Some countries’ pharmaceutical benefits programs such as Australia, Canada, or U.S. listed DEs for pancreatic insufficiency due to chronic pancreatitis, carcinoma of the pancreas, HIV, and a variety of other chronic conditions, which implies that NH1 had broader scope of indications. In addition to more medical orders prescribed by varied health care specialties, we observed the expenditure increased by approximately two times over the past 10 years.

**PHP31**

**KNOWLEDGE AND PRACTICE OF DISPOSAL OF DATE EXPIRED AND UNUSED DRUGS**

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**OBJECTIVES:** Knowledge and practice of disposal of date expired and unused drugs among college students and people having a health science background and to find the most widely used method of drug disposal for the expired drugs in the study group. 

**METHODS:** A total of 2,755 questionnaires were administrated to undergraduate students with varying health sciences background which should be done either by the government or any organization. 

**RESULTS:** The study clearly indicates lack of awareness and good practices of date expired drugs among surveyed population. There is a need to create awareness regarding disposal of drugs among the population which should be done either by the government or any organization.

**PHP32**

**ANALYZING THE UTILITIES OF FLUOROQUINOLONES AT A REGIONAL TEACHING HOSPITAL OF SOUTHERN TAIWAN**

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**OBJECTIVES:** Adequate use of antimicrobial agent is critical issue in hospital. It would enlarge the burden, for instance increase medical expenditure and antimicrobial resistance rate, if misuse. To evaluate the annual use of the third line antibiotic agents - fluoroquinolones, including ciprofloxacin, moxifloxacin and levofloxacin, was extracted monthly from Hospital Information System of a regional teaching hospital. 

**METHODS:** The data, including patient-days and the consumption quantity of ciprofloxacin, moxifloxacin and levofloxacin, was extracted from Hospital Information System of a regional teaching hospital from January 2010 to December 2011. Consumption quantity was transferred to “1000DDD /patient-days”. Data management and analysis was performed using statistical software SPSS 13.0. 

**RESULTS:** Number of 1000DDD /patient-days in levofloxacin was 202.47 in 2010, 202.47 in 2011 and there was no significantly different (p=0.067). Number of 1000DDD /patient-days in ciprofloxacin significantly decreased (p=0.0023) in 2011(1000DDD /patient-days = 127.35) comparing with 2010 does (1000DDD /patient-days = 181.69). Number of 1000DDD /patient-months in moxifloxacin were 38.95 in 2010 and 48.08 in 2011. In the aspect of levofloxacin, number of 1000DDD /patient-days were 25.46 in 2010 and 27.03 in 2011. The number of 1000DDD /patient-days in Moxifloxacin and Levofloxacin both were no significantly different between 2011 and 2010.

**CONCLUSIONS:** The fluoroquinolones consumption decreased especially on ciprofloxacin, but the levofloxacin and moxifloxacin mild increased. Although no significantly difference on the amount of all fluoroquinolones between 2010 and 2011 may be good and stand for well control.

**PHP33**

**DRUG-RELATED PROBLEMS AND LENGTH OF STAY IN THE MANAGEMENT OF INFECTION IN PATIENTS WITH CHRONIC KIDNEY DISEASE**

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**OBJECTIVES:** To identify the nature and frequency of DRPs (drug interaction and irrational dose), and their impacts on length of stay (LOS) of patients with chronic kidney disease (CKD) stage 1 to 5 in a hospital setting. 

**METHODS:** This retrospective cohort study was conducted on 80 patients based on JAMESMOMS database for 6-month period (October 2009 - March 2010). Inclusion criteria were patients administered antibiotics and GFR of ≥30 ml/min/1.73 m². Exclusion criteria were patients 18 years old, patients with cancer, and patient with Human Immunodeficiency Virus (HIV). Data collected include type of drugs administered, laboratory tests, and clinical outcomes. Identification of drug interaction and analysis of antibiotics dose rationality were performed using Stockley’s drug interactions, Medlines, and Handbook of Clinical Drug Data. The impacts of DRPs on LOS were performed by multiple linear regression analysis. 

**RESULTS:** Of the sample, male was 66% and female was 34%, CKD stage 4 was 17% and CKD stage 5 was 83%. Most drug interactions were between NSAIDs and ACE inhibitor, ranitidine and furosemide, ranitidine and ciprofloxacin, macrolide and amoxicillin or/and NSSAIDs and NCCM. 

**CONCLUSIONS:** Drug interaction 1 = 1.31. Most frequent irrational doses of antibiotics involved ceftriaxone, cefazidime, cefadroxil, ciprofloxacin, and amoxicillin. Mean value of irrational doses was 0.43 ± 0.67. Means of LOS was 6.45 ± 2.49. Simple linear equation: y = 3.91 - 0.67x + 0.29x² = irrational dose of antibiotics. 

