gates the rate of OOP in Korea. **METHODS:** Data from World Health Report 2002 are used to analyze the relation between per capita total health care expenditure (THE) of GDP and rates of OOP or rates of prepaid (i.e. tax, premium, etc). To explain why the rate of OOP is high in Korea, we compare price elasticity in demand for medical services between countries from previous studies. To argue that the OOP rate is not so serious currently and in the future, we show the trend of OOP rates in Korea for three decades. **RESULTS:** By comparing the relation between per capita THE of GDP and rates of OOP or rates of prepaid, we found the fact that the amount of THE of GDP or THE of GDP per capita would be same regardless of either high or low OOP rates, or high rates of OOP might spend less THE because it can prevent “moral hazard” in using medical services. This fact is support by the higher price elasticity in demand for medical services in Korea. In addition, we found that OOP rates came down from 85% (1970) to 41% (2000) out of THE in Korea and they have rapidly decreased due to the expansion of health care insurance and other factors. **CONCLUSIONS:** This shows that the OOP rate in Korea is not severe as worried. Rather, high rates of prepaid could spend more in THE. We also argue that adequate levels of OOP rates in health insurance systems could prevent unnecessary use of medical services, which follow to cost containment in THE. However, this could be a barrier to accessing medical care services for people on low incomes. Further studies on the trade-offs between the levels of “barriers” and “moral hazard” are suggested.

**A COMPARISON OF HEALTH CARE REIMBURSEMENT STRATEGIES: HOW ARE CHILDREN WITH CHRONIC CONDITIONS ENROLLED IN STATE PROGRAMS AFFECTED?**

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**OBJECTIVE:** There is increasing concern that children with special health care needs may face restricted access to care due to potentially inadequate reimbursement to health plans and providers caring for them. We employed data from a State’s Medicaid, Title V and Title XXI programs to analyze the implications of different reimbursement strategies. **METHODS:** Enrollment and claims data for 188,556 children with at least 6 (aged 1–19) or 3 (newborns) months continuous enrollment during 1999 were employed. Children were grouped into mutually exclusive Clinical Risk Group (CRG) categories (such as healthy, malignancies and catastrophic). Reimbursement models considered include demographics-adjusted capitation, health-status adjusted capitation, carve-outs and reinsurance for children with annual charges above a threshold. **RESULTS:** Premium estimates from demographics-adjusted capitation model showed little variation across CRG categories within each program ($133 PMPM for healthy and $170 PMPM for moderate/dominant chronic in the Title XXI program) resulting in profits on healthy ($42 PMPM) and losses on chronic CRG categories (for example a loss of $191 PMPM for minor chronic). While results from health-status adjusted capitation model indicated wide disparity in premium estimates across CRG categories ($94 PMPM for healthy and $695 PMPM for moderate/dominant chronic in the Title XXI program), there still was wide variation in expenditures within each CRG category creating incentives to risk select. Financial risks to health plans and providers were reduced slightly in malignancies and catastrophic carved-out model. More pronounced reductions in financial risk were provided by reinsurance. **CONCLUSIONS:** This study shows that demographics-adjusted capitation fails to account for diverse financial needs of children with chronic conditions. Health-status adjusted capitation, on average, supports varying needs of children with chronic conditions, but the likelihood of risk selection remains. Reinsurance further reduces incentives to risk select, but incentives to control health care costs are lost once charges exceed the threshold.

**RISK SHARING IN A STATE FUNDED HEALTH SERVICE: OUTCOMES GUARANTEE PROJECT**

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**OBJECTIVE:** State funded healthcare systems, such as the UK, tend to be cautious with the diffusion of new drugs for fear of financial pressures. One way of controlling diffusion, while maximising the benefits for patients, is to set up an outcome guarantee. This presentation describes a case study using lipid lowering drugs, recently completed. **METHODS:** The key stakeholders were identified and each declared their interest on an agreed matrix. This formed the basis of an outcome guarantee contract. Near patient testing and audit nurses were used to identify at risk patients and enter them into an agreed care pathway. Patients were given lifestyle advice, re-tested and monitored every 3 months throughout the 18 months of the project. Results of treatment with lipid lowering drugs were measured against their claimed benefits and adjusted for concordance. If the drug under-performed, according to agreed criteria, the pharmaceutical company agreed to refund the cost of those drugs. **RESULTS:** The concept was readily accepted by the stakeholders. Two thousand at risk patients were identified from 1 primary care trust, of which 1400 were eligible to enter the outcome guarantee. Six hundred patients to date have completed the project. Final results are due in July. Of those who have completed the project, the majority have reached target level and no refund has been due. A qualitative evaluation of the stakeholders is currently under way and will be reporting in August 2002.
CONCLUSIONS: An outcome guarantee is an acceptable way for a nationally funded health service to partner a pharmaceutical company for optimal diffusion of drugs likely to benefit a patient population. The model has potential for replication in other therapeutic areas and other healthcare systems.

