RESSOURCES ALLOCATION POSSIBILITIES WITHIN HEALTH SERVICES

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The state policy in the health care area must take into account the complexity and specificity of the domain. Health means not only "to treat", but also "to prevent" and "to recover and rehabilitate the individual physically". Regardless of the adopted health insurance system, the health system is facing a big problem and this is the insufficient funds necessary to function properly.
The underfunding may have various causes, from a wrong health policy, based on "treating" instead of "preventing", by the misuse of funds. This papers intended to formulate assumptions that underpin the research I am conducting within the Doctoral Research Program held at the Valahia University of Targoviste, which aims at using the management control in increasing the health services performance.
The application of the accounting and management control methods in determining health costs can be a beginning to streamline the system. This is also a result of the fact that health care is a public service with specific characteristics: it can not be subject only to market requirements but at the same time he must undergo an administrative savings, representing a typical case of market failure.
The increased cost of treatment, as well as the decline in their quality can be determined by the discrepancy between the funding and payment mechanisms. Different payment systems currently available do nothing but perpetuate the shortcomings in the system. Switching to the introduction of cost and budgets by cost centers or object (if solved) can be a step forward for a better management of resources. In this context, we consider as a necessity to be imposed the cost analysis on responsibility centers, the definition of the cost object and cost center identification and determination of direct costs and those indirect services to choose the basis for the allocation of cost centers and the determination of each actual cost per diagnosis.

Keywords: health, revenue allocation, management accounting, costs

JEL *Classification: H51, I18*

1. Introduction

Health is a factor with direct implications for the proper conduct of social life and economic activity.
The definition of health, provided by the World Health Organization, states that, *"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (Voiculescu* 1986: 5). Analyzing this definition there might be drawn the conclusion that the health policy should be an objective of state policy. This is particularly important, since the health should be considered from a triple perspective: *political and demographical*, according to which "the health of a nation depends on the health of its members"; *economic,* a healthy population is a premise for a greater productivity, and *social,* designed to provide a healthy life.
State health care policy must take into account the complexity and specificity of the domain. Health is not just "treating", but also "preventing" and "recovering and rehabilitating the individual physically". It follows that health care is not only a problem of health assisting, but also a profound social problem, an integrant part of all the social and economic conditions for development.
In the last decades there have been multiple and profound changes in the health system, from changing funding schemes, to the reshaping the whole system. The purpose of these changes was,

on the one hand, to ensure a balance between health system's income and costs, and, on the other hand, to increase performance sectors of health, so that the population health and quality of health services in Romania to be, as much as possible to those existing in European Union countries. Giving the Romania's accession to the European Union, the population health state and health services in EU member countries, become also the Romanian reference in this field.
Public health system has undergone numerous reforms, designed to ensure better use of available resources, in order to meet the European values in this domain: the right to health care, ensuring the access to health care, respecting the right to free choice of provider, and equal opportunities.
The transition from centralized health insurance (type Semasko), to health insurance system type Bismarck, based on the principle of social solidarity, has changed the financing method, but has not solved the big problem facing the health system, that is, the lack of necessary funds.
The problem of underfunding of the health sector continues, regardless of the measures taken. Underfunding may have various causes, from bad health policy, based on the "treat" and not "prevent", by the misuse of funds.

2. Health sector, typical case of the market failure

Health care is a public service with specific characteristics: it can not be subject only to market requirements but also it must run under an administrative economics system.
In 1963, Kenneth Arrow pointed out in his "*Uncertainty and the welfare economics of medical care"*, that health services are a particular market, highlighting that this is not a traditional, self-adjustable, market but rather a typical case of market failure.
According to Simona Haraga, the main causes of this market failure are*:* heterogeneity of health services, information asymmetry between consumers and providers of health services, consideration of health services as a public service, moral hazard both for the supplier's and patient's side, and the particular situation of monopoly or oligopoly on the market, that allows the providers to set the price (Haraga 2007).
Arrow shows that "the uncertainty in the incidence of disease and treatment efficacy determines the competitive markets to inefficient resources allocation, and thus to contribute to the appearance and intervention of an administrative institutions (non market) as compensation for market failures" (Arrow 1963). Despite its controversial nature, this idea turned into a fertile ground for developing theories regarding the formation of social institutions.
There have been remarkable changes in the health system, since the Arrow's article publication. Health expenditure has increased dramatically, both because of increased demand for health care and because the diversification of investigative methods are accompanied by their cost increases. This directly led to the emergence of new diversification entities in order to relieve the public health care system and increase the efficiency of existing units.
Another fact to bear in mind is that health is a particularly good, which determines a certain specificity in health insurance services. By the impossibility of substitution of such goods, unlike the classical goods and services, caused by situation of unaffordable purchase, and by the specific way to insure against such risks, health care has totally different features from all other goods.
"Individual health" is a complex phenomenon, influenced by many factors whose action may not always be controlled, including:
- The quality of the individual (hereditary endowment, level of general education, basic medical education, eating habits, preventive attitude, etc.).
- Living environment (pollution, stress etc.).
- The life standard (material and financial conditions);
- Healthcare system (health care institutions, medical equipment endowment, medical personnel, the quality of medical care, etc.).

