

# THEORETICAL CONSIDERATIONS ON THE USE OF THE VALUE LINE FOR THE PATIENT IN ROMANIA

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**Abstract:** Accelerated health spending dynamic, driven by the growing demand for medical services from chronic and multi-pathological patients, and by the cost increase of various medical supply components, a difficult future for the healthcare system was expected long before COVID-19 infection began. To this scenario is added the changing expectations of the patient, who becomes more demanding and more interested in actively participating in the management of his own health. The line of value in healthcare is a topic of particular relevance and importance, with a global scale impact, which proposes a reorientation of healthcare towards the values that interest the patient, with performances related to costs or the patient's health condition. The paper seeks to present the perception and current state of implementation of the concept of value line for the patient in the Romanian health system. This is a useful analysis to verify the viability of the model created by M. Porter in 2006. According to M. Porter, the value reflected in the patient's health is multidimensional, complex and not limited to the patient survival, but is defined in very diverse parameters: recovery time, quality of life after care (independence, pain, and freedom of movement) or emotional well-being during the care process. The conclusions from the theoretical documentation confirm an early stage in the implementation of the M. Porter model in Romania and a series of interpretations, assimilations and confusions due to a managerial conservatism specific to the Romanian health system.

**Keywords:** strategic health management, value added line, value chain (VC), value based healthcare (VBHC)

## 1 INTRODUCTION

The post-pandemic phase marks a turning point and offers new opportunities for the initiation of profound reforms, too long postponed in the past. The economic crisis from 2009 had a

strong impact on the healthcare sector, and got worse with the outbreak of the COVID-19 pandemic. The lack of radical changes in the healthcare sector, the low political interest and low impact of the changes implemented in recent years, show that the implementation of isolated

reforms regarding only external change, are not enough to cope with either the economic solvency or the sector's viability for medium or long term.

In most countries of the world, the challenges in the healthcare system are due to external factors with a major impact, generated in terms of "strategic demand management": demographic changes, increasing prevalence of chronic diseases, the incidence of patients with multiple pathologies and new patient expectations. An equally important impact have the supply factors specific to the healthcare system. Most studies [1] reflects three of the most important of them: the complex structure of the system itself, the progress in medicine and medical technologies, and the division of healthcare into medical specialties and subspecialties. The technological innovations and the fragmented provision of healthcare are still considered modern lines and most useful in the development of the medical service. Nonetheless, for several years now, the value it really creates for the patient has to be questioned.

The experience of countries that have embarked on a process of transformation in the field of healthcare has demonstrated the achievement of efficiency derived from changes in

the way healthcare is delivered [2]. Discussions at senior forums in developed countries around the world [1] also acknowledge that the main way to improve the realm of healthcare is to shape healthcare provision in line with increasing patient satisfaction, that is to say, in strategic management-specific terms, the institutions will adapt to demand and the supply will be resized according to these needs. In order to accelerate the process of changing the way healthcare is provided, the researchers and practitioners of this theory bring new arguments, practical solutions and examples that demonstrate the creation of value for the patient through systemic modeling of integrated healthcare delivery [3-6].

The New England Journal of Medicine Catalyst, namely the digital version of the journal stands out by promoting the value line theory for the patient and publishes the latest articles on this subject. An analysis presented by the Baker Research Service from Harvard Business School and published in PubMed demonstrates the importance of the subject by the extent to which articles published in various journals escalated since 2006 when M. Porter launched the original model.

