safety and departmental efficiencies can be realized with a glass to polymer bottle conversion.

**PHP31**

THE ECONOMIC EVALUATION OF HOME PHARMACIES IN HEALTH AREA

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OBJECTIVES: To analyze and evaluate the economic impact of cost of stored medicines at home. METHODS: The population to investigating is constituted by 146,396 homes. The size muestral calculated was 196 homes (alpha error = 0.05; confidence level 95%). The studied variables were: n persons who compose the home; n 65 years older; n of stored medicines and classes; sociocultural level; symptoms of disease in 15 days before the interview; n of persons with chronic disease and type; etc. The statistical analysis was made by the SPSS package. For quantitative: mean, DS, IC95%; for qualitative: proportions. For the analysis multivariate Student’s T-test for quantitative variables and test of Chi-square for the qualitative ones. For the calculation of the cost of medicines stored in the homes one has considered 2 values: the cost of the found medication (price sales) and the real value of this medication (considering the amount of present medicine in the package at the moment of the interview).

RESULTS: The total number of polled homes was of 360. The members average for home was of 3.9 (IC95% 3.8–4.0). The total of found pharmaceutical specialities was 8.544, of them 61% was financed by the NHS, and of financed ones 26.5% and 12.6% they were not bought with and without medical prescription, respectively. The average value for pharmaceutical specialities stored was €30.5/home (IC95%: 121.48–139.48).

CONCLUSIONS: A high percentage of medication exists stored (12.6%) that in spite of needing medical prescription did not have it. The self medication increases with the level of studies. Almost 75% of the stored medication was not used by any member of the home, and almost 11% they were expired medicines. The total cost of medicines stored in our city can range between €11–13 million (10% of the whole of expense in medicines in Malaga).

**PHP32**

PATIENT SATISFACTION WITH THE PHARMACY FIRST MINORAILMENTS SCHEME

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OBJECTIVES: As part of the UK Government priorities to improve access for people in primary care, the ‘Pharmacy First Minor Ailments’ scheme was introduced by Nottingham City Primary Care Trust in December 2003. People can ask for the scheme’s formulary medicines free of charge. This study aimed to measure the users’ satisfaction with the scheme. METHODS: Questionnaires were distributed to scheme users between May and December 2005. Satisfaction was measured using five-point Likert scales for 24 items across eight dimensions: general satisfaction, access/convenience, quality of drug, physical environment, pharmacist’s competence, communication, interpersonal aspect and time spent with pharmacist. Individual dimension and overall satisfaction scores for each respondent were calculated by summing the appropriate individual items scores. RESULTS: A total of 143 questionnaires were completed (response rate 14%). Most respondents were white women and the mean age was 33 years (range 17–62). Approximately half of respondents had annual household income below 10,000 GBP. Most respondents were not economically active with 36% looking after family and 25% unemployed. The mean satisfaction score was 99.7 (SD 11.4, range 67–120, possible score 24–120). The highest satisfaction score was reported for access/convenience dimension and the lowest satisfaction with the physical environment. Comparisons of overall satisfaction scores did not demonstrate significant differences with regard to gender, age, ethnicity, educational level, employment and frequency of using the service. However, those with a lower income had significantly higher overall satisfaction scores (ANOVA, F = 3.272, p = 0.042). CONCLUSIONS: Findings demonstrated a high level of satisfaction with the ‘Pharmacy First Minor Ailments’ scheme, particularly for those with lower incomes. Thus the scheme can be seen as a successful way of improving access to primary care in Nottingham City PCT.

**PHP33**

OCCUPATIONAL INJURIES: USE AND COST OF EMERGENCY DEPARTMENT FOR TREATMENT OF ACCIDENTAL HYPODERMIC NEEDLE PUNCTURES

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OBJECTIVES: Needle punctures are an occupational hazard for health care workers and others. This analysis was performed to assess use and associated costs of Emergency Department (ED) care for work-related needle punctures. METHODS: 2001–2003 statewide Massachusetts ED visit databases were analyzed. Work-related needle punctures were identified using diagnosis codes, E-code 920.5 (accidental cutting/piercing with hypodermic needle) and a primary payer code indicating workman’s compensation. Cost estimates (2006 US$) include facility, ancillary and physician services. ED charges were adjusted using 0.55 cost-to-charge ratio, appropriate inflation indices and geographic factors to reflect U.S. national values. RESULTS: Over the three years, 5288 ED visits for accidental needle punctures were identified. Of those, 3742 (71%) were work-related (annual visits: 2001 = 1171; 2002 = 1262; 2003 = 1309). Mean age was 38 years (median: 37, range: 16–77); 75% were female. Superficial injuries accounted for 9%; 81% were coded as finger/hand/arm wound or injury; 4% other injuries and 5% reflected an administrative encounter. No hospitalizations or deaths occurred. Almost all (98%) patients were treated and released with 2% leaving against medical advice or disposition unknown. Average visit duration was 1.6 hours (median: 1.2) at an average visit cost of $319 (median: $255). On average, 1699 ED hours were utilized per year. The average total cost per year for all work-related needle puncture visits was $418,450 with a cumulative three year cost of roughly $840,000. CONCLUSIONS: The ED is utilized as a primary treatment center for work-related needle punctures, even when the injury is superficial or visit occurs as part of the administrative process. Although the risk of contracting a blood-borne virus and related patient anxiety need to be addressed when such an injury occurs, an alternative, less resource intensive location for evaluating these injuries should be considered, particularly in high risk areas, such as hospitals, given ED time and cost consequences.
PHYSICIANS’ ATTITUDES TO AND EXPERIENCE WITH INCREASED USE OF INDIVIDUAL REIMBURSEMENT VERSUS GENERAL REIMBURSEMENT OF NEW IMPORTANT PHARMACEUTICALS