At the same time, individual health determines individual behaviour, personal growth, social and economic development and, not least, the quality of his life.
Health policy, as an integrant part of social policy, requires significant financial resources. Alongside the economic expansion and the scientific medicine, health expenditures have a tendency to increase due to factors such as: health care needs amplification, as effect of population growth and it's structure change, increased risk factors, the increasing cost of medical services as a result of introduction into medical practice new ways of investigation, treatment, medication, the increase in number of medical professionals, etc. In modern health systems, an increasing importance is granted to the theory according to that the medicine should not be the patient's medicine, but primarily it has to be healthy human medicine that emphasis on disease prevention.
In these circumstances, financial resources for health care are used predominantly for investments (building hospitals and their endowment with medical equipment and tools, and adequate means of transportation), for maintenance and normal operation of hospitals, dispensaries (salaries and other personnel rights, medical supplies, medicines, expenses for patients' food, repairs, etc.) and to ensure disease prevention.
One can appreciate that, globally, in the last three decades (1960-1990), the value of health expenditures doubled in most developed countries. According to UNCTAD's Human Development Report 1998, the share of total health expenditure in GDP in OECD countries increased from 4.5% in 1960 to 9.7% in 1991; in North America from 5.3% from 13.0%; in the European Union from 4.1% to 8.2%. In developing countries there has been total, also a share of the public health expenditures in GDP (from 1% in 1960 to 2% in 1990), but large differences between countries.

3. Imbalances in the Health services financing

Setting up the revenues for financing health services combine different ways: public financing (governmental) having taxes as main source, social security contributions made by private insurance (conducted by individual payment of insurance premiums) and patients' direct payments.
With the exception of the last way, these systems provide all the insurance schemes elements, meaning that they collect and distribute risks. The first two funding categories provide health services for free or below their price, based on past entitlements arising from contributions paid by all taxpayers.
Similar to insurances schemes, health financing schemes can provide an element of mutual support. The contributors with higher risk and those who have a lower income are partially supported by those with higher incomes and lower risks. Given the correlation that exists in all countries between low income and increased risk of disease, this support is necessary to be provided.
The autonomous public institution of national interest, which administers and manages the health insurance system in Romania, is, according to the Law no. 95/2006, National Health Insurance House (CNAS).
The Single National Health Insurance Fund's incomes are constituted of contributions from individuals and businesses, grants from the state budget, donations, sponsorships, interest, income derived from the heritage of the National Health Insurance House and the county health insurance houses, amounts from the revenues of the Ministry of Public Health and other income, according the law.
The overwhelming share of Single National Health Insurance Fund's incomes has as source the contributions of individuals and legal persons (Table no. 1).

Table no. 1. - The structure of funding of health care in Romania in 2004-2009 (%)

	2004	2005	2006	2007	2008	2009
Total revenues	100	100	100	100	100	100
State Budget	1.33	5.44	2.07	6.08	9.28	5.97
National Health Insurance House	96.84	93.65	95.44	93.46	90.26	93.92
Other sources	1.83	0.91	2.49	0.46	0.46	0.11

Source: Calculated by the author, based on data from annual reports of National Health Insurance House

According to the Health Insurance Fund budget, health expenditures might be divided into two broad categories: health care costs and Fund's administration expenses.
The expenditures for medical services include materials and supplies of medical services, such as: primary care, specialized outpatient care (except medical laboratory services), medical laboratory services, outpatient dental care, hospital services, medicines and materials typical used in hospitals for some chronic diseases and specialties based on programs, assistance with medications in outpatient treatment, medical devices, pre-hospital emergency medical services, health services, recovery and rehabilitation health care services at home.
Analysis of the structure of expenditure in the health system indicates the large share of expenditure in health care facilities with beds (Table 2).

Table no. 2. Structure of health expenditure in the period 2005 - 2009 (%)

	2005	2006	2007	2008	2009
Total expenditure of which:	100	100	100	100	100
Pharmaceutical products, sanitary materials and medical devices	23.15	31.57	31.19	29.43	28.02
Outpatient Medical Services	10.69	10.40	12.78	15.75	12.39
Pre-hospital emergency services	2.95	2.84	2.87	3.34	4.05
Medical services in hospitals with beds	52.40	48.76	46.53	45.21	47.93
Medical care at home	0.03	0.04	0.08	0.12	0.12
Administrative expenses of the Fund	1.31	1.64	2.12	1.50	1.24
Other expenditures	9.47	4.75	4.43	4.65	6.25

Source: Calculated by the author on the basis of the Health Insurance Fund Budget draft for 2005-2009

Given that revenues are reportedly growing CNAS, there is a shortage in the financing of health services (Table no. 3).