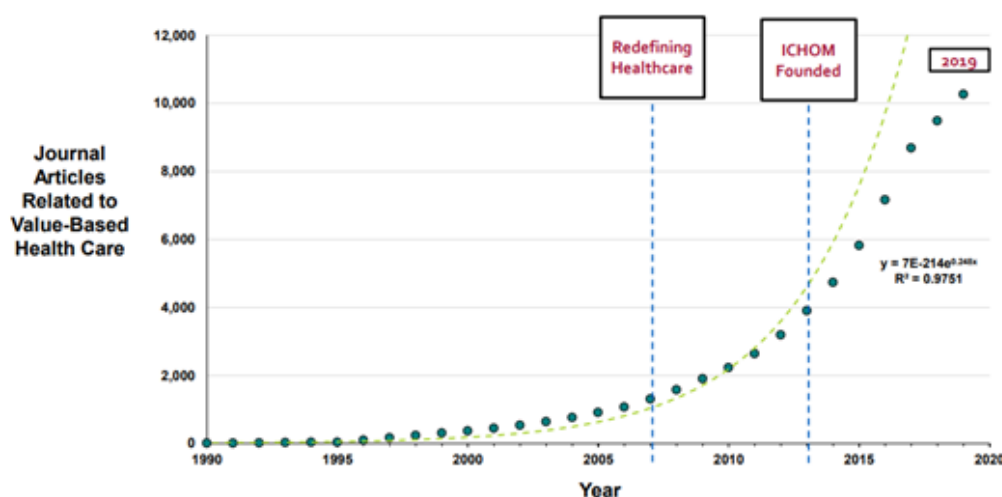


Figure 1. Value-Based Health Care Thinking and Practice Are Rapidly Diffusing Peer Reviewed Literature 1990-2019; Source: Porter M., Partners HealthCare Residents and Fellows Course, Boston, MA, 2020, From: PubMed; accessed December 2019, Patrick Clapp, Baker Research Services, Harvard Business School

M. Porter, professor at Harvard Business School, justifies the theory of the patient value line following findings on the characteristics of the American health system, but which are found in most health systems in the world, including Romania:

- it is not centered on the patient needs;
- the lack of value indicators for patients;
- the remuneration of clinical activities according to workload, regardless of the outcome obtained in the patient's health
- the provision of healthcare in accordance with the traditions and preferences of doctors (according to the offer), and less justified by the patient's demand, i.e. what really creates value for the patient;
- the organization of the system around the treatment, not around the maximization of the healthcare and the efficiency with which it is carried out.

The bibliographical study conducted for this work establishes the value line created by M. Porter for healthcare is a comprehensive and modern tool for the design and delivery of the medical service, leading to the definition of a new model of healthcare, foreseeable in behavior and predictable in performance, which meets current needs in line with the factors that put pressure on the healthcare system:

- Adequate sizing of prevention activities, wick to keep the population as healthy as possible or in a more stable condition if we are talking about chronic diseases. Prevention is known to be underfunded in Romania (max. 20%, while in developed countries it reaches 45-50%), most of the funds allocated for health being directed to hospital interventions (approx. 70%);
- Inclusion of the patient, in the decisions regarding his own health, with the shared assumption of the risks by developing the activity of counseling, training, explanation. The access to medical information and communication with the patient are not commonly used practices in the Romanian healthcare system.

- Integrating an medical procedures into a value chain, in order to avoid delays in diagnosis and disturbances caused by interruptions during care due to the lack of coordination between the different levels of the medical care. Integrated medicine that has started to be implemented in Romania and which many healthcare managers confuse, cannot ensure the continuity of procedures according to the added value line, due to the lack of modern investigative tools. This causes major patient dissatisfaction. The added value line can only be applied in units providing multidisciplinary healthcare and the equipment needed for investigations.

- Developing an integrated system of medical diagnosis and interventions, by setting up multidisciplinary teams to analyze the patient's clinical picture, with a view to achieving the most appropriate decisions, in order to avoid duplication of tests, repetition of medication, incompatibilities between drugs, etc. The paper highlighted that in Romania multidisciplinary teams are assimilated to the participation of professionals in interclinical consultations, with advice and treatment being generally coordinated by a sole specialist.

The documentary research in Romanian related to the value line for the patient highlights a poor bibliography, which leads us to the assumption that the subject is poorly known among the involved factors responsible for organizing and delivering health care. Of course, the research on this subject could not overlook Romanian legislation, specialist orders, and statistics on some aspects of health system performance, which emphasize that, still at the level of medium and long-term policy-makers, M. Porter's value line is not taken into account, even if in recent years the degree of patient satisfaction becomes a benchmark in the qualitative assessment of hospital institutions.

