

(ingredient cost = €3243). Potential savings if the cheapest generic omeprazole equivalent were dispensed (instead of proprietary omeprazole) would be approximately 6.2% of the total hospital expenditure on PPIs for the period examined. When follow-up prescriptions in the community were examined approximately 60% of patients did not receive further PPI medication. Of those who continued to receive a prescription for a PPI, approximately 30% remained on the PPI prescribed in hospital. **CONCLUSIONS:** Considering that generic omeprazole has the same therapeutic indications as proprietary omeprazole, there exists a case for more generic PPI utilisation in Irish hospitals. However, the fact that lansoprazole is priced comparably to generic omeprazole is encouraging. Regarding follow-up PPI prescribing in the community, it appears that where follow-up prescriptions are issued, GPs are more likely to reproduce the hospital prescription, rather than switch to an alternative PPI.

PHPI1**DOSE DISPENSED MEDICINE AND ASSOCIATED MEDICINE AND HEALTH CARE COST**

Søndergaard B¹, Gundgaard J², Sørensen J³, Hansen EH¹

¹Danish University of Pharmaceutical Sciences, Copenhagen, Denmark, ²University of Southern Denmark, Odense C, Denmark,

³Centre for Applied Health Services Research and Technology Assessment, Odense C, Denmark

OBJECTIVE: In 2001 a new law was passed to allow Danish pharmacies to distribute dose dispensed medicine (DDM). Studies have shown that DDM can reduce medicine costs. Other studies have evaluated patient satisfaction and compliance. No studies have evaluated the health effects of DDM. The objective of this study was to describe the development in medicine costs; contacts to GPs; and hospital costs before and after starting on DDM. **METHODS:** National register analysis of patients receiving DDM from 2001 to 2004 (n = 19,004). The data set included medicine use and costs (Danish Medicine Register), hospital admissions (Danish Patient Register), health care contacts and costs (Health Insurance Register). The analysis covers data from six months before and after first day of DDM. **RESULTS:** 3,464 patients are included in the 2003 analysis and 4,491 in the 2004 analysis. On average patients used 5.3 DDM and 1.1 medicines that could not be dose-dispensed. Approx. 25% of the total medicine costs were due to dispensing fees. The proportion of patients with GP contacts decreased (from 0.75 per month to 0.57). The average cost per patient on a semi-annual basis was 115.0 Euro before and 99.7 Euro after (2003 data). The proportion of patients hospitalised decreased from 0.06 per months before to 0.04 per months after (2003 data) and from 0.07 to 0.04 per months (2004 data). The average cost per patient on a semi-annual basis was 1445.0 Euro before and 882.0 Euro after (2003 data). The mean length of stay decreased (from 9 to 6 days) as well as the total number of hospital-days (from 15.397 to 5.909) (2004 data). **CONCLUSION:** The introduction of DDM resulted in an increase in medicine costs and a decrease in health care costs. Both the proportion of patients hospitalised and the length of stay in hospital decreased.

PHPI2**WASTAGE OF MEDICINES IN PORTUGAL**

Crisóstomo S¹, Mendes Z¹, Batel Marques F², Martins P¹, Rodrigues V³, Fontes Ribeiro C³

¹Centre for Pharmacoepidemiologic Research, National Association of Pharmacies, Lisboa, Portugal, ²Centre for Health Studies and Research, School of Economics and School of Pharmacy—University of Coimbra, Coimbra, Portugal, ³School of Medicine—University of Coimbra, Coimbra, Portugal

OBJECTIVES: Medicines waste, with both public health and economic impact, has been identified as a problem within the Portuguese National Health Service (PNHS). This provided the rationale to identify the extent of medicines wastage due to inadequacy of medicines pack sizes to the proposed treatments length and to further estimate non-used medicines due to patients' non-adherence, regardless of packs inadequacy. **METHODS:** A pharmacy-based prospective two phase study was carried out. New medication users were invited to participate. Prescribed pack sizes were scrutinized to evaluate the extent in which they matched treatment lengths. First-phase study enrollees were further invited to participate in a telephone interview for pill counting at the end of the prescribed treatment period (second phase of the study). **RESULTS:** From September 2005 to March 2006, 1501 patients were included in the study first phase (mean age 50.1, 68.6% females). A total of 2098 medicines were dispensed to these patients. The cost of wastage associated with medicines pack sizes was on average 1.75 € [95% CI: 1.51 €–2.00 €] with 58.5% being charged to the PNHS. This cost was higher than 4.00 € for anti-inflammatory and antirheumatic products, drugs for acid related disorders, corticosteroids for systemic use, drugs for obstructive airway diseases, and anti-protozoals. However the wastage cost represented more than 25% of total expenditure only for anti-inflammatory and antirheumatic products (28.8%) and corticosteroids for systemic use (41.1%). Follow-up data was already collected for 1298 patients, so results from wastage due to patients' non-adherence, regardless of packs inadequacy, will also be presented. **CONCLUSIONS:** The wastage associated with the size of medicines packs prescribed is significant in particular for some therapeutic groups. Total wastage is expected to be higher taking into consideration patients' non-compliance.

