ined the impact of changes in private drug plan formulary design on the health of private plan beneficiaries. METHODS: A search of the medical literature was conducted using the PubMed search engine. Search terms included combinations of reimbursement, formulary, plan, payer, restriction, cost, and adherence. The ‘related articles’ feature in PubMed was also used to identify relevant papers. RESULTS: While no published studies of Canadian employer-sponsored drug plans were identified, there were 15 North American studies that focused on the effects of changes in drug plan design. This body of research demonstrated three key points. Cost-sharing initiatives resulted in a reduction, or complete cessation, of medication consumption, including drugs deemed “essential”, and that decreased adherence to drug therapy can actually lead to the increased use of other more expensive health care resources. On the other hand, higher levels of medication adherence, which increased drug costs, were associated with lower overall health care costs. Employee satisfaction with their employer drug plan decreased when cost-containment measures were implemented and this is a problem for employers since drug plan changes typically involved increasing fees or imposing more restrictions to access. CONCLUSION: A short-term focus on controlling drug costs is likely to have negative consequences on the health, productivity and satisfaction of plan members. If changes to drug plans are not properly assessed, there can be undesirable and expensive consequences for plan members and employers. Employers need a longer term framework to guide and support health plan decision-making that avoids sudden or drastic changes to health benefits. Careful consideration of drug plan design and cost-sharing can improve medication adherence, health outcomes, employee satisfaction, and costs.

TOWARD HIGH PERFORMANCE ‘PHARMACARE’ SYSTEMS: A REVIEW OF EXPERIENCES IN SEVEN COUNTRIES

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OBJECTIVES: While pharmaceuticals can significantly improve the health of patients and help to mitigate health-related inequities within a population, their rising prominence within health systems is not without challenges. This paper explores health-related aspects of pharmaceutical policy in Australia, Canada, Germany, The Netherlands, New Zealand, the UK and the United States. METHODS: Drawing on published goals for national policies, we developed a framework for gauging pharmacare system performance. We review policy structures and investigate system performance using preliminary indicators drawn from the 2007 Commonwealth Fund Survey. Survey responses to questions related to accessibility, affordability, and appropriateness are compared across countries and stratified by age, income and morbidity. RESULTS: Shares of populations reporting prescription drug use were lowest in Germany and highest in the US. Pharmaceutical use displayed expected age gradients in all countries and expected income gradients in all but Germany and the US. Cost-related non-adherence was most frequent in the US and Australia, and relatively unlikely among elderly populations. Relatively few patients reported prescribing errors, with no significant differences across countries. Out-of-pocket drug costs were highest in the US and Canada. From 1995 to 2005, pharmaceutical expenditures outpaced health care and GDP in all countries except New Zealand. Expenditure grew most quickly in the US. CONCLUSION: Though no country appears uniformly strong in all areas of pharmacare policy, several appear to have done well to manage difficult tensions in the pharmaceutical sector.

RESEARCH AND MARKETING COMPLEMENTARITY IN PHARMACEUTICAL FIRMS: EMPIRICAL EVIDENCE

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OBJECTIVE: Snyder and King (2007) developed a theoretical model of firm behavior in which research and marketing activities are complements rather than substitutes. Public policy debate frequently makes the implicit assumption that the two activities are substitutes. In this paper the author uses financial reports of Fortune 200 pharmaceutical firms to examine the evidence for Snyder and King’s theoretical model. METHODS: We extract research and marketing expenditure totals from the quarterly filings of the eight largest U.S. based pharmaceutical companies. We also create a comparator list of non-pharmaceutical companies matched for size and using pre-specified exclusion criteria. Univariate analysis is used to test whether pharmaceutical companies are systematically different from the comparator companies. Simple regression analysis is used to test whether companies with higher research/revenue ratios have higher or lower marketing/revenue ratios. RESULTS: Pharmaceutical firms spend a greater share of revenue on both marketing and R&D than the comparator firms. The share spent on marketing is similar to a subgroup of the comparator firms. The share spent on research is uniquely high. Pharmaceutical firms are also unique in their combination of high marketing and high research spending. Regression analysis shows no significant relationship (positive or negative) between research and marketing expenditure. CONCLUSION: Empirical analysis provides limited support to the theory developed in Snyder and King (2007). The absence of significant regression results may be due to the time lag between development and approval for sale.

ESTIMATION AND COMPARISON OF ORTHOTIC BRACE COSTS WITH REIMBURSEMENT TARIFFS AND RETAIL PRICES IN BELGIUM

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OBJECTIVE: The RIZIV/INAMI, the Belgian third-party payer, aims to set reimbursement tariffs at a level that reflects costs of orthotic braces. In the absence of publicly disclosed information on the cost structure of braces, estimating production and distribution costs of braces is valuable to reimbursement agencies with a view to setting tariffs. The aim of this study is to calculate the cost of production and distribution of a prefabricated hard neck brace and a prefabricated hard knee brace, and to explore whether Belgian tariffs and actual retail prices correspond with estimated costs of these two braces. METHODS: The cost model took into account manufacturing costs, general overhead, research and development, warehousing, profit and distribution margins. Data were gathered from manufacturers, a visit to a production site, desk research, a decomposition of finished products and interviews with stakeholders. The price year was 2007.