## 2 FUNDAMENTAL CHARACTERISTICS OF THE PATIENT VALUE LINE IN HEALTHCARE

The value line or value chain (VC - value chain) is a concept created by M. Porter [7-9] which defines the organization and delivery of healthcare, so as to create a superior value for the patient. Through the two defining stages, it refers to namely the design and provision of healthcare, the value line becomes a descriptive and normative tool [7] in the modern management of the medical service. The specific feature of this healthcare guideline is the value it aims for and which needs to be understood and created from the patient's perspective. This gives priority to certain components of healthcare other than the ones we have been accustomed to so far, and how they should act to respond to the value that the patient expects.

The value line in healthcare is built around the needs and desires of the patient, integrating him as an active part in managing his own health. It is composed of various activities that provide a positive response for both chronic patients and those with multiple pathologies. The value line treats the patient not the disease

and adapts the content of the activities that make up the care according to the pathological needs and preferences of the patient.

The brief analysis of M. Porter's value line model (Fig. 2.) shows us two groups of activities: a group of six activities (stages of care) called primary, represented vertically, and a group of three others, called support activities, represented transversally in the illustration. The value line also includes the tenth activity, also drawn transversely, which, although it does not belong to either group, has an important role in the design and optimal development of the entire medical service. The model identifies and suggests the sequential development of the primary activities of an integrated medical care, while the transverse placement of the support activities is translated by their presence in each of the primary activities, contributing to their development in the most efficient and effective conditions for the patient. The content of each primary activity is specified in a general way, and is determined according to the ailments that the patient presents. As the author of the value chain points out, we need to understand not *what* activities are important, but *how* they work [7].

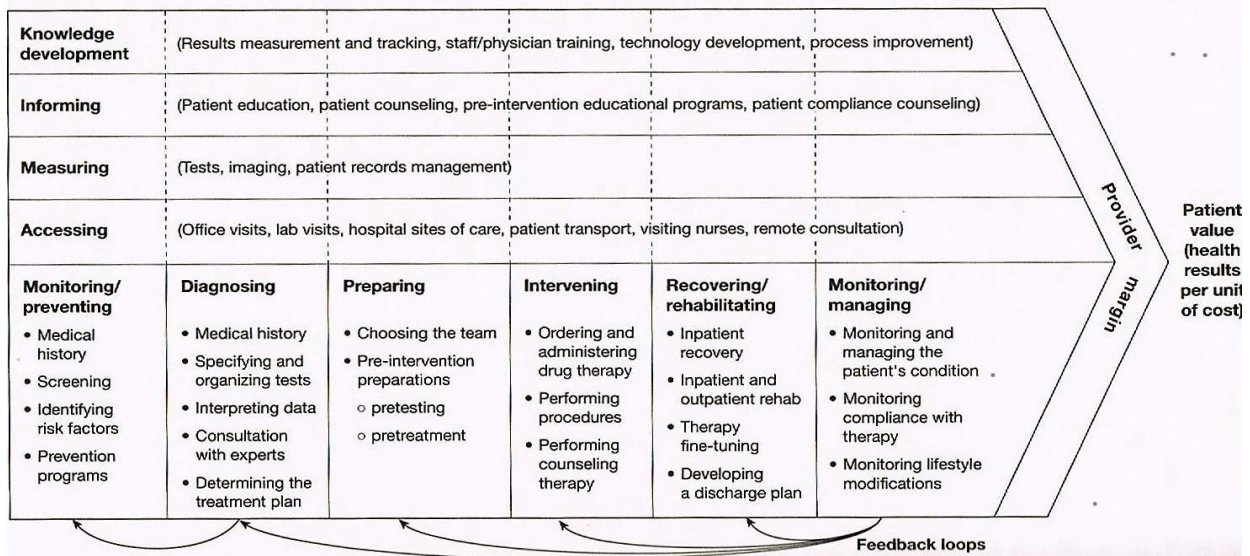


Figure 2. The care delivery value chain for an integrated practice unit. Source: Redefining health care; Figure 5-5; Page 204

Each of these activities has its own autonomy and intrinsic value, but their action must not be independent, but systemically framed, interconnected, so as to function as an integrated circuit with a well-defined purpose and following the principle: how one is fulfilled depends on the result of the other. The common goal is the result obtained in the patient's health, which accumulates value not by the arithmetic sum of the value of each medical act represented in the chain drawing, but by their Aristotelian axiom: a much higher value obtained by the synergistic action of the components.

