

## **Solutions against crisis applicable to the oro-dental health system in Romania**

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**Abstract.** *The health systems consume a lot of resources. In the last thirty years, there was registered a continuous increase of the necessary resources' level. This increase was mainly due to: the ageing of the population, discovery of more efficient medicines and of more advanced and costly technologies, the increase of the number of persons who benefits by medical assistance.*

*Theoretically, the financial supporting could be upgraded by help of a series of measures: restriction of the access to services, reduction of the quality of the services or increase of the private financing weight (which has consequences connected to the limitation of the access to services). None of these is desired from social point of view.*

*From social perspective, the most indicated modality of upgrading the financial supporting is the efficient increase of the health system. In this situation, the efficiency makes reference to the decrease of costs, maintaining at the same level the quantity and quality, achieved by preventing the overconsumption (which could be connected to oversupply) of medical services and assignment of sufficient resources for the prevention and health maintenance programs with the purpose to reduce some future potential expenses. The performed comparisons between different international experiences based on the resulted/expenses rapport could represent a useful guide referring to the efficiency.*

**Keywords:** health and inequality; efficiency; crisis; quality of life; sustainability.

**JEL Codes:** I14, D6, H1, I1, Q0.

**REL Codes:** 11E, 13K.

## Introduction

The program of the European Union within the public health domain contains actions which could be complementary to the national policies in the domain concerning the protection of the human health and upgrading of the public health. The main objectives of this European Union program are: the upgrading of the information quality and knowledge for the development of the public health; the increase of the capacity concerning the rapid and coordinated answer to the risk factors for health; promoting the health and preventing the diseases for actions over the factors which determine the health status, by help of actions over all policies and activities.

In this context, at the 53<sup>th</sup> General Assembly of WHO, there is recommended for the member states to develop national programs, or at an equivalent level, which corresponds to the global strategies oriented to the prevention and control of the major chronic diseases in a general and specific way. In this context, the oro-dental prevention appeared as a necessity given by the special prevalence of the oro-dental affections and by the biological, economic and psycho-social impact caused by their evolution and treatment.

The identification of the optimal allocation of the resources in view of maximizing the health state of the population will be a key instigation of the health system from Romania which will affect both the involved state and the private bodies in the next ten days. The medical research will continue to produce a big number of alternatives in order to detect, prevent and treat different diseases. Taking all this into account, the budgetary constraints will limit the access to these solutions or at least to one of their party.

According to the Convergence Program 2011-2014 from Romania, even if the indicators of the health state progressed, they are still at an improper level as compared to the average of the EU.

The best result of the health national state reform consists of the simultaneous upgrading of: *health state or cares*, by increasing the efficiency and the service range, *medical adequate technology and raising of the medical assistance quality, economic efficiency* (reduced costs, best utilization of the resources, increase of the economic or health benefits for the same level of expenses, increase of the work productivity), *satisfying the major power centres from the system* (health, financial and psychological benefit for the interest groups: communities, medical professional persons, health insurances persons, health managers, politicians). Both Romania and other European states also confronts with the public finances sustainability and, as resulting from the next table, the tendency of the public funds allocated for the health sector is

increasing, being estimated an increase as compared to 2010 year when it was an increase of 0.8 percentage points for the level of 2030 year.

Table 1

<b>The sustainability of public finance on the long term</b>							
<b>% from GDP</b>	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>
Total expenditures	33.6	40.7	41.5	43.0	43.5	43.3	42.2
Which: age-related spending							
Pensions	6.7	9.0	10.5	10.8	11.3	11.5	10.8
Health care	3.3	3.4	3.8	4.2	4.4	4.7	4.9
Education	2.8	2.4	2.3	2.2	2.1	2.2	2.3

**Source:** MFP.

This tendency corroborated with the significant increase of the expenses with the pensions will put more pressure upon the situation of the public finances due to the fact there is imposed the identification of the most efficient methods concerning the allocation of the resources, especially the public one and not only.

The quality of persons' life represents a consequence of the simultaneous actions of more influence factors out of which: health, education, personal actions, government and political environment, social relations, environment conditions, etc. Health represents certainly the most important influence factor of persons' life quality. The crisis of the sovereign with which deals many of the EU member countries continue to impose the adaptation of some difficult austerity measures which certainly will also point out the influence over the health sector. Consequently, there is imposed the identification of some resources allocation optimal measures concerning the diminution of the negative effects which are to be also felt at the level of the medical services.