**PHP34**

**THE CLINICAL EFFECTIVENESS AND RESOURCE UTILIZATION OF DRUGS WHICH CONTAIN HERBAL EXTRACTS – THE EXAMPLES ON SILYMARIN**

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**OBJECTIVES:** Although most of the medications containing herbal extracts have been used in the treatment of diseases for many years, the evidence on the clinical efficacy and safety are still in controversy. It is necessary to conduct an evaluation on these products. 

**METHODS:** First, we defined the “medications containing herbal extracts” in this study, as well as identified the items reimbursed in National Health Insurance. In the next step, we analyzed the 2001-2007 National Health Insurance Research Database (NHIRD) to find the most frequently used items in the category. Silymarin was identified as the most used during 2001-2007. We conducted the literature search and review on the clinical effectiveness of the ingredient. 

**RESULTS:** In this review, we summarized the reports published by the literature. These reports had systematically reviewed on the topic of the effectiveness of silymarin in patients with alcoholic or /and hepatitis B or C liver diseases. In the report by The Cochrane Collaboration - a total of thirteen randomized trials assessed silymarin in patients with alcoholic and /or hepatitis B or C liver diseases were included in the meta-analysis. Results from these trials showed a significant effect of silymarin on liver-related mortality (RR 0.50, 95% CI 0.29 - 0.88), but no significant effects could be demonstrated if the analysis were restricted on only high quality trials (RR 0.57, 95% CI 0.28 - 1.19). For the resource utilization of silymarin, we found that the total claims on silymarin increased 59.83% from year 2001 to 2006/2007.

**CONCLUSIONS:** As mentioned above, the effectiveness of silymarin in patients with liver disease has not been established. Further studies on mechanisms of action, as well as related well-designed clinical trials are needed.

**PHP35**

**IS THERE A DIFFERENCE IN PRESCRIPTION MEDICATION UTILIZATION BETWEEN AGED ADULTS WITH AND WITHOUT DISABILITY IN THE UNITED STATES?**

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**OBJECTIVES:** To quantify the association between disability and prescription medication use among older adults. Individuals with disability may consume more or vary types of prescription medication, thereby requiring special services. 

**METHODS:** Data from the nationally-representative Health and Retirement Study 2006 and the Prescription Drug Study 2007 in the United States were used to examine the associations between disability and prescription medication use among 2,755 adults. The dependent variable, disability versus no disability, was determined based on responses to questions assessing functional, mobility, and cognitive status. Subjects responding affirmatively to one of these types of disabilities were classified as disabled. Descriptive statistics assessed the dependent categorical variables by disability. Negative binomial regressions were used to examine the relationship between disability and prescription medication use, controlling for accessibility, affordability, beliefs in medication, health conditions and sociodemographic variables. 

**RESULTS:** Of the 2,755 subjects, 70.8% were classified as disabled. Female, older, non-white, widowed, less educated, living in rural area, lower income, having three chronic diseases, poor health status, no alcohol or smoking habits, hardly exercise, taking prescription drugs regularly, and consulting with medical doctors more were all statistically significant variables indicating greater risk of disability (P<0.001). Subjects classified as disabled (IRR = 1.09 [95% CI, 1.03-1.15]), with three or more chronic conditions (IRR = 2.08 [95% CI, 1.92-2.35]), not exercising (IRR = 1.08 [95% CI, 1.04-1.10]), taking medications regularly (IRR = 1.85 [95% CI, 1.51-2.27]) and seven more times doctor visits (IRR = 1.46 [95% CI, 1.35-1.57]) had a greater incidence of prescription medication use. Subjects with lower income (IRR = 0.99 [95% CI, 0.99-0.99]), no alcohol or smoking habits (IRR = 0.93 [95% CI, 0.88-0.98]) had a lower incidence likelihood of prescription medication use. 

**CONCLUSIONS:** Disability was a statistically significant predictor of prescription medication use in research use and further research is necessary to examine the associations between specific disability types and medications use.

**PHP36**

**COMPARING ORAL 5-AMINOSALICYLIC ACID TREATMENT PERSISTENCE AND ADHERENCE IN PATIENTS WITH ULCERATIVE COLITIS IN THE UNITED STATES**

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**OBJECTIVES:** Compare oral 5-aminosalicylic acid (5-ASA) treatment persistence and adherence in patients with mild/moderate ulcerative colitis (UC). 

**RESULTS:** IMS LifeLink™ Health Plan claims data were analyzed to identify patients ≥18 years with ≥1 UC diagnosis (ICD-9-CM: 556.x) and had ≥1 prescription for 5-ASA (sul-