

## Value for the patients – The main goal of Public Health

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### **Abstract**

In healthcare, the value which a patient receives is usually defined as the result of the healthcare activities, achieved per a financial unit. Measuring this value should be the basis of the model for reimbursement of health products (therapeutic and diagnostic activities, medicines, prevention and prophylaxis and the like). When the reimbursement policy is bound to the value for the patient, then the medical providers are rewarded for their effectiveness in achieving good health results, while enabling to locate the responsibility for poor health results. The current health reforms in the economically developed EU countries are oriented precisely to such individualized long-term care policies.

**Keywords:** approach, healthcare costs, management, reimbursement, value for patients.

## Introduction

Health economics is based on an analysis of the demand and supply of health services and products, with a focus on the ratio of the used resources and the results achieved (profits). The results of this economic analysis are used to select between different health alternatives to improve the effectiveness and the value that the patient receives (1). It is measured as the ratio of the health benefits and costs. In recent years everybody has expressed dissatisfaction with the healthcare system in Bulgaria. Multiple publications and interviews, including those by former ministers, describe the health system as “shattered” and in “ruins”. In reality, this is not so, the Bulgarian health system is not shattered. It “successfully” carries out the objectives it has set. Since the “demand” in hospital care is for more clinical pathways, this is what the health system will offer. Since the primary outpatient care is paid per the number of enrolled patients (capitation), this is what the patients will receive, and not healthcare. Until we change the incentives in the system, it will continue to produce what has generated demand (2). Bulgarian patients and health politics declare that they have the desire to receive high quality healthcare services and commodities. Then the system will have to create conditions for its demand by paying for achieved objectives and quality. Therefore the health policy and the reimbursement of healthcare products have to be based on their value for the patient.

### What is the value for the patient

In healthcare the value which a patient receives is usually defined as the result of the healthcare activities, achieved per a financial unit. Precisely this objective has significance for the patient and unites the interests of all the participants in the healthcare system. When the value increases, the winners are the patients, the financing institutions, the healthcare providers, while the stability of the healthcare system increases (3,4). These are the theoretical foundations upon which the science of health technology assessment is based.

One of the main problems in achieving this goal is

that to a large degree the value in healthcare is not understood and not measured correctly. The value always has to be defined according to the needs of the patient. The remuneration of the participants in the system should be determined according to the creation of value for the patients (4).

It is important to know that the value in healthcare has to be measured by the achieved health results, and not by the volume of the services provided.

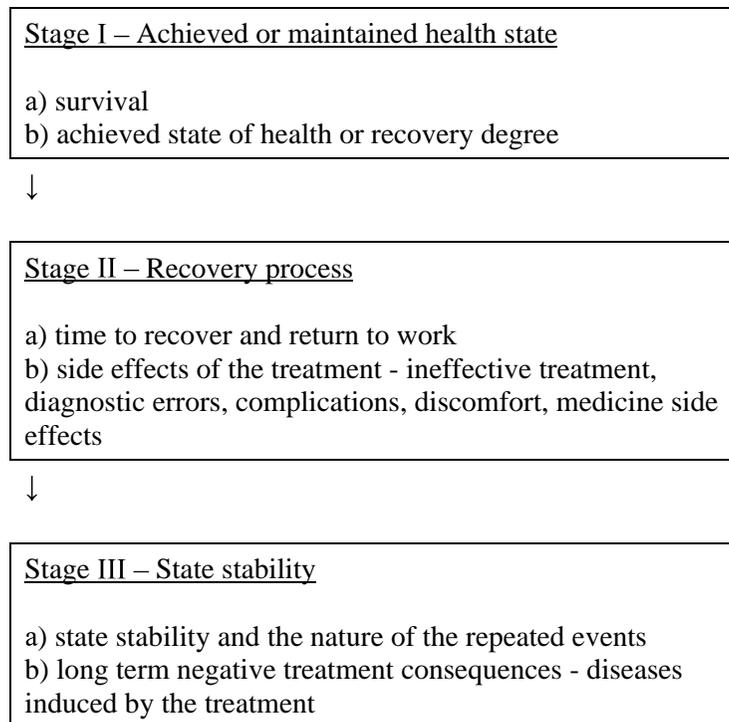
The correct structure for measuring the value has to encompass all healthcare services, commodities and activities, which taken together determine how successfully have the given needs of the patient been satisfied. These needs are determined by the illness of the patient, which is defined as the sum of interrelated medical conditions (diagnoses) to which it is correct to have an integrated approach. For example, when treating a patient with diabetes the treatment of the concomitant diseases should be integrated - hypertension, cardiovascular diseases, kidney failure, etc. In this case, the value should be measured for everything included in the integrated treatment. In this respect, the implementation of diagnosis-related groups is an approach that is much closer to the concept of value in healthcare than clinical pathways (5).