This research has rather in view to make a research at the macro-economic level by identifying the most efficient methods of costs' calculation due to the fact that, in nowadays context, the main problems result from the character as limited as possible of the resources allocated for each activity sector partly.

The researchers carried-out up to now in the medical services domain lead to the conclusion that there is a clear list of treatments (with the proper therapeutic manoeuvres) which could be applied in (almost) all dental surgeries from Romania.

In the same time, in function of the aggregation principals of the costs, there are many calculation methods of the costs which could be extra polar to the dental surgeries: traditional method; global calculation method; job order costing method; ABC method – Activity-based method.

*The traditional method* is a method specific for that economic entities which make products or services whose direct costs are important and represent the major share in the total costs.

*The global calculation method* (also called “process costing”) is proper for those economic entities (pharmaceutics industry, energy, chemical industry, etc.) which make a big volume of identical products (the same category of product or services) and in which the allocation of the indirect expenses – with a significant share in the total productivity costs – is executed at the end of the period for which the production costs are calculated by the simple dividing of the indirect expenses at the end quantity (or value of the proper direct expenses) of the products/executed services; even if the dental surgeries are far away from this type of activity. In Romania, we have met this system of allocation of the indirect expenses for many of these cabinets;

*Job order costing method* is used within those economic entities (consultancy cabinets, private medicine cabinets, dentistry, advocate cabinets, architecture, etc.) which executes a “small series of production” or individual/special or where it is rather worked on projects. The calculation object is represented by the project (specific treatment, patient X, etc.). Practically, on the calculation object are aggregated all direct determined expenses;

*Activity based costing method* – represents a calculation methodology of the costs which are based on the performance of the processes, costs of the resources and costs of the objectives. The main premises of ABC method are those that the activities are resources consumers (salaries, materials, utilities, etc.) for producing results. As compared to the traditional calculation methods which are concentrated on products/services, ABC method is concentrated on activities. Taking all these into account, ABC method has also among its objectives the determination of the costs/on products services, but through the resources consumers’ calculation objects. ABC could generate the determination of some relevant costs of the services as compared to the traditional methods as consequence of the nature and big number of the basis concerning the allocation of the costs based on activities. The recent researches concerning the ABC method in the medical practice were based on the conceptual discussions of this method’s benefits. Also, the cases based on the medical practice were utilized along the time in order to demonstrate the utility and general benefits of ABC method.

A cost driver basis represents an element which has a direct “cost-effect” relation with the cost and is an activity which creates costs. Therefore, each treatment or therapeutic manoeuvre should be detailed in a sequence of activities and each activity partly should “receive” a basis of allocation of the

costs of that activities which is to be relevant. Obviously, each basis of allocation of the costs of the activities should have relevance for the cost “of the final product/therapeutically treatment”.

An essential objective of our research is represented by the execution of a practical methodology and scientifically validated through which there is possible the informatics shaping of the costs, determined based on ABC method for the economic and operational substantiation of the prices and rates and efficiency of the activity.

A major decision of any industry management is the establishment of products, respectively of services which are to be sold to the clients/beneficiaries. The decisions connected to the establishment of the prices which could be of type:

- establishment of the price of a new product or service;
- establishment of the price of a sold product or service under a certain own mark;
- establishment of a new price as response to the actions of the competition;
- price offers for the closed/open bids.

The decisions concerning the establishment of the prices depend on the characteristics of the market. In case of an imperfect competition (as now it is the case of all markets of the world), the price which the organizations claim that influences the quantity (number) of sold products (services). The economic legitimacies denote that the bringing down of the prices generates an increase of sales and vice-versa. Obviously, the price which an organization claims for a sold product or services should be correlated with the cost of manufacturing of this product/service in the idea that the minimum level, the limit for starting the construction of the prices should be the cost of the consumed resources for its manufacturing.

Now, the health system from Romania deals with a series of lacks, from the financial ones up to those concerning the medical personal.

