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# THE SWOT ANALYSIS OF THE ROMANIAN HEALTH CARE SYSTEM AND THE KEY ELEMENTS FOR RESOURCES ALLOCATION

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#### Abstract

The complexity of the problem the national health care program confronts with and which must be solved through the measures of the respective reform lead to a SWOT analysis, particularly for this reform. The capacity to generate the necessary income it is a very important criteria in establishing a certain method of financing in order to be the most desired one represents the cornerstone of its capacity to line up additional funds for HEALTHCARE. It is very well known that in poor countries, the abilities of governments to collect taxes is somewhat limited, thus it becomes somehow difficult to allocate additional resources towards the healthcare system. There are special taxes (alcohol and tobacco), but there is always the probability of fiscal evasion. The healthcare social responsibility, financed through income tax allocation has a wider capacity of generating revenue.

Keywords: indicators system, SWOT analysis, financing health care, healthcare expenditure, risk pooling, service quality, income, efficiency.

# 1. INTRODUCTION

One of the objectives of sustainable social development could be the increase of healthcare services financing and a more effective management of the existing resources, taking into account that social development is directly influenced by the investments in human capital. The main problems are: the efficiency of the resource collection, the efficiency of the management system and the acknowledgement that the public healthcare field is an important sector, requiring investments for a long-term sustainable development (Cicea and all, 2010).

# 2. STRENGTHS OF THE ROMANIAN HEALTHCARE SYSTEM

We can consider strengths: the new Law on healthcare reform (Nicolaescu, 2009), the relatively high number of service suppliers for each type of medical care and the existence of medical centres of excellence which leads to an inflow of patients, regardless of the area they live in.

### Implementation of hospital financing system – DRG – case-based financing

The DRG (Diagnosis Related Groups) system has been successfully applied in Romania since 1999, by means of several projects run by MS (Ministry of Health), CNAS (National Health Insurance Funds), CMR (Medical Board), INCDS (National Institute for Health Research and Development) and the Centre for Health Statistics and Medical Documentation (CSSDM) with the financial support of USAID Romania. The system was officially initiated in 2002, as a financing mechanism for 23 hospitals. Based on local experience and on experience of other health care systems, the decision was made to introduce gradually this system, through a series of stages to be completed within the next three-five years. To support this process, a MS project was approved and has received the financial support of the European Union, through PHARE 2003 program.

Diagnosis-related groups were developed in the USA, at the Yale University, by a group of doctors, economists, statisticians that were trying to imagine a system for assessing hospital results (the'70s). The Health Care Financing Administration in USA (HCFA) has adopted the system, has generalized it and decided to use it for hospital financing starting with 1983 (the financing currently exists based on the model). Other countries also use this system, either for assessing hospitals activity, or for their financing: Belgium – hospital activity assessment, Italy – private hospital financing, France, Ireland, Austria, Spain, Hungary, Germany, Singapore, Norway, Finland, Sweden, Denmark – public hospital financing and regional settlements.

#### Classification of a discharged patient in a diagnosis-related group

#### First stage:

- Obtaining clinical data regarding discharged patients there are seven mandatory data categories for each patient: age, gender, hospitalization duration, main and secondary diagnoses, surgeries or other therapeutic procedures or diagnosis performed: condition at discharge; weight at birth (for newborns only); data are collected from the general clinical record of the patient.
- 2. Encoding diagnoses and procedures in view of report standardization; the encoding is performed based on the international classification diseases ICD 10, developed by OMS.
- Electronic collection of data required for classification within DRG in a database comprising all discharged patients and their clinical data. Hospitals reports discharged cases to INCDS according to the order of the Minister of Health no. 29/2003. To ensure data confidentiality, all files are sent in an encrypted form.
- 4. Grouping of every patient in a diagnosis group, based on an algorithm. This automatic process uses software that is also knows as a grouper.

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# 3. WEAKNESSES OF THE ROMANIAN HEALTH CARE SYSTEM

#### The necessity of increasing the financing level of the Romanian health care system

What has taken place in Romania after the introduction of health insurance system in 1997 was in fact (in contradiction to the ruled objectives at the initiation of the reform) the existence of a hybrid system between the financial control of the Health Insurance Funds and, at the same time, of the Ministry of Financing, resulting in many distortions in resources allocation and, first of all, a conversion of a part of these out of the medical system. Analyzing the operation of this hybrid system, some specialists in the field consider that there was no need for Romania to switch to the health care insurance system.

