

Chapter 2

Economic Aspects of a Health System Electronization

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ABSTRACT

There are significant disparities among the health needs of citizens and the financial resources of the healthcare system. Limitations of the inputs to growth of the health systems are primarily due to fiscal constraints, the demographic crisis, the degree of competitiveness of the EU, as well as the willingness of citizens to bear some degree of the tax burden. The costs of providing healthcare can be reduced by the proper implementation of eHealth project, as is evidenced by the analysis of the costs and benefits of successful implementation abroad. The aim of this chapter is to evaluate the use of Information and Communication Technologies (ICT) in medical institutions, in Slovakia, as the basis of effective strategic management, influencing the positive and negative changes in their external environment. In addition, the chapter focuses on investments in technological innovation, its determinants, and specification of the effects of the use of IS and IT in healthcare facilities. Finally, it reflects the partial outputs of the first international research GESITY/Hospitals 2011-2012 conducted in partnership with Slovakia and Brazil, in connection with the objectives of the implementation of an eHealth program in Slovakia.

INTRODUCTION

An aging population, higher incidence of chronic diseases and financial cost of the new procedures are global trends that cause increase of expenditures in healthcare. Together with the growing demands of patients, it is clear that, for achievement of long-term sustainability of the system, an

efficient and stable system of financing is needed. The volume of resources in the Slovak healthcare is determined by two factors. First, the development of macro-economic situation, which is not directly influenced by government through direct state intervention, social, fiscal and other policies. Exactly in these interventions we can find an explanation for the lack of money in the system.

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The Government through the tax-contributions policy determines the amount of health insurance contributions, which constitute the most important component of income. While the economically active population has to pay 14% of their salary, the State pays for a defined group of people (pensioners and unemployed) only 4% of the minimum wage. The number of subsidized persons is increasing due to population aging, and older people need financially demanding healthcare services. The State low fixed rate contributes significantly to the formation of the deficit in the finance sector. Slovak health expenditures are represented with an estimate 8% of GDP, which is in percentage and per capita more than the other V4 countries (WHO, 2011). The larger amount of money in the system is not reflected in higher wages, quality or lower price of medicinal products. Compared to the average of OECD country, Slovakia spends 13% more of medical products (OECD, 2010), while staff salaries are still lower than in neighbouring countries (Morvay, 2009; Romanová, Ivančová & Klepáková, 2013). The health status of the population in Slovakia is significantly worse in many parameters compared to more developed countries of the European Union (EU). In Slovakia, health needs of the population are not yet mapped properly. If we add the lower cost of hospital treatment (WHO, 2011) and a lower quality of service than in the Czech Republic, Poland and surroundings (Szalay, 2009) it is clear that the Slovak health system has significant problems with the allocation and efficient transformation of resources (Harkovotová, 2011). This fact was also confirmed by several studies (Balloni, 2011; Soltes, Gavurova, Balloni & Pavlickova, 2012). Estimates show that health expenditures (20 to 50%) are spent inefficiently (WHO, 2010; Harkovotová, 2011; PWC, 2010). The most important factors that reduce the effectiveness of the Slovak healthcare are demotivated staff, inefficient use of beds and staff, unnecessary prescription of antibiotics, lack of generic medical products, corruption, lack of transparency, overpriced purchases

and administrative complexity. These problems are a reflection of many systematic errors which should be changed. One of them is the weak flow of information.

In Slovakia, there is no single system that collects information about patients. This deficit of information allows and often causes duplication of diagnostics and prescription of medical products that affect the resource usage efficiency. Problematic is the lack of information flow in the relation to healthcare providers. Lack of communication is weakening the negotiating power of hospitals with health insurance companies and thus reduces their attractiveness from the perspective of the private sector. Therefore, the flow of information is a critical factor influencing the efficiency of the whole system. Solving this problem will help to create an online eHealth platform that will work on European basis (PWC, 2011; PWC, 2010). This will allow a higher level of specialization and use of beds; thereby supporting the reduction of the average cost of treatment. Assumptions for further development of Slovak Health to 2020 are affected by an aging population, increasing incidence of difficult diagnoses, shortening of the medicinal products life cycle, increasing expenditures in the sector by 30% - 70%. Therefore, necessary priority will be to focus on the following aspects: pressure for effective treatment, elimination of inadequate flow of information and the creation of a vision and strategy for Slovak healthcare.

BACKGROUND

The changing paradigm of healthcare, as well as the new challenges, requires constant updating of state health policy. This should reflect the economic status of the country based on the challenges for the healthcare, current data of the population's health status as well as providers of healthcare (Benčo & Kuvíková, 2011; Klepáková, 2010). It has to clearly define the vision, strategic targets, priorities and methods to achieve those objectives

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