Perception of Healthcare Institution Management: An Example of the Healthcare System in the Republic of Croatia

Filip Barić
General County Hospital in Vinkovci, Croatia

Abstract

Over the past few decades, the field of work in healthcare management and administration has changed dramatically. Hospitals have become large and very complex organizational systems. This led to the need for a thorough reorganization of the system of training managers in health care. Health systems in transition, as currently exist in the Republic of Croatia, are not flexible enough to accept scientific and practical insights into the role, content and meaning of management. The aim of this research is to gain an understanding of how directors in health care institutions perceive and understand management as a concept of health care management. The discriminant analysis method was used. The survey was conducted during 2019 on a quota sample of 26 directors and assistant directors in private and public health institutions in central Croatia. Despite the fact that this was a relatively small sample, the results of this analysis have yielded quite interesting results that may be useful in implementing the concept of management in healthcare institutions.

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Introduction

It has now been more than 50 years that management is interested in healthcare and healthcare is of interest. Today, the health systems of not only developed countries but also countries in transition are complex and burdened with the legacy of the past, and under this burden, they are increasingly struggling to meet the growing health care needs of the population and the challenges that come from their environments. Health needs are constantly growing and will grow. People's age is increasing. The share of the elderly population in the total is growing. New, unknown diseases were reported yesterday (Kay, 2007). Patients are getting louder looking for better and more effective healthcare. Patients are looking for a free choice of healthcare facility and doctor. They are more aware of their rights to health guaranteed by all democratic constitutions in the world and are increasingly informed of the opportunities offered by the new diagnostic medical technology and information technology. The traditional doctor-patient relationship goes back to history (Iliondi et al., 2013). Demands for the demystification of the medical profession have long been a reality (Zuckerman, 2012). Today, high medical equipment and technology and highly specialized medical staff are not in themselves sufficient to meet patients' expectations and make them happy. People today do not want to be an object, but an active subject in health care planning for themselves and their families. Patients want a different relationship with the medical team. Want to participate in their treatment and to be active, informed, respectful, and worthily admitted to a health care facility (Kessels, 2003). Patients want to participate in health care management and decision making (Swayne et al., 2009). The company already has today and will have in the future less and less financial resources with which it can and wants to keep up with growing health needs. Privatization in healthcare in transition countries will only open the door to a new concept of governance. Sustainable solutions, in the long run, will certainly not be offered. These are just hints that represent the health of the world, which do not answer the question.

Healthcare management has so far offered numerous solutions and opportunities. With his general philosophy, he has undoubtedly proven his role in healthcare over the past five decades (Johnson, 2005). How effective this philosophy has been remaining for scientific and professional debate. Can a new, reinvented concept of healthcare management contribute to building a new vision for safer healthcare systems? One thing is for sure: healthcare providers in the present and the very near future will be exposed to strong competition in the healthcare market. It is not a matter of their will, but one unstoppable world megatrend (WHO, 1988). Only through the implementation of the highest standards of health care will the best medical practices be maintained. This will require entirely new profiles of healthcare managers and an entirely new approach to managing healthcare facilities and health systems (Lighter & Fair, 2004).

This research seeks to understand how much health institutions, as part of the healthcare system in the Republic of Croatia, are prepared to understand and implement the concept of modern healthcare management? Some discussions suggest that transition institutions are not flexible enough and not at all prepared to accept scientific and practical insights into the role and meaning of management (Ferguson & Irvince, 2003; Habicht et al., 2009; Lekhanet al., 2004). This research aims to get a clearer understanding of how directors in health care institutions perceive management as a concept of health care management, how much do they need it and what does it mean to them? The hypothesis that emerges is that the

administrations of health care institutions do not have a true and complete picture of the benefits of management implementation.

The discriminant analysis method was used as explained in the methodology of the paper. It is expected that the results of this research will lead to positive shifts in the opinions and attitudes of responsible people in health care and will take a decisive turn in implementing the concept of management in health care institutions, as the developed world did a few decades ago. The paper is structured in such a way that in the first part it gives brief indications about the meaning of management in health care institutions, and then about the contents that this concept encompasses. The following is the research methodology which points to the need to apply discriminant analysis as a multivariate method. The following are the results of research that is presented in abbreviated form due to space constraints. The presentation of this research ends with a discussion and conclusion.