But people dissatisfactions and expectations where diffuse after 1990 and they were not related to a certain means of functioning, but to the obviously poor quality of medical services and doctors discontent related to low wages and difficult work conditions, under the conditions of lack of sanitary materials, facilities and utilities. In my opinion, the transition to the new financial pattern has created a new administrative mammoth, an annual consumer of important financial resources, I am talking about the National Health Care Insurance Funds (including also the county branches), whose administrative efficiency in relation to the costs is controversial.

Why was the insurance-based system chosen? This is one of the questions.

Analyzing the European models (Dobos, 2009), the two options for a change would have been: the actual Bismark model, currently used in Germany, Austria, France, based on insurance and the Beveridge model in Great Britain, Italy and Sweden, based on general tax revenues.

One of the specialists' explanations (Vladescu, 2004), is that the chosen model was more convenient to the Romanian inter-war reality and that is was a middle way between two options supported by two sides: the supporters of the free market for the functioning of the health care system and the supporters of government planning.

According to some interviews taken to policymakers in the healthcare field, the transition to the new system was performed without a very clear analysis of the implications of various European models in the Romanian context and it has rather consisted of preferences of clerks and officials within that government for the German health care insurance model. In fact, during the period following the '89 moment, in Romania there were not many trained specialists in the health care management or health care policies field.

The question is whether initial expectations of people and professionals within the system were met. These expectations included: the increase of services quality and the increase of medical personnel wages, through

the financial independence of the system, the increase of its financial resources and the transparency of resource allocation.

The current problems within the system are related to the fact that the current functioning and legislation have deviated from the initial objectives and philosophy of the Health Insurance Law, as the analyses performed by the indicated author have shown a significant difference between the alleged policy and the implemented reality in almost all listed sections: decentralisation, new mechanisms for resource allocation, institutional autonomy (Dobos, 2009).

Health Insurance Law was came fully into effect only in 1999. It was subject to a series of consecutive amendments during the years after the implementation (one of the Romanian post-revolutionary traditions, as this has happened to multiple laws), so that the initial philosophy of the law was significantly changed. According to several studies, even from the beginning, the new law has only introduced partial changes by means of its regulations.

The precarious condition of financial resources allocate to the health care system during 1990–2009 has continued the trend of scarce investment in the health care system over the past decades in Romania. This has led to the poor endowment of public health care units with modern medical equipment and high-tech utilities and to low wages for the personnel within the system as compared to their self-perceived status. The result has reflected directly on the quality of medical services people benefitted from. The way the medical personnel perceive the work conditions provided by the system and their social status, along with the dissatisfaction towards low remuneration enables them to request extra-payments for the medical services. This restricts the access of poor people to medical services as they also consider that additional payment is a necessary/established practice.

Public health expenses amounted to only 2.8% of GDP in 1997 and to 3.8% in 2009. Thus, the overall health care expenses as a GDP percent and as net income ranks Romania at the end, between Central-European countries and between countries with similar GDP/per capita. Public health care expenses are less than half, as compared to many European countries. Hence, by introducing social insurances, the resources have only increased with 1% of GDP.

Currently, financing sources for public health care expenses are: health care insurance funds, the state budget, local budgets, own income and external resources.

The budget of the Ministry of Health and the budget of the National Unique Social Insurance Fund manage about 95-96% of the total health care expenses and the rest is managed by other ministries with own health care network.

The lack of an unique built-in information system interconnecting all medical services suppliers as well as the institutions with responsibilities in health insurance, allowing a better management of available funds and, at the same time, providing an "intelligent" method to store data that would lead to a database allowing long term synchronic and diachronic analyses and forecasts that would increase system adaptability to the real needs of people.

Lack of real financial and managerial autonomy, impairing all major aspects of the activities of qualified institutions within health care system, from functional organization, to collection, financing, contracting, settlement, information etc.

High incidence of contagious and chronic diseases. The low living standard and the lack of information are some of the reasons why statistics rank us among the "foremost" as regards severe contagious diseases such as AIDS, syphilis, TB, Hepatitis C or chronic diseases such as diabetes – the treatment of which amounts in certain cases to 6 – 7 thousand RON/month for an insurant. This also leads to an increase of pressure over the system, i.e. the continuous increase of medical services demand following the constant deterioration of population health condition.

The incidence of problems related to the ignorance of services related to family planning, a problem with multiple consequences, from the large number of abortions due to the lack of information, thus problems that are not only related to health but also to demographic aspects, to STDs.

# 4. THREATS AND OPPORTUNITIES

Opportunities and threats are a special category for the healthcare system in Romania. In the current global financial crisis context, the reduction / elimination of the threats and the capitalization of the opportunities are fundamental objectives for any manager in the system (Colesca and Dobrica, 2009). To better understand these issues we present in Table 1, in a suggestive form, the opportunities and threats of the Romanian medical system.

