

Summary of Paper

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1 Title

‘Using Diagnoses in the Risk Adjustment Model for Improving Solidarity and Efficiency in the Chilean Social Health Insurance System’

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3 Objectives

Technical evaluation of the possibility of applying a diagnosis based risk adjustment model in the social health insurance system of Chile. The model includes incentives for efficiency and the improvement of solidarity in the Chilean health system as better way than a risk adjustment model only based on demographic variables.

This investigation evaluates a feasible model of risk adjustment for Chilean care health system that - with the systematically available information - allows to predict the cost in health of the persons, for a better resources allocations in the system, dealing for Risk Adjustment the use of information to calculate the expected health cost of an individual or group – based on the usage and observed costs – during a fixed interval of time and establish subsidies of the premium for high-risk groups to improve efficiency and equity.

With risk adjustment, capitated payments are adjusted to reflect the expected cost of individual enrollees, for mitigating the inequity and inefficiency of the selection of enrollment in health insurance. The financial gains of the insurances from selection, that in social terms it is a social loss, can be reduced, and the incentives of selection can be lessened as long capitation payment system are adjusted with refined adjustors to improve their accuracy of predicting medical expenditures.

4 Methods

4.1 The study has a Diagnosis of the current situation of the social health insurance system of Chile based on information of expenses of the public and the private health sector. This diagnosis shows that risk selection is important and it generates social losses and problems of equity.

In the Chilean Health Care System the population has the obligation to insure against the risks of health care costs, and to pay a mandatory related – income premium, it is contribution of 7 percent of his income. Any person has, in theory, the choice to insure with the public system (FONASA) or with one of 24 private insurances (ISAPREs) and periodic change among risk-bearing private insurance or FONASA who are responsible for purchasing their care or providing them with medical care. But in the reality ISAPRE works with a risk-related without a strict regulation consumers’ premium, and FONASA works with related- income premium.

About two thirds of the population are insured with FONASA, about 20 per cent with one of the ISAPRES. As a result of the regulatory framework of the insurance system, younger, richer population and relatively few women are privately insured; and the population more likely to be

old, handicapped or chronically ill, to have many dependents and to have a low income, is insured in FONASA.

In 2002 the Government of Chile presented to Congress law projects for health reform, for this work the more important are: A mandatory and universal standard benefit package and a Solidarity Compensation Fund among insurers to finance the benefit package, in order to spread risk, reduces incentives for selection and to bring more solidarity into the system.

4.2 The available information has been processed and it has been obtained a data - set that permits the use of based diagnoses risk adjustment. The data sample comes from the hospital discharges of Chile (public and private). Data-sample contains the identification of patient, demographic and provisional characteristics, the clinical diagnoses of hospitalization and the expenditures of each discharge.

4.3 We will do two concurrent models of risk adjustment: the demographic one that tries to predict costs only based on sex and age; and another based on diagnoses that besides sex and age incorporates conditions of health grouped as the Hierarchical Condition Category of Diagnosis Cost Group classification System (DCG/HCC). We will use an actuarial model of cells and a regression model. These two models of risk adjustment are compared according to its aptitude to predict the current costs in health in the Chilean context.

5 Results

5.1 The empirical evidence shows that in Chile the high levels of risk selection and the existence of the segmented health system generates major expected health expenditures for the public insurance.

5.2 The model allows obtaining risk scores for groups (sex, age, type of insurance, diagnoses according to DCG/HCC categories), risk adjusted expenditures and the predicted expenditures.

5.3 On having compared the actual expenditures with respect the predicted expenditures in two different models, in the Chilean case, as in some international experiences, a based-diagnoses model shows better results in the prediction of the expenses in health that a demographic model.

6 Conclusions

6.1 Any risk adjustment model, only demographic or diagnoses based model are possible and can improve the current situation of the social health insurance system in Chile. But using diagnoses is better than only demographic model.

6.2 The problems of information limit the possibilities of applying systematically adjustment based on diagnoses in Chile. In spite of these limitations, it is possible to plan the introduction of a model of this type, in several stages and operating soon with a model who combines the demographic-adjustment and diagnoses-based for inpatient.