Healthcare management

Healthcare management is one of the expanding forms of general management in the service sector. These are the most important services - those that make up the primary, existential human needs. Healthcare management can be defined as the use of clinical and information technology as well as a range of managerial and organizational skills to ensure optimal health care. The US Bureau of Labor Statistics (BLS) confirms that healthcare management is one of the fastest-growing occupations. This is a result of the growing need for health and advancement of health, the importance of health care and the rise in health spending, but also because of the importance of complex management of the business of health care institutions as extremely complex systems. The same office predicts that hiring of health managers is expected to grow at a rate of 16% between 2008 and 2018 and that this rate of growth will be faster. Healthcare management can be dimensioned as a science, profession, theory and practise based on the philosophy of a modern approach to health care needs and maximizing the satisfaction of users of health services (patients).

It is an illusory assumption by many that the fact that they are physicians alone and those they have excellent skills and knowledge in patient care is sufficient to be able to be skilled and able to manage health care, given that the primary role of the same patient is always (Ginter, 2013). Unfortunately, this situation is still prevailing today, especially in our healthcare facilities, but also in other countries in transition. Although physicians possess critical insights and skills to care for their patients and their families, they have clinical training and experience; they usually do not have enough knowledge to run healthcare facilities. The biggest challenge for physicians who are placed in management positions is their unwillingness to transfer their focus from the individual level to the entire institution. For most physicians, this is an insurmountable, large cultural turn (McAlearney et al., 2005).

The functions of managers in healthcare are planning, organizing, labour, controlling, directing, decision making. The World Health Organization (WHO) defines the following key functions and content of health manager functions: policy and planning, financial management, human resources management, accountability management, management health services, information management. Five are the least, key areas covering as many as 802 identified competencies of health managers (Guo, 2002). Those are Communication and relationship management, Leadership, Professionalism, Knowledge of the health environment, Business knowledge and skills.

Each healthcare organization is the intersection of different flows and content of a wealth of information. Healthcare managers must be able to communicate effectively with physicians, specialist physicians; other healthcare professionals, patients; patient families, suppliers; investors/partners; administration; various associations, religious organizations, the media, leaders in society and the economy. Communication is more than speaking abilities and skills. It involves the ability to listen, write, present information, persuade, etc. Communication in healthcare facilities is quite complex and differs significantly from communication in other organizations. Research has shown that as many as 75% of patients are concerned that information (or easily accessible) about their health is being shared on websites without their permission. The patient-doctor relationship is based on the principle of privacy. Patients share their information with physicians to facilitate diagnoses, to determine their treatment, and to avoid adverse drug interactions. However, patients may discover important information, such as psychiatric illness, HIV, etc., and this can lead to social stigma and discrimination (Appari & Johnson, 2008). Communication in healthcare is not just about social interaction. It can affect the health and lives of people. Miscommunication about medications can lead to the patient receiving too much insulin or an antibiotic to which he is allergic. Poor communication can worsen the condition in patients with some chronic illness. Dysfunctional communication between physicians and nurses can adversely affect the work environment and patient safety (Greenwood, 2013).

Running a healthcare facility is not just about being the "boss." Good leaders recognize the personal needs, problems, and priorities of staff. They find creative approaches to foster teamwork. Creators are the organizational climate and organizational change in healthcare settings. Healthcare to model and develop ethical behaviour in a healthcare facility, which primarily involves the continuous initiation and encouragement of lifelong learning by employees and the acquisition of new knowledge, abilities and skills by each member of the healthcare facility. For example, a surgeon cannot work until the patient is under narcosis, and it is a specific team: surgeon, assistants, and anesthesiologist. Despite the importance of teamwork in healthcare, most clinical units continue to function o Separate and separate professionals. This is because members of these teams rarely work together. Besides, they often come from separate disciplines and different educational programs (Knox & Simpson, 2004).