For the purpose of integrated treatment of the patient, the value line also involves the presence of a multidisciplinary team of specialists who provide medical care throughout the care service.

The margin that the healthcare provider (doctor or medical center) has in applying this method of approaching the patient, goes beyond a medical protocol or guide, giving the freedom to adapt the care according to the pathological needs of the patient.

Finally, the purpose of configuring the medical service according to this model is to obtain a value for the patient measured according to the result obtained in his health, and to reduce the expenses arising from the provision of medical acts. What is specific to this type of value is that it is calculated at the end of the healthcare cycle and involves the calculation of the actual cost generated and the health outcome that must be justified by this cost.

$$\text{Value} = \frac{\text{Outcomes in patient health}}{\text{The cost of obtaining}} \quad (1)$$

Probably the biggest difficulty in applying such a model of healthcare is the lack of organizational structures, of a framework that would allow the development of the medical service in these conditions. For this, the author of the value line proposes the establishment of

integrated medical practice units (IPU) - fundamental organizational structures responsible for providing the framework for the provision and control of integrated healthcare in time and space, as well as the control expenses incurred.

The description of the value line identifies the fundamental characteristics of value-based healthcare (VBHC), which will be used as benchmarks in comparative analysis to verify the existence of a superior value for the patient in healthcare in Romania, as well as testing the views of healthcare professionals on their role and importance:

- continuity of healthcare phases in order to provide integrated healthcare;
- participation of a multidisciplinary team of specialists, constituted according to the pathological needs of the patient, to provide assistance throughout the care;
- measuring the result obtained in the patient's health condition at the end of the medical care period;
- the cost calculation and the reimbursement of medical care depending on the result obtained in the patient's health;
- recognizing the contribution of support activities to creating a superior value for the patient
- the need for professional training of the staff that is responsible for organizing and providing healthcare;
- the value chain as a tool in healthcare delivery;
- integrated medical practice unit (IPU) as an organizational structure for the practice of healthcare based on the value line for the patient;
- the need for an integrated medical information system, accessible at the level of each basic or support activity, so that medical history, diagnosis and medical treatment are correlated on the basis of accurate and honest recorded medical records.

With regard to the last characteristic, M. Porter creates a hierarchy of the publication of medical information on a electronic national platform, with access for those concerned, acting as a guide, both for the choices made by patients, regarding the medical center or the doctor, and for professionals, on the dissemination of practical experiences:

1. Information on the results of the treatment of the medical condition – consists of the state of health achieved, related to the cost of care, both measured at the end of the care cycle;

2. Data on the experience each healthcare provider (doctor or health center) has in dealing with a medical condition, measured by the number of patients and the results obtained in each one. Experience is the instrument that links the provider and the patient;

3. Information on methods - refers to the care processes themselves, which are important for understanding how the results are achieved and are instrumental in improving the guidance process of the medical service;

4. Patient attribute data: age, sex, pluripathologies, genetic information and other data of interest.

### 3 THE VALUE FOR THE PATIENT IN THE CURRENT WAY OF DESIGNING AND PROVIDING HEALTHCARE IN ROMANIA

The objective of this study was to establish the alignment level of healthcare in Romania with the principles of the value line for the patient.

The results obtained from the bibliographic study are shown in the following:

- It was found that the integrity in the provision of medical services in the Romanian system is a legislative recommendation [10] that appears when describing the standards, procedure and methodology of accreditation of hospitals. This includes elements such as the

overall assessment of the patient's pathological needs, the facilitation of the patient's circuit and access to medical services, participation of multidisciplinary teams for investigations and treatment, and elaboration of individualized protocols. Despite mentioning these elements, the process is limited to checking them on a checklist, which does not guarantee their application in practice.