**PHP34**

**IMPROVING OUTCOMES THROUGH ACCESS TO CRITIQUED ECONOMIC EVALUATIONS: THE NHS ECONOMIC EVALUATION DATABASE WITHIN THE HTA REVIEW PROCESS**

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OBJECTIVE: Outcomes in healthcare technology reviews now increasingly include cost as well as effectiveness. The aim of this study is to report the findings and implications of a survey regarding the usefulness of NHS Economic Evaluation Database (NHS EED) structured abstracts within this process. METHODS: Postal survey of lead authors of Technology Assessment Reviews (TARs) commissioned by the UK’s National Institute for Clinical Excellence. The questionnaire investigated the usefulness of NHS EED regarding: search strategy, data extraction, quality assessment, and requirement for new modeling studies. Qualitative data were requested, including opinions regarding NHS EED. RESULTS: NHS EED was used in 90% of all identified reviews (n = 46). The questionnaire response rate was 57%. The percentage of scores 3 or above, 2 or below, or N/A were, respectively: search strategy = 60%, 22%, 17%; data extraction = 26%, 26%, 48%; quality assessment = 30%, 22%, 48%; requirement for new modeling studies = 22%, 26%, 52%. The results were expanded upon in the qualitative data from the respondents. CONCLUSIONS: Where several economic evaluations had been published NHS EED was utilized and valued as an independent source, and was highly useful to non-economists. However, those undertaking TARs also used confidential data from company submissions and cost data for studies not critiqued on NHS EED. More standardization and use of quality checklists in reviews of economic studies is clearly needed. The findings will help in developing and improving NHS EED in its role of providing health outcomes and economic evidence in TARs.

**PHP35**

**AN ANALYSIS OF THE HEALTH AND PRODUCTIVITY COST BURDEN OF THE PHYSICAL AND MENTAL HEALTH CONDITIONS AFFECTING SIX LARGE CORPORATIONS IN 1999**

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OBJECTIVE: To estimate the most costly disease conditions affecting medical, absenteeism, and short term disability (STD) expenditures affecting a subset of American employers. METHODS: The Medstat Group’s 1999 Health and Productivity Management (HPM) Database was used for this analysis. The HPM database links medical, pharmacy, STD, and absence claims for over 340,000 employees. Medstat’s Episode Grouping software product was used to classify and organize employees’ inpatient, outpatient, emergency department (ED) and pharmaceutical claims temporally, so they could be connected to the treatment of any given condition. Absence and STD claims associated with each clinical episode were then added. The most costly physical and mental health conditions were then ranked by their overall medical, pharmacy, absence and STD expenditures. RESULTS: Across all physical health conditions, employers paid an average of $2505 per eligible employee for medical care (71% of total), $316 per employee for STD (9% of total), and $703 per employee in absence (20% of total). Medical care expenditures included money for: inpatient care–$687 (20% of total), outpatient care–$1321 (38% of total), ED treatment–$57 (2% of total), and pharmaceuticals–$440 (12% of total). When considering per-eligible payments for mental health conditions, $94 (53% of total) was paid through health benefits, $23 (13% of total) was paid through STD programs, and $61 (34% of total) was as a result of employee absence from work. Medical expenditures for mental health care included money for inpatient care–$21 (12% of total), outpatient care–$45 (25% of total), ED treatment–$0.3 (0.2% of total), and pharmaceuticals–$28 (15% of total). CONCLUSIONS: Although health care expenditures account for the majority of costs faced by American businesses, productivity-related costs can be high as well. Inpatient, outpatient, ED, and drug cost, along with STD and absence costs, varied greatly by disease.

**PHP36**

**COSTS ASSOCIATED WITH FALLS IN COMMUNITY DWELLING ELDERS**

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OBJECTIVE: Falls are a major problem for the community-dwelling elderly. About 30% of this group experience a fall each year and between 4 and 10% of community-dwelling elders experience a fall-related injury. Further, falling occurrence is a significant predictor of institutionalization and death. The objective of this study was to provide an annual estimate of the direct medical costs associated with fall-related injuries among the community-dwelling elderly. The study was done from the payer’s perspective. METHODS: Data from the 1997 Medical Expenditure Panel Survey (MEPS) were analyzed to identify elderly respondents who reported a fall-related