Knowledge of the healthcare environment includes experience in managing human resources as the most valuable resource of a healthcare facility. Encouraging staff to carry out their assigned roles and to assume individual responsibility for the survival and development of the healthcare facility in its environment (Mainz et al., 2009). Likewise, this competence of health managers implies their ability to enable patients to exercise their rights. Business knowledge and skills are also a core competence of healthcare managers. Managers must be able to apply the learned knowledge of managing healthcare facilities in different fields of activity concerning specific health performance (Hulshof et al., 2012).

Ross et al. (2002) believe that health care managers must have several key competencies to perform their functions:

1. Conceptual skills. They include the ability to critically analyze and solve complex problems. For example, an analysis of ways to provide quality health care while defining a strategy to reduce patients' complaints about hospital preparation and provision.
2. Technical skills. These are all those skills that reflect the knowledge and ability of healthcare managers to perform a particular task.

3. Interpersonal skills. They allow managers to communicate well with other members of the healthcare facility, whether they are in the same rank, superior or subordinate.

Rubino and Freshman (2005) in turn, list and address the eight core competencies of healthcare managers: Decision, Strategic thinking, Taking risks, Communicating, Motivating team members, Ambiguity tolerance, Internal locus of control, and Innovative management

Khadka et al. (2014) understand managerial competencies in health care as a set of knowledge, skills and abilities, behaviours and attitudes that health care managers must-have when performing managerial tasks. In the research they conducted, they found: (i) The most developed competencies of managers were honesty; integrity; health care innovation; communications and information; (ii) The least developed competencies they identified were program and project management; health management knowledge management; and (iii) The most important competencies for which the health managers were interviewed were strategic skills; guidance; human resources management.

These insights should be a useful guide in the training and profiling of healthcare managers and the acquisition of insufficient knowledge, abilities and skills, to increase their competence and recognition in healthcare systems worldwide.

Methodology

Different secondary and primary data were used for the research. MEDLINE, PubMed, Science Direct, were used from the databases. The primacy has been given to papers published in the last ten years. The primary source of data was structured questionnaires designed for this research. The study did not present significant risks for participants, as it was not primarily focused on providing ethical decisions for clinical trials involving new drugs, experimental studies, and studies requiring human biological samples.

The survey was completely anonymous. Verbal consent was obtained from each participant. All participants were provided with information about the research goals and process. To protect participants from the risk of the survey, participants' names, identification numbers and names of health care institutions and doctors were not recorded. Interviewers interviewed respondents on premises that were part of health facilities. It was performed between March and June 2019. on a quota sample of 26 directors or assistant directors in private and public health institutions in central Croatia. One of the limitations of this study is the sample size, which could have been even larger so that the results could be considered more representative. This was not possible for several reasons: time, resources, the response of health institutions. Random selection was used based on data collected from different sources. The survey was conducted directly using a specially designed questionnaire for this purpose.

The discriminant analysis method was used as a multivariate method. The purpose of the discriminant analysis is to achieve as much intragroup homogeneity as possible while increasing intergroup heterogeneity. The procedure of this analysis itself has many similarities to the process of regression analysis. Of the total number of respondents, two groups of the same size were formed. In the first group, 13 respondents stated when forming a sample that they perceive management in a healthcare institution as a necessary and useful management concept and should be implemented, and in the second group, 13 respondents perceived health management negatively and they think he has no place in health care facilities. To

obtain the least-squares vector of the coefficient of determination coefficients, the first group was assigned a value of 1 and the second a value of 0.

