OBJECTIVES: China’s health care expenditure is one of the largest in the world and is set to grow strongly in the foreseeable future. A greater understanding of the impact of economic and policy factors on China’s health care expenditure and its growth trend will help major pharmaceutical firms make strategic plans in the emerging markets. METHODS: Dynamic least squares regression was used on annual time series data from 1998 to 2013. The dependent variable was real health care expenditure (RPCHE). The explanatory variables included real per capita GDP (RPCGD), relative price for consumer health spending (RPCMED) and lagged variables. The analysis used data from WHO, China Statistical Yearbook and IHME data.RESULTS: The main independent variables were RPCGD and RPCMED. A positive correlation was found between estimated RPCHE and RPCGD, and a negative correlation between estimated RPCHE and RPCMED. The main results can be summarized as follows: 1) For every 1% rise in the growth rate of GDP, there is a 1.36% decrease in the level of RPCHE, and 2) the income elasticity of real health care expenditure is 15%. Based on the estimations, forecasts on total health care expenditure were made for the forecast period (2012-2020). The main independent variables—RPCMED and RPCGD—were derived from IHS Macro for the forecast period. To capture health care policy’s impact on health care expenditure, expenditure, and factors were used in the forecast. According to the forecast, China’s total health care expenditure is projected to grow 15.8% this year and 14.8% next. CONCLUSIONS: In terms of economic impact, relative price for consumer health spending and income play a major role in determining health care expenditure. In terms of policy impact, China’s health care expenditure will increase with economic expansion—will be a key driver of health care expenditure growth throughout the forecast horizon, although there are increasing pressures on pricing and significant regional disparities.

PHG48 HEALTH FINANCING FOR PRISONERS WITH HIV: LESSON LEARNED FROM INDONESIA

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OBJECTIVES: To obtain information on spending on prevention and care-treatment programs among prisoners in two prisons: Jakarta and Bali and who finance the program. METHODS: Retrospective data was collected from two prisons: Bali and Jakarta. Cost was estimated from government and partners perspective. Both quantitative and qualitative analysis were done. A modified activity-based costing was done with supported document review and interviews. RESULTS: HIV intervention in Indonesia has been improving with support from the Government and international partners. At the moment several prisons in Java are chosen as model for HIV-AIDS programs for prisoners, including VCT, Lab-test, ART, OI treatment and hospital care. Total spending in Bali was USD 26.239 per year and unit cost of the program was USD 78, while in Jakarta unit cost was USD 426. These spending even higher if other activities such as substitution and treatment at hospital were included. Some programs such as Methadone therapy, condom and ART were conducted in collaboration with District Health Office and local hospital, and funded by government. Interestingly, program for prisoners in Bali includes spiritual therapy such as yoga and dancing, initiated using funds from international partners. High cost for CD4 and ART were covered by central government, while operational cost was supported by local government. Networking with other institution brought more funds, since no direct costs actually covered by the prisons themselves. CONCLUSIONS: Most of program intervention for prisoners supported by external partners. Sustainability issue remain unclear since donor funding will be finished soon and must be replaced by government. Local government is expected to support continuity of the program, but regions with low fiscal capacity are not able to ensure program continuity.

PHG49 DOWN-SCHEDULING MEDICINES FROM PRESCRIPTION TO OVER-THE-COUNTER: WIN-WIN?

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OBJECTIVES: Each year over a million patients in Australia delay seeing a General Practitioner (GP), and a similar number do not fill their prescriptions, because of the cost. This study assessed how necessary medications has economic and morbidity implications in the long-term. In addition, reduced uptake affects company revenue. Currently the US Food and Drug Administration (FDA) is considering a range of measures to improve access to medicines, including making more drugs used for common, under-treated conditions, available over-the-counter (OTC). This study aimed to group patients according to the patient and potential manufacturer price for a sample of medicines that are available both OTC and on prescription in Australia.

METHODS: Costs of accessing diclofenac (25mg tablets) and omeprazole (20mg tablets) via a GP prescription were compared to those for OTC. For medicines obtained on prescription, doctors mentioned mark-up. Costs of accessing OTC medicines were estimated based on a sample of pharmacies. The resultant cost to patient and potential price to the manufacturer were calculated and compared.

RESULTS: The difference between the two price points was estimated at $7.79 for diclofenac and $10.36 for omeprazole, representing a cost difference of up to 50% less expensive per tablet than accessing treatment via GP prescription. The per tablet savings for patient were greater for omeprazole than for diclofenac. At the point of sale, the cost per tablet of OTC products was 150%-500% of the ex-manufacturer cost for the PBS listed product. Therefore, an OTC strategy also appears to be a commercially viable for manufacturers, even allowing for a pharmacy mark-up.