At the level of all European health systems, there are discussions about the profitable, effective development direction of health care services in view of a sustainable social development. Fiscal pressures also cause developed countries to pose questions regarding new financial sources, a new management as effective as possible of these or alternate ways to organize services.

In conclusion, we can say that, at European level, health is considered a social right all citizens must have access to, as opposed to USA, for example, where health is an individual good for which people must pay high costs (Vladescu, 2004).

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TABLE 1 - THE OPPORTUNITIES AND THREATS OF THE ROMANIAN MEDICAL SYSTEM	
THREATS - OPPORTUNITIES	
1.Major determinants of health condition	
1.Recoil of social- economical determinants	<ul> <li>a) Although Romania amounts about 6% of the total EU inhabitants (15), only produces 1.5% of GDP (PPS) of UE.</li> <li>b) The analysis of the human development index (HDI) in Romania, during 1990-2009, reveals important differences, not only against the countries within EU (15), but as well against the last 10 countries that have accessed (0.778 in 2009 at Romania level, as compared to index between 0.936 and 0.946 in EU-15 and between 0.895 and 0.850 in countries such as Slovenia, Cyprus, Malta, Poland).</li> <li>c) As compared to the EU average (15), Romania distinguishes itself by a high share of people aged between 25-64 and with an average education level: 60.9% against 43% (UE average-15); but in Romania, the segment of population aged between 25-64, with a higher education level, only amounts to 9.6%, as compared to the same share on the EU assembly - 15 of 21%.</li> <li>d) Employment indicators in Romania highlight the existing difference against those registered by EU-15.</li> </ul>
2.Unreasonable health care behaviour related to health risk factors	<ul> <li>a) Tobaccoism incidence has mainly increase on male segment, as Romania distinguishes by a cigarette consumption (62% of the adult population in 2009), highly exceeding the EU countries average (where the range of this share varies between 19% - Sweden and 47% - Greece).</li> <li>b) The average yearly consumption of certain foods that can impair health show for Romania an alarming deterioration of people nutrition, having effects over the health condition, mainly for deprived segments of population; it is noticed the tendency to increase consumption per inhabitant during 2000-2007, of all foods (not including sugar) considered risk factors that can harm health: calories from 2953 (year 2000) to 3233 (year 2007), alcohol from 8.9 I to 9.6 I, vegetable and animal fats from 14.3 kg to 17.2 kg.</li> </ul>
3.Poor environmental conditions	<ul> <li>a) The huge difference Romania registers as compared to EU countries related to the environmental conditions is emphasized by the very low share of population having access to a quality water source (58% in 2000) and quality sanitary installations (53% in 2000).</li> <li>b) Possible morbidity shocks, under the conditions of the powerful damage to the environment (acts of God) and of the urban decline (the absence of investments in utilities), marginalisation of the dropped behind areas</li> </ul>
4. Health promotion	As opposed to UE, where a series of effective measures were taken, with visible results and retrieved as synergetic effect in reducing the morbidity and mortality degree of population, in Romania is it possible to assess that a conjugated action is required of all involved factors in ensuring the performance of the national health system, so much the more as morbidity rates have increased for the main contagious diseases (tuberculosis, syphilis, viral hepatitis)

# 5. KEY ELEMENTS FOR FINANCING OF THE HEALTHCARE SYSTEM

The criteria used to select the most appropriate method for financing a healthcare system tend to focus on the capacity of the aimed method of meeting six important elements (Blidu, 2006):

- the capacity to generate the required income;
- equity;
- efficiency;
- quality of services;
- sustainability.

Unfortunately, it is impossible to equally meet these objectives. Therefore, the policymakers have the task to perform a trade-off between the six objectives listed, according to the features of the society.

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The capacity to generate the required income. An important criterion in establishing a certain financing method as the most appropriate is related to its capacity of attracting additional funds for healthcare. It is known that, in poor countries, the ability of the government to collect general taxes is limited; therefore, earmarking additional funds towards the healthcare system is difficult. Charges particularly intended for healthcare systems (e.g. charges for alcohol, cigarettes) seem to be collected easier, if we do not consider tax evasion. Health insurance, financed by checking off a certain percentage of the salary, has a higher capacity of ensuring additional amounts. However, this is also limited to those people who have a labour agreement. Studies have shown that direct payments do not represent a major source of income for healthcare systems. On the other hand, when community financing is well-organized and well-managed, it seems that t has the required capacity to mobilize new funds, thus improving the efficiency and the quality of healthcare services (Bardey and Lesur, 2008).

*Equity.* Equity is a difficult to define concept but whose accomplishment is the target of all policymakers in the healthcare sector. There are several aspects of equity.