PHPI3**BENEFIT INCIDENCE ANALYSIS BEFORE AND AFTER UNIVERSAL COVERAGE IN THAILAND**

Prakongsai P, Tangcharoensathien V

International Health Policy Program—Thailand, Nonthaburi, Thailand

OBJECTIVES: To investigate changes in the distribution of government health resources towards different socio-economic groups of Thais after implementation of the policy on universal coverage (UC). Effectiveness of the UC policy in improving equity in access to health services and distribution of government health resources were also assessed. **METHODS:** Four main steps of benefit incidence analysis were employed in order to analyze the distribution of the net government health subsidies. The analysis of benefit incidence between different approaches: using household income and asset index to classify individual socio-economic status; and using aggregated and regional government unit subsidies. Data sources comprise the national household surveys on health service use of individuals in 2001 (before UC) and 2003 (after UC), unit government subsidies for public and private providers in 2001 & 2003. **RESULTS:** The concentration indices of ambulatory services at health centres, district hospitals, and provincial hospitals were more pro-poor after UC (changing from -0.29, -0.26, and -0.04 in 2001 to -0.36, -0.32, and -0.08 in 2003, respectively). The concentration indices of hospitalization increased their negative values from -0.079 in 2001 to -0.121 in 2003. The distribution of net government health subsidies was more pro-poor after UC with a change in the concentration indices from -0.044 to -0.123. There was not a significant difference in the distribution of government health subsidies when income and asset index were used as means testing, or using aggregated unit subsidies, compared to regional variations. **CONCLUSIONS:** The UC policy

improved equity in access to and utilization of health services and the distribution of government health subsidies. The promotion of primary care and changes in government health resource allocation are key factors in improving equity in the health care system after UC.

PHPI4

STAKEHOLDERS' PERSPECTIVES ON IMPROVING ACCESS TO PRIMARY CARE

Pumtong S, Anderson C, Boardman H

University of Nottingham, Nottingham, UK

OBJECTIVES: Improving access to primary care is one of the top UK Government priorities. As part of a programme to achieve this target, Nottingham City Primary Care Trust (PCT) launched the "Pharmacy First Minor Ailments" scheme. People were encouraged to visit their local pharmacy to be treated for 12 minor ailments rather than visiting their doctor, treatment was free if they were exempt from National Health Service (NHS) prescription charges. This study investigated stakeholders' perspectives of the acceptability of the scheme. **METHODS:** Semi-structured interviews were conducted with 46 stakeholders (26 pharmacists, 7 doctors, 7 commissioners and 6 scheme users). Interviews were tape-recorded, transcribed verbatim and analysed for emerging themes using the principles of constant comparison and deviant case analysis. **RESULTS:** Findings demonstrated that the scheme was largely well received by most stakeholders. They perceived benefits of the scheme in terms of improving patient access and choice in primary care as well as being more convenient than visiting a doctor for minor ailments. Additionally, most health professionals felt that the scheme could enhance the professional image of pharmacy with the public. Most commissioners interviewed expressed the view that the scheme could reduce cost to the NHS, as pharmacist consultations cost less than GP consultations. Nonetheless, some were concerned about overuse or abuse the scheme. Examples of problems raised by the scheme users included the small range of medicines available, a lack of privacy in some pharmacies and the poor publicity for the scheme. These might all be barriers to the use of the scheme. **CONCLUSION:** Despite the reservations noted above, the majority of stakeholders saw the "Pharmacy First Minor Ailments Scheme" as a way to improve accessibility to primary care for local people and help the PCT to meet its NHS access targets.