In the case of private dental services, it should be also taken into account the tolerance level of the population because it exists, for example, very costly materials, generally important and which could generate very high complete costs and which could not be supported by the “medium” patient of the dental surgery.

On the other side, a performance management means also the possibility to execute the optimal combination of all variables from this equation (for example, a certain necessary dental treatment), cost-efficiency-efficacy so that each treatment to be configured in function of the health care necessities of the

patient and of its financial power at a certain level of quality of the dental interventions.

A wide-spread method concerning the determination of the prices is *cost-plus-pricing*, through which it starts from the establishment of the reference costs (which could also be represented by the entire cost or the production cost or variable cost) and a desired profit margin is added. The profit margin could be freely established or restricted in function of the professional remuneration system, professional non-concurrence agreements, etc. This method could be utilized in the situation of that products or services where the managerial decisions could influence the market price. The most part of dental surgeries of the world adopts this method in order to establish the prices of the services executed in private system.

In the situation when the decisional factors could influence the market price of the products/services, either due to the fact that it is limited or due to the fact that is limited to the sums which the Health Insurance Funds could deduct (totally or partially), either due to a aggressive concurrence when the only alternative for the execution of a profit margin is to “work” over the costs and limit their value. This method is called “*target costing*” and starts from the supplied price from which is knocked off the desired and obtained profit at the determination of the “target” costing in function of which the product/service is then configured.

In our country, the diffusion rhythm of the information to those interested is very low. The informational system is not adequate and not ensures sufficient information and of big accuracy concerning the context of the quality of the dental services and especially over the management of the private dental surgery.

In this moment, there is utilized information from the site of different institutions or associations having this type of preoccupations or from the content of different publications, there is utilized information which has not the guarantee of reflecting a reality in the domain.

The calculation module of the indicators whose value could be identified by help of different informational sources is not a little one and many times it could remain unknown to the patient and this fact leads to wrong decisions and many of them have disastrous effects. The accuracy of the information is also affected by the inexistence of a viable system, fast system concerning the procurement the information, consequently their delay procurement, but especially late processing due to the fact that there is not a centre specialized in the analysis of data or a national basis of data.

The information sources do not cover their entire field, the most part of it offering out-of-date information or without being totally available in the area of dental services.

The idea of making and activating such a calculation and information basis over the private dental surgery management was generated by the fact that in the countries advanced from economic point of view the existence of such a basis facilitates the decisional act of those persons who are interested.

### **Conclusions**

In the majority of EU member states, the crisis of the sovereign duties put pressure over the situation of the public finances. Nowadays, Romania is in between few countries which still respect the criterion of the public duty (public duty does not exceed 60% from Gross Domestic Product).

For Romania's economy, the rhythm of this increasing is alarming, not the level of public duty. As it is demonstrated by the Convergence Program for 2011-2014 period, all the public expenses have the long term increasing tendency and this tendency could be also seen in the health domain.

In this research paper, we identified both the causes of the financial resources increasing necessary for the health domain and the vulnerability of this system. The population ageing tendency corroborated with the over-consume tendency of the medical services and of the financial resources lack in relation to the necessities of the population represents the main causes which imposes measures for the identification of the most efficient methods concerning the allocation of the public and private financial resources.

After the analysis made, we consider that the methods concerning the allocation of the financial resources within this system could be upgraded by:

1. Making and activating a calculation and information basis over the management of the private dental surgeries and not only;
2. Preparing and supporting an efficient private insurance system;
3. Applying some efficient methods concerning the identification of the costs as for example the cost-plus-pricing method or target costing method;
4. Adopting measures which prevent the over-consume of medical services;
5. Adopting some efficient programs concerning the prevention and maintenance of health.

In order to draw up a conclusion, the main objectives of this scientifically research could have the purpose to inform: the private dental clinics and cabinets in order to identify the development opportunities; the potential

Romanian or foreign investors in order to develop some businesses; organisms of the public power in order to prepare the statistical situations; research institutes and universities in the current activity of presenting the specific calculation methodologies of some costs categories; dental surgeries in the activity of perfection and efficiency of the dental surgery management; consultancy, stock exchanging or insurance societies in order to prepare, respectively support a private system of dental insurances in clinics which respect the ISO European standard.

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