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OBJECTIVES: In 2003 a restrictive reimbursement scheme, advocating increased individual reimbursement versus general reimbursement of new important pharmaceuticals, was implemented in Norway. This study was conducted 18 months after implementation, and investigates physician self-reported attitudes to and experience with the scheme from a clinical and administrative perspective. METHODS: Practicing physicians (n = 1399) from the NMA Research Panel were surveyed (75 question self-administered questionnaire) by mail, December 2004. The response rate was 71% (n = 993). Only data from respondents involved with the scheme in 2004 (n = 605; 61%) were analysed in this sub-study of 24 questions. Physicians’ attitudes and experience were addressed through 17 claims about the scheme and evaluated on Likert scales, in addition to questions on resource use and number of applications, referrals and application approvals/rejections. RESULTS: Of the 605 respondents in this sub-study, 87% agreed that the individual reimbursement scheme was complicated and demanding. Only 37% reported approval of all applications. Rejected applications were appealed by 26% of the physicians, 31% re-submitted/referred to specialists, 22% requested written justification, 21% recommended patients to pay for the pharmaceutical themselves, whilst 14% did nothing. The majority of physicians (71%) were dissatisfied with the scheme and 34% were dissatisfied with the application process. In contrast, only 11% were satisfied with the scheme and 14% with the application process. Fifty-seven percent reported that the scheme restricted physicians from prescribing the pharmaceutical they consider clinically best for a patient and 52% of patients choose to pay for the pharmaceutical themselves. Self-reported use of time to administer individual applications (n = 110,000), was estimated to 11 physician-labour years and a cost of 42 million NOK in 2004. CONCLUSIONS: The majority of physicians in Norway are dissatisfied with the government’s increased use of individual reimbursement. The results indicate that the scheme generates high administrative costs and may have negative consequences for patients.

TELEMEDICINE IN THE U.S. MEDICARE PROGRAM: 2007 REIMBURSEMENT IMPLICATIONS

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OBJECTIVE: Reform legislation has expanded the U.S. Medicare program for eligible telemedicine services and has required establishment of a process to add or delete covered services on an annual basis. This study explores the current reimbursement status of Medicare telemedicine reimbursement and its potential implications for 2007. METHODS: The Medicare rationale and historic progress of telemedicine coverage and reimbursement was constructed within a worksheet format. Major changes and additions to the program were highlighted and examined. A timeline of legislative and regulatory decisions was prepared. Criteria for coverage and payment were identified and summarized. Current definitions of required equipment and exceptions to these requirements were identified and their evolution tracked. The potential for 2007 reimbursement changes was evaluated. RESULTS: A summary of findings follows. The Medicare telemedicine program contains four major covered types of service that can now be performed by eight categories of specified professionals. Two types of geographic areas are eligible, although certain demonstration programs may be eligible regardless of geographic location. Billing and payment requires the use of stipulated codes. The process to add or delete services annually has been implemented. Each transaction must contain two sites: “distant” and “originating”. There are five types of originating sites. Payment is funded differently for “distant” versus “originating”. The required equipment is primarily represented by interactive telecommunications systems, although asynchronous technology is allowed in restricted instances. An upcoming Medicare report to Congress may recommend further expansion of the telemedicine program in 2007. CONCLUSIONS: Medicare telemedicine coverage and payment has continued to expand but remains restricted to certain geographic areas and to certain service provider sites. Health care decision-makers, including managers and payers, must be made better aware of the multiple benefits and efficiencies that telemedicine offers to both service providers and to patients.

PHARMACOEPIEMIOLOGICAL ANALYSIS OF THE USEING DRUGS FROM REIMBSMENT LIST IN RUSSIA

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OBJECTIVES: To estimate volumes and structure of consumption of the drugs received by separate categories of citizens which have the right to free-of-charge reception under reimbursement program (DLO) in 2005 in Tatarstan (on example Tatarstan region). To allocate diseases having the greatest prevalence and/or the greatest financial loading for budget. METHODS: In 2004 there was not the federal reimbursement system. In 2005 DLO was launched. A total of 216,722 persons have the right to receive drugs by DLO. We received the information on each of 2,543,599 purposes of drugs. Ischemic illness of heart, hypertonic illness, diabetes, cancer of a mammary gland were leaders on volume. Expenses Ischemic illness of heart, hypertonic illness, diabetes, cancer of a mammary gland were leaders on volume of expense. One thousand patients with these diagnosis were randomized. We compared their therapy in 2004 vs. 2005. RESULTS: Total cost of DLO in Tatarstan in 2005 was €26,368,244. Average cost of one recipe in 2005 in DLO was €10.5. Average expenses for one patient in 2005 a year in DLO was €124. The maximal expenses for one patient was €23,534. On ischemic illness of heart 7% of charges are necessary, arterial hypertension 9%, diabetes 16%, oncology 19%. CONCLUSION: Introduction of system of reimbursement has rendered beneficial effect on quality of treatment of patients 2005 vs. 2004 percentage of patients on a regular basis received drug therapy in occasion of cardiovascular diseases (with the miss no more than three months for a year) has grown from 15,8% up to 32.8%.

GENERIC COMPETITION: EFFECT ON PRICES AND SUBSTITUTION EFFECTS

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OBJECTIVES: To calculate a price index for pharmaceuticals in Sweden and to examine the effects of generic competition on patented pharmaceuticals. METHODS: Price and volume data