### How to measure the value for the patient

When determining the relevant health results for the patient the following principles have to be taken into account:

- The health results have to include the health circumstances, which have the strongest relation to the patient.
- Measuring the results has to be related to the conditions in the near, as well as in the far future, while the period has to be long enough to encompass the optimal results of the treatment.
- Measuring the possible health results has to include measuring the risk factors and the initial conditions, so that the future risk could be corrected.

Figure 1 displays an exemplary algorithm for measuring the value for the patient.

**Figure 1. An exemplary algorithm for measuring the value for the patient**

The modern system for evaluating the quality and health results for the patient to be funded by the public healthcare system should be based on a similar algorithm. Due to the complexity of medicine we often need to assess the advantages and disadvantages of health results in direct competition with each other - for example, the short term functionality against the long term safety. Therefore, the application of the model for reimbursement, based on the value that the patient receives, is specific for the various diseases (6).

Every illness has its own measurement of the results for the patient. It is important to know that in order to monitor and analyze the effectiveness at least one measurement of the results at each stage of the proposed algorithm has to be made. Moreover, the improvement of the measurement results of one stage may be beneficial for other stages (7). Figure 2 offers an exemplary algorithm for measuring the performance and effectiveness of the treatment in patients with breast cancer.

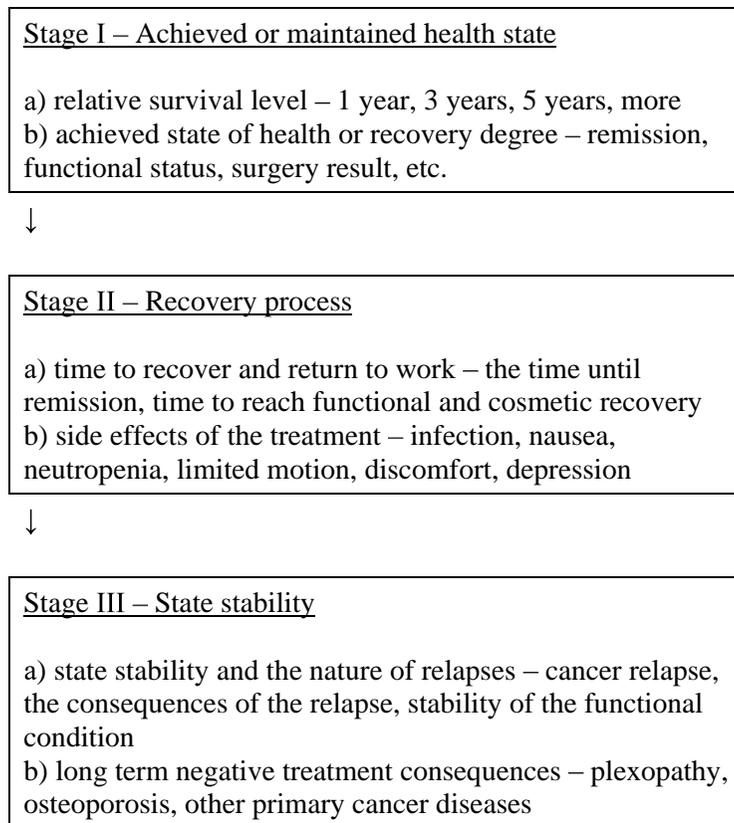
Similar algorithms for short and long term treatment results can be made for all the diseases

by the professional scientific societies in therapeutic and surgical specialties.

