials during 2001-2010.

METHODS: Annual sales of antibacterials for systemic use (J01) based on ATC classification were obtained from the Ministry of Health and Social Security of Iran and converted to 2001 prices using the Consumer Price Index (CPI) and the exchange rate. The share of inpatient (IP) and outpatient (OP) costs in drug expenditure was estimated after adjusting for health utilization (IP and OP). The share of medicines purchased with personal payment was estimated for each year. Key determinants of affordability were estimated via panels effects models and determinants of total pharmaceutical expenditure in China.

RESULTS: In 2001, the share of medicines purchased with personal payment was 0.47. The share of medicines purchased with personal payment decreased over time and was below 0.1 in 2009. The share of inpatient costs in drug expenditure was 0.37 and 0.47 in 2001 and 2009, respectively. The share of outpatient costs increased from 0.63 in 2001 to 0.53 in 2009. The share of inpatient costs was 0.37 in 2001 and 0.47 in 2009. The share of outpatient costs increased from 0.63 in 2001 to 0.53 in 2009. The share of outpatient costs increased from 0.63 in 2001 to 0.53 in 2009. The share of outpatient costs increased from 0.63 in 2001 to 0.53 in 2009.

CONCLUSIONS: Affordability is one of the main objectives of national drug policies but there are no clear indicators to determine whether a medicine is affordable. The share of inpatient (IP) and outpatient (OP) costs in drug expenditure was estimated after adjusting for health utilization (IP and OP). The share of medicines purchased with personal payment was estimated for each year. Key determinants of affordability were estimated via panels effects models and determinants of total pharmaceutical expenditure in China.

**PHP4**

**THE IMPLEMENTATION OF ESSENTIAL MEDICINE POLICY IN CHINA: PROS AND CONS**

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OBJECTIVES: Establishing essential medicine policy (EMP) is one of 5 health system reform pillars in China in 2009. After three-year implementation, the strengths and weaknesses of EMP need to be monitoring and evaluation. OBJECTIVES: The paper reviews the process of listing, pricing, purchasing, utilization and reimbursement of essential medicines and discusses the achievements and issues of EMP. METHODS: