

THE HEALTHCARE PROFESSIONAL'S PERCEPTION ON THE ROLE AND THE IMPLEMENTATION'S IMPORTANCE OF THE PATIENT'S VALUE LINE IN THE HEALTHCARE SYSTEM IN ROMANIA

Olga-Mihaela DOROBANȚU¹,
Liviu Onoriu MARIAN², Aurora POPA³

1 *Engineering and Management, Technical University of Cluj-Napoca,
Memorandumului Str., No. 28, Romania; olgadorob@gmail.com*

2 *Engineering and Management, Technical University of Cluj-Napoca,
Memorandumului Str., No. 28, Romania; liviu.marian@yahoo.com*

3 *Engineering and Management, Technical University of Cluj-Napoca,
Memorandumului Str., No. 28, Romania; popaurora1@yahoo.com*

* *Correspondence: olgadorob@gmail.com*

Abstract: The purpose of this paper, which is part of a much wider research dedicated to highlighting the assimilation of elements specific to the patient's added value line in Romanian healthcare, is to present the results of an analysis on the opinion and agreement of health professionals regarding the importance of fundamental characteristics of the strategic management model proposed by M. Porter for the provision of healthcare. The model has been successfully implemented in some developed countries of the world. In order to achieve this goal, the fundamental characteristics of the value-based healthcare model created by M. Porter were examined and summarized from the literature. Based on the findings working hypotheses were formulated and the objectives for a questionnaire-based survey were defined in order to continue the research. The paper presents the working methodology and the interpretation of data related to the level of assimilation of the notion of value for the patient, the integration of the medical service as well as the need to assimilate the main attributes of the M. Porter model in Romania. The resulting conclusions and proposals create a real picture of the healthcare provided in the Romanian healthcare system and can be used to promote the value for the patient and to adjust Porter's model to the specific conditions of this system.

Keywords: strategic management, added value for the patient, integrated medical service

1 INTRODUCTION

The opinion of healthcare professionals on the value for the patient offered by the

Romanian medical system is relevant to define the current condition and the measures to be taken for a real change for the benefit of the patients. Even if doctors are not the decision-

makers on the changes that need to occur in the healthcare system – so that the value for the patient is actually felt – they are the main providers of value in healthcare [1]. Their attitude and commitment are important through the feedback they give, their willingness to work according to a new model and their ability to influence the hospital environment and beyond.

„Healthcare providers (hospitals, clinics, ambulances, surgeries, medical teams, individual doctors, nurses) are the central actors in the health care system and the place where most value is actually delivered. Other system participants – whether they are health plans, employers, suppliers, government, or patients themselves – can reinforce or detract from this value through their roles and choices. Ultimately, however, it is how medicine is practiced, and the way patients are cared for, that will determine the success or failure of the health care system” [1]. In another article [2], the same author mentions: „the only ones who, can make sense of the medical service are the doctors” – and he adds clearly: „the value of the medical service is given not by the medical act itself, but by its result”. In this context, the doctors must:

- do things that bring value by improving people's health;
- organize themselves according to the pathological needs of the patient (groups of specialists);
- be equipped with the necessary resources to provide integrated medical services;
- be remunerated in accordance with the result obtained in the patient's health;
- be transparent (especially regarding the results of the activities);
- manage "indicators that measure results, not the activities they do" [1].

2 RESEARCH METHODOLOGY

In order to establish certain conditions related to the perception, attitude and

commitment of healthcare professionals towards the existence or adoption in medical practice of a value line for the patient, the survey-based questionnaire was used as an investigative. The usefulness of the questionnaire as a working tool emerged from the results obtained from the documentary research of the specialized works and a structured interview, carried out at an earlier stage [3]. The interview participants, recognized figures in the management of Romanian healthcare system in Romania, highlighted a number of issues regarding the state or future policies concerning the implementation of the patient value line.