CONCLUSIONS: Down-scheduling from prescription-only to OTC may decrease the direct costs of treatment for patients, while simultaneously increasing the price per tablet to manufacturers: a win-win situation.

PHG50 INTERACTED CLOSED INTRAVENOUS CATHETER SYSTEM REDUCES THE OCCURRENCE OF THE CATHETER REPLACEMENT AND THE COST

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OBJECTIVES: Replacement of Peripheral Venous Catheter ( PVC) is sometimes required prematurely due to extravasation, catheter damage, complications such as phlebitis. A review of the economic benefits of an integrated closed intravenous catheter system (CICS) with pre-attached stabilization platform and extension tube (Catheter A) which may reduce the occurrence of unscheduled catheter replacement. METHODS: A prospective, open, quasi-random, and controlled study was conducted to compare 2 groups: Catheter A (in 114 patients) versus Catheter B) in a 286-bed general hospital in Japan. Patients requiring PVCs for 72 hours or more were enrolled and assigned to either Catheter A Group (Group A) or Catheter B Group (Group B). Both catheters were secured with the same procedure and regularly observed until removal. The Kaplan-Meier estimate for the replacement rates for both catheters for 72 hours was calculated, and the cost difference between the groups was obtained using product prices and average nursing fees published by the government. RESULTS: There were 558 patients evaluated: 193 in Group A and 365 in Group B. One hundred forty three patients in Group A and 109 patients in Group B required catheter replacement because of extravasation, catheter damage, complications, or scheduled catheter removal. The remaining 106 patients from both groups had catheters removed for reasons such as earlier end of therapy and self-withdrawal. Excluding those 106 patients, there was a significant difference in the catheter survival curves between Group A and B (p = 0.0192, log-rank test). The total cost of catheter replacement for 72-hour use was 393 yen for Group A and 704 yen for Group B. CONCLUSIONS: The cost difference between two catheters can be offset by savings generated from a lower event rate. Along with total cost benefits, the use of CICS is considered to provide improved safety to patients through decreased complications.

PHG51 MANAGEMENTS OF FEBRILE NEUTROPIA AMONG NON-HODGKIN’S LYMPHOMA PATIENTS IN TAIWAN

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OBJECTIVES: Febrile neutropenia (FN) is a major complication in cancer patients treated with chemotherapy, leading to infection-associated morbidity and mortality. Therefore, prophylactic use of granulocyte colony-stimulating factor (G-CSF) is recommended by recent clinical guidelines to manage those patients with high risk of FN. Uncertainty in selecting patients who need G-CSF prophylaxis, however, remains in clinical settings. The objectives of this study were to document the utilization pattern of G-CSF and to analyze the potential risk factors of FN in non-Hodgkin’s lymphoma (NHL) patients. METHODS: Eligible patients were those who were older than 18 years, diagnosed with NHL, and initiated a new chemotherapy regimen in 2010 at a medical center in Taiwan. All chemotherapy cycles received by our patients were divided into two groups based on the occurrence of FN during each cycle. All patients were followed until all the planned chemotherapy courses were completed or one year after the first date of chemotherapy regimen. Differences in patient characteristics between the FN and non-FN group were assessed using chi-square tests for categorical variables and t-tests for continuous variables. RESULTS: Two hundred and eighty-six courses for G-CSF prophylaxis were evaluated in 72 patients receiving a total of 432 cycles of chemotherapy regimen. Of these, 38 % of G-CSF was prescribed as primary prophylaxis, and 62 % as secondary prophylaxis, with an average duration of 3 days. Differences between FN and non-FN group which is statistically significance were history of chronic renal failure or anemia (p = 0.0038, p < 0.0001), prophylactic use of G-CSF (p = 0.0192), performance status (p = 0.0001), numbers of previous neutropenia (p = 0.0008), baseline albumin or hemoglobin level (p = 0.0085, p = 0.0001). CONCLUSIONS: At this cancer center in Taiwan, the duration of G-CSF administration is shorter than the recommended. Differences between the two groups may be the possible risk factors, and need to be further analyzed.

PHG52 COMPARATIVE EVALUATION OF DRUG INFORMATION SOURCES USED BY PHARMACISTS

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OBJECTIVES: This study aimed to compare the usage of reference material from the pharmaceutical company and medical representatives as drug information source with other conventional and advanced sources being used by Doctors. METHODS: A total 103 doctors were interviewed personally by using a structured validated questionnaire developed. Ransom and purposeful sampling technique was used to select the study population. Data was calculated and represented in the form of total numbers and percentages. RESULTS: Among 103 doctors (52.42% or 54) mentioned that pharmaceutical companies and medical representatives are less useful source of information. 58.25% doctors responded that Pharmaceutical company sponsored Education program as useful. A total of 17.47% mentioned it as very useful source of information for new drugs and 24.27% doctors mentioned it as less useful. A total of 59.12 doctors mentioned medical