### **How to use the value for patients**

The most important users of the data from the measurement of health results are the physicians and health institutions themselves, for whom the overall long term measuring can bring to significant improvements of both – the therapeutic and economic nature. Moreover, the transition of the therapeutic results to public reporting can accelerate the innovations, while motivating the health care providers to become better than their colleagues in the field and allowing the stakeholders to benefit fully from the information about the healthcare results (8).

To achieve an objective level of measuring the effectiveness of health activities, it is necessary to measure not only the results for the patients, but also the costs in the long run. The measurement of the total cost of the entire treatment cycle of a patient and its comparison to the results will allow for true structural cost reductions through measures

**Figure 2. Algorithm for measuring the health results in patients with breast cancer**

for redistributing the spending of the resources among the types of activities, eliminating the activities that do not add value for the patient, bettering the capacity utilization, shortening the duration of the treatment cycle, the provision of health services in the appropriate situation, etc. The known methods for economic evaluation which measure the value the patients receive are the basis of the evaluation of health technologies – the economic analysis of the type of cost minimization (CMA), cost/result (CEA), cost/utility (CUA) and cost/benefit (CBA). Therefore, the model for the reimbursement of health care products and services should be based on an evaluation of the health technologies.

#### **How are healthcare costs estimated**

A large part of the total cost for treating a patient includes shared resources, such as the personnel, premises and equipment. In order to measure the

actual costs, it is necessary to distribute the cost of the shared resources and individualize them as referring to the individual patient, based on the actual use of the resources for his/her treatment rather than using average values. The great differences in the costs among the different diseases and patients with the same disease reveal additional opportunities for cost reduction.

The effective management of healthcare and medical institutions requires for the management to have information about the actual costs on the patient-level, which includes knowledge about the distribution of total costs.

In practice, there are different approaches, such as the direct, step or simultaneous cost distribution for the shared resources, such as overhead costs, administrative costs, transportation costs, etc.

#### **What are the steps to reforming the health system**

As already mentioned, the goal of every health

system is to increase the value that the patients receive per unit of consumed resource. Therefore several steps to achieve this goal could be formulated:

- Measuring the health costs and results for every individual patient.
- Payment, regardless of the source, for a full course of treatment rather than for individual healthcare activities and hospitalizations. This is what integrated health care at all levels of the health system requires.
- Spreading of the good medical and organizational practices across the country.
- Construction of a single integrated information system to enable the realization of all the previous steps.

The described stages are not easy to use and implement. They require a binding commitment from the top down - health policy makers, managers, experts and medical activity providers. Perhaps the one who succeeds in implementing them at the experimental stage in an integrated hospital or health region will be more competitive, despite the slow regulatory changes that are needed (9).

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## Conclusion

Improving the value in healthcare and its measurement should be a priority in health policy. In countries like Bulgaria, where such priorities do not exist, this slows down the introduction of innovations, leads to unreasonable ways of reducing the costs and boosts the micromanagement level of clinics and wards, which in itself increases costs significantly.

Measuring the value the patient receives should be at the core of the model for reimbursement of health products (therapeutic and diagnostic activities, medicines, prevention and prophylaxis, and the like). This will allow the reimbursement system to be reformed so as to reward the value that the patients receive by providing bundled payments, covering the full cycle of treatment.

When the reimbursement policy is bound to the value for the patient, then the medical activity providers are rewarded for their effectiveness in achieving good health results, while enabling at the same time to locate the responsibility for poor health results. The current health reforms in the economically developed EU countries are oriented precisely to such individualized long-term care policies.