Table no. 3. The shortage in the financing of health services in Romania (thou lei)

	2005	**2006**	**2007**	**2008**	**2009**
Total revenues	8474378	10151441	13080571	15780537	14623761
Total expenditure of which:	9157441	10170503	12859102	16636256	15274758
Deficit Financing	-683063	-19062	221469	-855719	-650997
% Shortfall in income	-8,06	-0,19	1,69	-5,42	-4,45

Source: Calculated by the author on the basis of the National Health Insurance House (CNAS) reports

Naturally, appears the question: Why this money shortage in health financing? The question is the more legitimate, giving that, in recent years, in addition to public sector health insurance has

grown the private healthcare sector (in 2009 there were approximately 380,000 policyholders in the private sector).
There might be multiple answers:
- An increased demand for medical services due to deterioration of health;
- Inadequate collection of revenues;
- Inefficient allocation of funds for different categories of expenditure;
- Lack of a cost management (cost control) to the major health providers (hospitals).
The following paragraph will address the last two answers identified.

4. Methods of allocating public funds in health sector

Health care system performance depends largely on how the payment system for health care providers is organized.
Arrangements for funding the system can not be treated separately nor from payment mechanisms nor to the types of care provided.
Increased cost of health care services, as the decline in their quality can be determined by the discrepancy between the funding and payment mechanisms. On the health care market, the consumer does not have sufficient knowledge to make voluntary, independent choices. The supplier, in our case the doctor, is one who sets the price and influences the demand. Because doctors can decide the treatment, the medication and the quantity of services, through their behavior, they can influence the cost, efficiency and quality of health services.
Different payment methods determine different behaviors, depending on their typology.
Payment per service has as main unit of payment the medical examination or medical act itself. The supplier is paid in proportion to services rendered. The method is used in hospitals, health centers and individual physicians practice. Providers may be tempted to raise the number of services, even some of them are non-necessary. Also, form the patient's side might be observed the same tendency to over use these services.
Pay per capita represents a fixed amount payment over a period of time for each patient entered on a doctor's list, regardless of the number of services. Age or gender might influence the price per patient. In this case, there may be the tendency to attract only healthy individuals on their lists, preventing access of patients ("cream skimming"). Also, the number of services could be reduced to that required.
Payment per case has as payment unit the service package or the number of hospitalized patients. The supplier receives, through a standardized contract, a predetermined amount for the package or hospitalized patients. This method is used in hospitals funding. There is a tendency to reduce the duration of hospitalization, a diminution of services per case, but also for selecting cases with less severe disease.
Pay per day-hospital care causes the tendency to increase length of hospitalization, knowing that the last days of hospitalization are even less expensive. This form of funding tends to over-increase the hospital beds utilization and the appearance of oversized health care units. In this context, the number of services per case will fall.
Payment by salary represents the monthly payment to the doctor, with a fixed amount, regardless of the number of patients treated, the quantity and cost of health services provided.
The overall budget is the amount allocated in advance to the provider. It may decide to redistribute money on various items of expenditure. This payment method is used for hospitals and health centers.
Each type of payment for service health providers has specific limitations.
In this context, we consider that it would require the cost analysis by responsibilities centers.

In order to increase performance in the health sector and better management of funds, David W. Young proposes the introduction of the management accounting in the patients' care (Young, 2003).
This process involves six strategic decisions in determining costs, taking account of sector specific analysis:
- Definition of the cost object;
- Identification of cost centers;
- Identification of the direct and indirect costs;
- Choose the basis for allocating service cost centers;
- Select the method of allocation;
- Attaching to the cost of a cost centre a cost object.
These decisions are no more than cost accounting methodology.

Conclusions
In the case of hospitals, the cost object can be represented either by the cost of hospital inpatient days, either by an episode of illness (diagnosis). The introduction in 1983 of DRGs (Diagnostic Related Groups) changed the cost of the hospital subject to a "day care" at discharge for a given diagnosis. Using this method represented an attempt to uniform and somewhat to standardize the expenditures for a specific diagnosis.
DRGs system has often been criticized because, most often with a specific diagnosis, there are associated other related diseases that can lead to increased costs. In addition, patient care activities are carried out in units having different endowments than those considered as standards, which involve different overheads.
These observations lead to the necessary to identify appropriate cost centers and their budgeting. The cost centers delimitation within the healthcare unit, affects the way of aggregation of these costs. If the budgeting is done at the organization (hospital) level, there is likely to overstatement the overhead costs, which will then be distributed to each item of cost. If the organization is divided into a many cost centers, the expenditures to can be better managed. From the management perspective, the costs are better identified and more easily to calculate if they are grouped on homogenous activities.

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