

The principal-agent relationship and costing framework for better pricing of healthcare services: the case of the Sverdlovsk region of Russia

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Abstract

The principal-agent relationship in health insurance systems is often considered as one of the key prerequisites for studying the effectiveness of systems. In the classical sense, the problem of information asymmetry between health care providers and patients leads to an overproduction of medical services and an increase in prices for them.

Considering the Russian specifics of compulsory medical insurance, it is of great interest to characterize the principal-agent relations that arise between the regional Commission of compulsory medical insurance and hospitals in terms of the implementation of key functions, such as setting tariffs, allocation the volume of medical care, and determining needs.

The current research raises the question of the necessary conditions for the formation of economically justified tariffs in the context of principal-agency relations between the Commission and hospitals.

The purpose of this research is to assess the validity of tariff differentiation (on the example of medical organizations in the Sverdlovsk region), as well as the influence of principal-agent relations in the compulsory medical insurance system on tariff differentiation in the aspect of the relationship "Commission-hospitals", including the study of the problem of imperfection and asymmetry of information on medical costs.

We used hospital data about the cost of medical provision in the Sverdlovsk region of Russia. Real hospital costs were determined and compared, including comparatives among medical units of hospitals. For this, based on unique statistical data of the Sverdlovsk region using created costing methodology, the costs of a medical care unit were calculated. Correlation analysis was also carried out to determine the relationship of the cost value with various measurable aspects of hospital performance.

As a result, we have found that the current difference of individual tariffs for hospitals located in the investigating region is inefficient economically in terms of the actual cost of medical services provided by hospitals.

In a theoretical aspect, it has also interesting findings concerning the problem of principal-agent relations. The reason for economic inefficiency could be shown in terms of the problem in relations between the Commission (the principal) and the Agent (hospitals). The data analysis has shown us that the principal doesn't yet operate data about cost differences effectively to regulate tariffs in the health compulsory insurance system in the Sverdlovsk region. But at the same time, the experience of the investigating region demonstrates that the costing framework of the Sverdlovsk region gives great potential for development in this domain.

The data has real life and could be used by both sides of the principal-agent relationship in the compulsory health insurance system for better pricing. This could be done by linking tariffs and information about the real costs of medical care provided by hospitals establishing appropriate administrative procedures.