The study carried out and summarized in this article aims to highlight the attitudes of respondents for six of the main attributes of the value line for the patient, and the survey (objectives, dimensions guiding the research and items in the questionnaire) was related to these attributes:

1. The use of performance indicators for the health system that highlight the overall health of the patient at the end of the period of medical care and not the results obtained step by step after each procedure;
2. The creation of an integrated healthcare system by ensuring real-time continuity of all core activities specified in the M. Porter model (integration is defined "around the medical condition not around a specialized medical service, treatment or laboratory investigation" [1]);
3. Communication and collaboration in health services through the training of a multidisciplinary team of professionals (where there is a case of comorbidities) to provide healthcare throughout the patient's care;
4. Reimbursement of medical services provided on the basis of the result obtained in the patient's health at the end of the care period;
5. Creation and use of a national electronic platform containing data and information on diagnosis, treatments, results and costs – individual performance indicators.

6. Carrying out healthcare according to the Porter Value Line Model and establishing integrated medical practice units.

The survey has been structured in order to materialize three objectives and the results obtained will be presented according to these formulations.

O1. Identifying the opinion of the healthcare professionals regarding the current value that the medical assistance in Romania has for the patient.

O2. Identifying the degree of knowledge and perception of the fundamental characteristics of the value line for the patient.

O3. Identifying the degree of acceptance (agreement) regarding the implementation of the elements of value for the patient in the Romanian healthcare.

In the wider research paper the realization of the objectives is verified according to some working hypotheses, among which we mention:

H1. Most healthcare professionals believe that healthcare in Romania has value for the patient, but it is defined by the classic parameters.

H2. Most healthcare professionals are unfamiliar with the patient value line care model created by M. Porter.

H3. There are different approaches of the concept of integrated healthcare and the attributes that characterize it.

H4. Most healthcare professionals agree with the application of an integrated healthcare model, created according to the value line, but do not recognize the importance of all its components for the patient.

Google Forms were used to create questionnaires. The distribution of the survey was made online, through the platforms of Medical Colleges, through various groups set up on different medical specialties and through the platform of Romanian Order of Nurses, participation being free. The random selection process of the target group provided the opportunity to complete the questionnaire of all

medical staff who wished collaborate. The survey collected quantitative and qualitative data taking into account the field of totally new research in Romania. The time period for data collection was 4 months, and the number of respondents who chose to participate was 260. The number of answers obtained does not give the survey the quantity as the main characteristic, instead it is the quality through the categories of participants: specialist medical doctors- with direct involvement in the provision of healthcare; nurses- staff who spend most of their time at the patient's bed; resident doctors- a professional category in training for the future. The last section of the questionnaire also allowed the classification of respondents (as appropriate) according to their function or responsibility in coordinating the medical service, very useful for the topic researched.

The questionnaire consisted of 18 items, organized into 5 sections. Closed-ended questions were used with various answer grids (one answer, several answers, hierarchical answers, Likert scale or matrix), depending on the subject of analysis.

The limits of the survey refer to the number of participants and a possible semantic misunderstandings of the technical terms used are also taken into account, as well as a probability of deviations in the choice of answers, induced by the stereotype that interacts with the subject's consciousness. We calculated a margin of error of 0.05 and 0.06, starting from a confidence level of 90% and 95% respectively.

The interpretation of the results was based on the percentage analysis of the answers, and their validity was verified by the statistical method based on the variety obtained for each item.

3 ANALYSIS OF RESULTS

The analysis and presentation of the survey data is carried out on a cumulative basis on the objectives defined and presented above.

➤ For the first objective, "Identifying the opinion of the healthcare professionals regarding the current value that the medical assistance in Romania has for the patient", the answers obtained showed the following:

- Most respondents (35.4%) consider that the current estimate of healthcare in Romania takes into account to *a medium extent* the outcome obtained in the general condition of the patient at the end of the care period. The remaining answers are divided among *small, large or very large extent*, without the relevance of one of the percentages.

The main reason for this is the strong fragmentation of medical services and procedures that does not allow an integrated assessment of the end result achieved in the patient's health.

- Most respondents consider that when estimating the outcome in the patient's health, takes into account to *a very little, little or no* the recovery time and the quality of life after the intervention.

The recovery time and the quality of life after the intervention are considered performance parameters in the patient value line and indicate the quality of a healthcare system.

- The value of healthcare in Romania as a whole is assessed by the majority of respondents (48.5%) as average to good (even if, as it is known, the patient value line is not implemented in Romanian healthcare services).
- 41% of respondents believe that the value of the medical assistance provided in the Romanian healthcare system is largely reflected in the patient's well-being.

