OBJECTIVES: The purpose of this analysis was to explore—from a theoretical welfare economics perspective—how whether drugs are substitutes or complements affects the design of optimal coinsurance. METHODS: A theoretical economics model of a duopoly market for two medicines was constructed. In the model, there are consumers who first purchase insurance and then consume drugs if they become sick. Drug producers are responsible for the costs of the drugs in the market. The results from the model are then used to infer how benefits should be designed differently whether drugs are complements or substitutes. Specific real-world examples are interpreted in light of these predictions, and special attention is given to the implications for value-based insurance design. RESULTS: We show that drugs that are complements should have a lower coinsurance than drugs that are substitutes. The model also suggests that when drugs are substitutes, consumers choose levels of coinsurance that are too low (i.e., consumer is insured too much). This may or may not be the case for complements. From society’s perspective (including drug makers’ profits), consumers choose levels of coinsurance that are too high (consumer is insured too little) when drugs are complements. This may or may not be the case for substitutes. CONCLUSIONS: The results from the model can be used to inform the design of pharmaceutical benefits to make the consumer as well as it possible. When drugs are complements, a lower burden of payment should be implemented for the consumer. Examples of this would be HIV/AIDS drugs, malaria drugs or bone loss prevention (Calcium/Vitamin D). When drugs are substitutes, a higher burden of payment should be implemented. Examples would include status, for example, when one treatment is chosen from many options. Value-based insurance design needs to consider this complementarity in addition to the potential for under-use.

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USE OF ECONOMIC EVIDENCE IN PHARMACEUTICAL MARKETING AUTHORIZATION PROCEDURES, FIRST EXPERIENCE FROM IRAN

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OBJECTIVES: Economic evidence in terms of different types of pharmacoeconomic data serves a crucial role in informing decisions on selecting pharmaceuticals, both for national drug lists and insurance reimbursement lists. Iranian Drug Selection Committee (IDSC), the only responsible body for granting marketing authorization for pharmaceuticals in Iran has made some efforts, however fragmented, to consider economic evidence in its decisions. This paper aimed at evaluating the role of economic evidence in the Iranian Food and Drug Organization’s current marketing authorization policy. METHODS: At first, we captured the past and current situation of utilizing pharmacoeconomic data for granting pharmaceutical marketing authorization by conducting a number of exploratory interviews and reviewing relevant official documents on rules and regulations. Thereafter, within an analytic framework, we evaluated the cost-effectiveness profile of pharmaceuticals which were granted marketing authorization within the period of obligatory economic evidence submission. RESULTS: Pharmacoeconomic evaluations and their potential role in assuring value for money was first introduced to Iranian pharmaceutical policy-makers in 2003 by World Health Organization. Only after 5 years did The Iranian Drug Selection Committee begin to launch The Pharmacoeconomic Subcommittee in addition to developing certain forms for collecting pharmacoeconomic data and making pharmaceutical companies fill these forms out within their routine submission process for requesting marketing authorizations. However, this regulation last only 6 months and was abolished in July 2008. Currently there is no room for submitting economic data in pharmaceutical dossiers. CONCLUSIONS: Iranian pharmaceutical regulatory authority suffers from lack of a clearly defined policy on taking the advantage of the results of pharmacoeconomic evaluations either in granting marketing authorization or drug reimbursement decisions. Thus, the need for a clear policy in this regard is unequivocal.

HEALTH CARE USE & POLICY STUDIES – Health Care Costs & Management

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THE ANNUAL HEALTH CARE EXPENDITURES PER CAPITA IN BRAZIL: A COMPARISON BETWEEN THE PUBLIC AND THE PRIVATE HEALTH CARE SYSTEMS

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OBJECTIVES: In Brazil a hybrid health care system that comprises a public and a private system is in place. The objective of this exploratory analysis is to better understand the distribution of resources in terms of annual health care expenditures per capita in Brazil in both systems. METHODS: A review of public databases was conducted to raise data on both financial expenditures and the population assigned in each system. Sources were: Instituto Brasileiro de Geografia e Estatística—IBGE (Brazilian Institute for Statistics), Ministério da Saúde (Brazilian Ministry of Health), Agência Nacional de Saúde Suplementar—ANS (Brazilian agency which regulates the private health care sector) and available studies in Portuguese. RESULTS: The total annual health care expenditure (added value) in Brazil is R$ 137.9 billion and it represented 8.4% over the GDP in 2007 (IBGE, 2009). Eighty billion Reais were spent by the private health care system (IBGE, 2009), whereas R$ 57.7 billion were spent by the public health care system. As a result, a significant difference can be observed in the annual health care expenditure per capita in the private sector when compared to the one found in the public sector, R$ 2,015 vs. R$ 583, respectively (US$ 1 = R$ 1,711 Dec 10, 2009). CONCLUSIONS: The annual health care expenditure per capita in Brazil in the private sector is 3.5 fold the one found in the public sector. Further research is recommended to comprehend whether such a difference might impact on the clinical outcomes of each system.