- The system of DRGs, used in the Romanian healthcare system to classify patients according to diagnosis and the cost of resources consumed for medical care, as described by some authors [11, 12] implies clinical homogeneity and costs, being used for financing or settlement. The results obtained in the health of patients and reported through this system are used only to maintain the viability of medical institutions (accreditations) and do not take into account the patient as an individual and the pathological needs they present.

- Despite the fact that all the norms and regulations regarding prevention are active in the Romanian health system [13], the analysis of the population's health profile shows that the death rate from preventable causes is almost double than the European average [14]. This reflects a major shortcoming in the development of this activity. Moreover, regulations on prevention are separated from the rest of the healthcare chain, with an emphasis on diagnostic and treatment activities. In conclusion, in Romania a reactive medical assistance is practiced, detrimental to the proactive one. The lack of health education among the population is highlighted by unhealthy eating habits [14].

- The procedures for diagnosing and treating the disease are carried out according to medical guidelines and protocols [15] - normative documents that indicate the legal framework for the provision of healthcare and giving a certain protection to the healthcare provider against risks, but which lose their intrinsic purpose dedicated to the well-being of the patient. These processes are monitored by

attending physicians mainly in order to check some indicators according to which medical services are reimbursed by insurance. The priority is to follow certain rules, rather than the result in the patient's health.

- Another element in line with the fundamental characteristics of the value line found in the health management manuals [12], refers to the activity of informing the patient. Although this ethic recognizes that each patient needs individualized medical care, tailored to his or her particularities and preferences, standardized medical practice allows only little involvement from patients in managing their own health. This issue minimizes the usefulness of the information, counseling and involvement of the patient in the decisions taken.

- The OECD report [14] on the health profile of the Romanian population reflects the fractional allocation of a rather poor budget for health, determined by the fragmented provision of healthcare and the lack of completeness of services. The same report highlights obstacles that make it difficult for patients to access medical services, such as: costs, distance, waiting time.

#### 4 CONCLUSION

From the data presented there are a number of shortcomings at the level of management of healthcare provision in Romania. The scriptic mention of certain components that have a role of creating value for the patient, do not mean that they are actually used and coordinated in an integrated way, in order to achieve a common goal that is the patient's health condition. The lack of integrated action of medical activities determines the practice of a reactive assistance, with emphasis on diagnosis and treatment. Ignoring important activities, such as prevention, monitoring or involving the patient in his or her health decisions, is also evidence of a healthcare that is less focused on the patient's needs and

preferences. The results obtained do not reflect the alignment of healthcare in Romania with the principles of the value line.

The current, functional structure of the healthcare system must become an integrated patient care structure. This is defined around the medical condition of the patient, not around a specialized medical service, treatment or investigation. In Romania, and beyond, many doctors work on their own and address either only the pathological part they specialize in, or a little of every clinical aspect with which the patient comes. This means that healthcare is not medically integrated, and the fact that the healthcare facilities involved in the treatment of certain phases / aspects of a patient's pathology work separately means that there is little continuity in the delivery of the complete medical service. Patients' access to medical services of all kinds must be improved, all obstacles and discrepancies, bureaucracy and immobility must be eliminated, so that procedures are rigorously planned and implemented on time.

As mentioned, the value line of M. Porter considers as a supporting activity the improvement of knowledge, including in this category the improvement of health professionals, but also the integration of modern procedures, the adoption and use in health management of performance indicators which realistically show the accuracy and quality of the medical act linked to the level of satisfaction of the patient. These aspects should not be neglected in defining the new healthcare value line in Romania.

According to the model of M. Porter, the ideal health care system encourages a close working relationship between local and regional hospitals. These relationships would contribute to integrated health care.

Doctors need to realize that the value is given by the results achieved in the general condition of the patient's health, i.e. it meets

their expectations, and to want to channel their work toward this common objective.

The results obtained and mentioned above justify the present theoretical research and its authors are convinced that only a systemic approach, based on an M. Porter model, adapted to Romania's socio-demographic characteristics, can ensure a high degree of satisfaction for patients, effective integration of healthcare services, reduction of intervention time and overall costs.

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