➤ The responses regarding the second objective, "Identifying the degree of knowledge

and perception of the fundamental characteristics of the value line for the patient", showed the following:

- The outcome obtained in the patient's state of health, at the end of the entire healthcare cycle, should be the *primary element* in transmitting the value of healthcare to the patient.

Although this opinion accounted for the majority (37% of respondents), is not reflected even in half of the subjects.

- According to the majority of respondents (54%), the cost of healthcare should be the component that *least* reflects the value of healthcare, for the patient.

This certifies that in the management of health services, economic efficiency must be taken into account.

- 61% of respondents believe that the continuity of the primary phases of medical care would contribute to an increase *of over 80%* to the improvement of the result obtained in the patient's health. Also, 56% of respondents believe that the chain deployment of the six activities would also *greatly contribute to the development* of prevention and monitoring activities.

- 50% of the subjects believe that Both the presence of a multidisciplinary team of specialists throughout the care and the current interclinical consultations, practiced only in certain cases, contribute equally to the improvement of the result in the patient's health condition.

- More than 68% of the respondents believe that healthcare should be settled on the basis of the outcome of the patient's health.

- Only 41% of the subjects consider that it should be done at the end of the care period, while 35% think it is more

- accurate after every medical act or procedure.
- Approximately 76% of respondents consider important to have an electronic platform to provide information on diagnosis, treatment, outcome, doctor and patient.
 - Regarding the understanding of the concept of integrated healthcare, only 21% of respondents associate it with ensuring continuity of the phases of medical care, simultaneously with the presence of a multidisciplinary team of specialists throughout the care. The rest of the respondents associate it either with only one of the two or with another different form of therapy (alternative medicine, naturopathy, etc.).
 - Most respondents believe that the provision of fragmented healthcare by specialties and superspecialties conveys value to the patient, facilitating a range of services such as: shortens the waiting time; increases public access to medical service; allows participation of the multidisciplinary team of specialists in diagnosis and treatment; has competent health professionals; is equipped with high-performance medical equipment; provides data on diagnoses, results, treatments and methods to those concerned; it is based on relations with other centers to facilitate hospitalizations.
 - Over 90% of subjects agree that the practice of a health care designed according to the value line contributes to a great and very great extent to the acquisition of the patient's well-being.
 - The vast majority of respondents consider that the support activities in the value chain contribute both to the improvement of the result in the patient's health and to the increase of his satisfaction. The only exceptions are patient counseling, which is not considered, by most subjects, to be important in improving outcomes, and staff training, which is not considered important in increasing patient satisfaction.
 - 84% of respondents do not know M. Porter's theory regarding healthcare based on the value line (certifying that the Romanian medical system is organized and managed in a traditional, conservative style).
- The processing of data from the items formulated for the objective "Identifying the degree of acceptance (agreement) regarding the implementation of the elements of value for the patient in the Romanian healthcare" highlights the following:
- Almost unanimous agreement (95%) on the provision of healthcare according to patient value line model
 - Very large agreement on the provision of medical care by a multidisciplinary team of specialists throughout the care of the multi-pathological patient;
 - Agreement (79%) on the communication of data on outcome, treatment, diagnosis, physician and patient in a national electronic platform;
 - Agreement (64%) on the establishment of the method of settlement of medical services according to the final outcome.
 - Strong agreement on the training, in implementing and managing the patient value line model, of the factors responsible for the organization and delivery of health care;
- ## 4 CONCLUSIONS
- By comparing the principles of the patient value line, the following conclusions are noted:
1. The current value of healthcare in Romania is not estimated based on the most important indicator for the patient, namely the

result obtained in the general state of health, and in terms of estimating the outcome, this is not done based on two of the most important parameters, recovery time and quality of life at the end of the care period.

2. A small number of respondents (only 37%) believe that the result obtained in health, following medical care, should be the component that conveys the highest value for the patient. This demonstrates the different view that healthcare professionals have about healthcare or the low level of knowledge of the patient's expectations.