Equity in financing has several types: vertical, horizontal and intergenerational.

Vertical equity refers to the fact that each individual must pay according to his income and not according to health care needs. Based on this concept, there are three types of systems, distinguished through the payments method: the progressive system, where the percent retained for healthcare increases as the income increases; the regressive system, where income increase is accompanied by the decrease of the percent intended for healthcare; the proportional system, where regardless of the income, each individual pays the same percent to the healthcare account.

Horizontal equity is defined, from the financing point of view, in terms that show to what extent do individuals having the same payment capacity pay equally, regardless of gender, marital status, occupation or residence. However, this is a concept that seems not to concern too much healthcare policymakers.

Equity in the supply of healthcare starts from the premise that healthcare services must be distributed according to necessities rather than according to the capacity to pay. Within this concept, horizontal equity must be seen as the need to provide the same treatment to individuals requiring the same healthcare services, regardless of their income. Here, vertical equity refers to the fact that individuals with higher needs benefit from more healthcare services compared to individuals with lower needs, regardless of the income.

There is also a concept of results equity, according to which all individuals are entitled to the same state of health, regardless of income, residence, race etc.

*Efficiency.* Taking into account that healthcare resources are limited, it is mandatory to collect and use these resources as effectively as possible (Alexandru, 2005).

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The inequitable distribution of available funds, the deficient coordination between different financing sources as well as the inadequate attention paid to costs and efficiency related aspects are major problems faced by the financing of healthcare systems in countries in transition.

Should the matter of fund collection efficiency devolve upon financiers, as it is mainly related to aspects such as tax evasion, underground economy, the increase of administrative costs or corruption, the efficiency in the allotment of healthcare resources is a major concern for healthcare professional, as they may intervene in this field.

There are two aspects of efficiency in healthcare provision: allocative efficiency and productive efficiency.

Allocate efficiency refers to modalities for the allocation of resources between various branches of healthcare activity so as to obtain the best results. In other words, how to assign limited resources so that to obtain maximum benefits, measured by state of health indexes.

The concept involves an attempt to reassign available funds from the most expensive services, available to a low number of individuals, towards healthcare services such as prevention, immunisations, vector control or healthcare education that may be available to more individuals, with long-term results.

Productive efficiency (technical) refers to two aspects: based on the resources available, how can we obtain the best results? Considering certain results, what means do we choose in order to consume as few resources as possible?

**Sustainability.** It is defined through the capacity of a system to provide benefits assessed this way by users and policymakers so that to provide sufficient resources in order to continue the long-term activity. It has several components (Armean, 2007):

- financial sustainability. A system is financially sustainable when it is able to support itself, without external interventions.
- political sustainability. A system can only be sustainable if political stability exists.
- organizational sustainability. While appropriate financial support is the basis of a sustainable healthcare system, the success of the healthcare programs suggested depends greatly of how the system is organized. Organizational sustainability is determined by factors such as: political changes and changes on the capital market, managerial and organizational qualities and, not lastly, the training degree of healthcare professionals.

*Quality.* The quality of services received is a major concern for patients. It is obvious that a healthcare system having insufficient resources cannot provide quality services (Galland and Fontaine, 2005).

It is also true that a system having very large funds but that does not apply restrictions regarding the consumption of services by patients and the supply of services from suppliers respectively could also face with quality related problems.

It is difficult to define the concept of quality of healthcare services especially as the term has another meaning for patients as compared to services suppliers. For patients, quality is rather a subjective concept, as they appreciate more human relations or easy access to medications rather than the medical service itself. Patients also focus on the waiting time, the comfort degree in healthcare units, the lack of respect and dialogue from the staff and, not lastly, the need to offer money "underhand" in exchange of a preferential treatment.

Professionals equally insist upon the technical aspects of medical services, thus being more objective in their assessment.

# 6. CONCLUSIONS

There are five main financing methods of health care systems: financing from the state budget; financing through social health insurance; financing through private health insurance; financing through direct payments; community financing. Each of them presents their own characteristics. There are two aspects that must be emphasized: first, in many cases, there are many financing sources of health care expenses; secondly, none of these methods is ideal and cannot provide a magical solution to solve the severe problems the health care financing confronts with, especially in poor countries.

In order to understand precisely the actual position of the Romanian health system, in order to achieve an improvement in its effectiveness, the SWOT diagnosis analysis has a crucial role. This is very important issue because, in the current financial crisis context, there is a severe lack of resources (human, material, financial).

Nevertheless, it is important to understand that the resources allocation in the healthcare system must be done according to six key elements such as the capacity to generate the required income; equity; risk pooling; efficiency; quality of services; sustainability.

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