PHPI5

IMPACT OF A DRUG POLICY ON AVAILABILITY AND DRUG COST CONTAINMENT IN A TERTIARY CARE HOSPITAL: 10 YEARS OF EXPERIENCE

Sharma S¹, Gupta M¹, Roy Chaudhury R²

¹Institute of Human Behaviour & Allied Sciences (IHBAS), Delhi, India,

²International Network of Clinical Epidemiology, New Delhi, India

OBJECTIVES: To study the impact of a drug policy on availability of essential drugs and cost containment in a neuropsychiatry tertiary care hospital. **METHODS:** The interventions consisted of selection of list of essential drugs and procurement through centralized pooled system in 1996–1997, followed by setting up of Drugs & Therapeutic Committee to review drug expenditure and prescribing pattern (1998). Analysis of the annual hospital budget, drug expenditure, availability of key drugs, stock-outs, and ABC analysis was done before (1994–1996) and after intervention (1997–2004). **RESULTS:** Average drug expenditure increased from 3.63% to 5.16% only after intervention while there was 5 fold rise in hospital patient attendance. Previous trend of rising annual drug expenditure was reversed immediately after interventions in 1997 for the first time as drug expenditure reduced by 47%, without any compromise on availability of key drugs which in fact increased to 94.6%.

Despite high expenditure on key drugs (75.89%) mean availability was 67.48% but after intervention with the same expenditure (77.68%) it increased to 95.28%. Number of drugs out-of-stock decreased from 27.57% (also included vital drugs) to 19.57% of minor duration only and no stock out of vital drugs. ABC analysis revealed that before intervention only 3.33 drugs of the category A consumed 74% of the budget which increased markedly to 9.63 drugs consuming 79.53%. Analysis of top 10 drugs consumed showed reversal of previous trend of non-essential among top 10 drugs from 1998 onwards where only vital drugs represented top 10 drugs except in 2001 when buprenorphine appeared as top second drug. **CONCLUSIONS:** The present study showed effective containment of overall expenditure on drugs accompanied by increased availability of essential drugs is possible. These interventions serve to optimize the value of limited government funds and thereby empower and support government in making basic medicines available to all.

PHPI6

ATTITUDES TOWARD HOME CARE AMONG ACUTELY HOSPITALIZED PATIENTS IN HUNGARY

Betlehem J¹, Török C², Sebestyén A³, Boncz I³

¹University of Pécs, Pécs, Hungary, ²District Hospital Tapolca, Tapolca, Hungary, ³National Health Insurance Fund Administration (OEP),

Budapest, Hungary

OBJECTIVES: Legally home care is a well-defined service in the Hungarian health care system since 1996. The utilization of home care services is examined by several cost-effective studies in Hungary although the attitude of the potential costumers in using this service not very well known. This study examines the acutely hospitalized patients' information about short time home care, and the subjective or objective obstacles in using this service more frequently. **METHODS:** A cross-sectional study design was used with anonymous self-fill in questionnaire among 248 acutely hospitalized patients in the medical, surgical and casualty ward of a county hospital in Hungary. The questionnaire used many time five point Likert type scales to find out patients' attitudes toward short-term home care. **RESULTS:** The response rate was 80%. The vast majority had some information about home care services (89%) although lots of people reported about having not enough information about it (78%). The majority of the respondents were over 50 years (61%). Among them the educational background was lower (58%) (elementary school, vocational education without GCSE) then in the other age groups. Respondents with low educational background had the fewer information related to home care. 12% of the respondents think that this type of care can not be realized in their home because of the inappropriate environment. Among those who find their environment appropriate for home care only 56,8% would use this service. **CONCLUSIONS:** Although the possibility for home care in Hungary is present those people who are at higher risk of being acutely hospitalized (50 year or over) are not aware of the content of this service and are against of asking for it in their home. With more patient education the use of this service could be widespread which could diminish the in-hospital days.

PHPI7

EFFICIENCY OF RHEUMATOLOGY HOSPITAL CARE: CHANGES IN THE AVERAGE LENGTH OF STAY IN RHEUMATOLOGY DEPARTMENTS IN HUNGARY

Boncz I¹, Sebestyén A¹, Péntek M², Börzsei L³, Fodor B³, Mintál T³, Máthé T³, Gulácsi L⁴, Nyárády J³

¹National Health Insurance Fund Administration (OEP), Budapest, Hungary, ²Flor Ferenc County Hospital, Kistarcsa, Hungary, ³University of Pécs, Pécs, Hungary, ⁴Corvinus University of Budapest, Budapest, Hungary