3. The view on the primary importance of "devices and equipment" in the transmission of value to the patient shows again, that physicians and nurses either have different criteria for assessing the value of health care compared to patients, or they do not know what is of greatest interest to the patient when requesting medical service.

4. The subjects recognize the need for the participation of a multidisciplinary team in order to approach the patient holistically, but do not recognize the importance of its presence throughout the care, in order to create value for the patient.

5. While most subjects recognize that the payment of healthcare needs to be justified by the outcome of the patient's health, there is still a concern for the payment of each medical act or intervention. Once again, the concern for ensuring the settlement of services provided, marked by the restrictive legislative framework in which healthcare is currently carried out, is demonstrated.

6. About 30% of the subjects understand differently, compared to the original model, the concept of integrated medical care, associating it with other forms of medical care (natural medicine, spiritual medicine, etc.).

7. The unequal percentages obtained when assessing the dual role of support activities demonstrate once again the lack of awareness among professionals about patients'

expectations and perceptions of the healthcare they receive.

8. The very low rate of respondents (16%) who state that they have knowledge of the value model for patients, created by M. Porter for healthcare, correlated with the other answers obtained previously, demonstrates the urgent need to train healthcare professionals, especially those with responsibility in the management of healthcare. Of the 260 respondents, 97 have leadership or coordination positions. Out of these, only 20 know M. Porter's model (10 nurses and 10 physicians). Another correlation of the data reveals that out of the 260 respondents, 64 are physicians with a position of responsibility. Out of these, only 10 say they have information about the patient care model.

9. The percentages below 50% obtained by the numerical majorities of the answers regarding the degree of perception of the elements of value for the patient demonstrate the need for a thorough knowledge among the healthcare professionals of the integrated models of healthcare, the needs and desires of the patient, which have changed with the social changes.

10. In general, the very broad agreement on the implementation of healthcare based on the value line for the patient, demonstrates the awareness of the need for change and an internal environment of doctors and nurses willing to accept and work according to the new model.

11. The creation of a national IT platform containing data of interest to doctors and patients is a desired change, although the answers show that its role in creating value for the patient is not well understood.

Finally, we mention the pioneering character offered by the study based on questionnaires, applied to the medical staff in the Romanian health system, which opens new possibilities for research, and for complete or deepen the knowledge in the field. Research in the international literature has not shown similar

studies, existing ones address the subject of the value line as a whole or test only certain characteristic attributes, and most are dedicated to the opinion of patients [4].

BIBLIOGRAPHY

Dorobanțu O., Marian L., Critical analysis on the management of the medical service in the Romanian health system, in the context of the Covid-19 pandemic; Proceedings of the 7th Review of Management and Economic Engineering International Management Conference: „Management Challenges Within Globalization”, Cluj-Napoca, 17th – 19th September 2020, Romania, ISSN 2247-8639, ISSN-L 2247-8639

Gentry S, Badrinath P., Defining Health in the Era of Value-based Care: Lessons from England of Relevance to Other Health Systems; *Cureus*, 2017; 9(3): e1079-81; DOI: 10.7759/cureus.1079; <https://pubmed.ncbi.nlm.nih.gov/28405529>.

Jayakumar P., Bozic K., Lee T.H., Asimetría de información: el valor sin explotar del paciente, *NEJM Catalyst*, 2019; <https://catalyst.nejm.org/doi/full/10.1056/CAT.19.0700>

Makdisse M. et al., What Do Doctors Think About Value-Based Healthcare? A Survey of Practicing Physicians in a Private Healthcare Provider in Brazil, *Pubmed. National Library of Medicine*, 2020. Vol. 23, pg. 25-29. DOI: 10.1016/j.vhri.2019.10.003;

Porter M, *The Strategy to Transform Health Care and The Role of Outcomes*. Paris, France, 2017;

Porter M., Teisberg E., 2006, *Redefining Health Care, Creating Value-Based Competition on Results*. Boston: Harvard Business School Pres, 2006. ISBN: 1-59139-778-2

Porter, M.; What Is Value in Health Care?; *New England Journal of Medicine*, 2010; 363(26):2477-81; DOI: 10.1056/NEJMmp1011024; https://pubmed.ncbi.nlm.nih.gov/?term=Porter%20ME&cauthor_id=18936561.