Table 1
Discriminatory characteristics

Characteristics	Characteristics structure	Weights
Size of institution x_a	x_{a1} - up to 30 employees	1
	x_{a2} - from 31 to 50 employees,	2
	x_{a3} - 51 to 100 employees	3
	x_{a4} - 101 to 200 employees	4
	x_{a5} - 201 and more employees	5
The organizational structure of the institution x_b	x_{b1} - primary healthcare only	1
	x_{b2} - primary and secondary health care	2
	x_{b3} - clinic	3
	x_{b4} - physical medicine and rehabilitation	4
Directors' knowledge in management x_c	physician or specialist doctor without training in health care management	
	x_{c2} - is not a healthcare professional	1
	x_{c3} - doctor with a specialization or postgraduate degree in health care management	2
	x_{c4} - not a healthcare professional completing a specialist or postgraduate degree in healthcare management	2
	x_{c5} - a doctor with a doctorate in health management	3
	x_{c6} - is not a healthcare professional with a PhD in Healthcare Management	3
Patients relationship x_d	x_{d1} - classic traditional relationships between healthcare professionals and patients	1
	x_{d2} - patients participate in therapy planning	2
	x_{d3} - Patients' families and patients actively participate in treatment and rehabilitation	3
	x_{d4} - the institution actively uses patients' knowledge and encourages them to increase health literacy	4
	x_{d5} - patients enrolled in health prevention programs in a healthcare facility and local community (city)	5

Source: author

It is noted that none of the healthcare institutions involved had a health management system implemented. The inclusion of the respondents in the sample and the groups did not enter into the meaningful meaning, functions and levels of management implementation in health institutions, as this was not the aim of this paper. It was left to the respondents to evaluate themselves and decide on the group to which they belong. Four characteristics of health care facilities are included for testing discriminatory abilities: size, organizational structure, managerial knowledge in management, patient relationships. It is argued that although these segments are incomplete for a more detailed analysis of management perceptions in healthcare, they may be relevant for establishing that perception.

Testing of discriminatory abilities was performed based on four characteristics: the size of the health care institution, its organizational structure, the health management knowledge that health care directors formally dispose of, relations with patients as a key identifying feature of all modern healthcare management approaches. The structure of these characteristics and the weights of their importance are presented in Table 1. They are determined according to the subjective assessment of the author, based on the study of the cited literature in this paper.

Microsoft Excel and SPSS (Statistical Package for Social Sciences, 21.0) software were used in the data processing.

Results

The key results of this discriminant analysis are presented in Tables 2 and 3 and the classification matrix (Table 4). Efforts are made to present the essential perceptual characteristics of both groups of respondents, followed by the correctness of the initial classification.

Table 2
Discriminatory analysis of the first group

Examinee	Discriminatory abilities				Discrimination coefficients (KD_1)
	x_a	x_b	x_c	x_d	
1	4	3	2	2	**0.4128**
2	5	4	2	3	0.7590
3	3	2	3	3	0.7714
4	4	4	2	3	**0.4725**
5	1	2	1	4	0.8326
6	3	2	2	2	0.5202
7	3	4	3	3	**0.3814**
8	5	3	3	3	0.6073
9	4	4	2	4	0.5908
10	2	3	2	2	0.6211
11	3	3	2	4	0.7602
12	3	2	1	3	0.9392
13	3	3	2	4	**0.3470**
SV_1	3.31	3.00	2.08	3.10	**0.6223**
SD_1	**3.0453**	**1.8917**	**2.5501**	**1.0844**	

Source: author
Note: SV - mean; SD - standard deviation

Table 2 presents the discriminant analysis of the first group. Healthcare facilities where principals have a positive perception of health care management have on average between 51 and 100 employees and are in the field of primary and specialist care. Principals have a specialization or a master's degree in healthcare management, which in itself may have influenced their positive perception of management in healthcare settings. They have relatively well-developed relationships with patients, which may be one-step forward in implementing management in these healthcare settings.

Table 3 presents the second group discriminant analysis. In health care institutions where their directors have expressed negative opinions arising from a negative perception of management in healthcare, the size of the health care facility is between 31 and 50 employees. They include only primary care. The directors do not have any training in health care management. Patient relationships have a traditional meaning and character that boils down to patient obedience and loyalty, irrational confidence in healthcare professionals, and low levels of patient literacy.

Table 3
Second group discriminatory analysis

Examinee	Discriminatory abilities				Discrimination coefficients (KD_2)
	x_a	x_b	x_c	x_d	
1	2	2	1	1	0.4286
2	1	1	2	1	0.2058
3	1	1	1	2	**0.6149**
4	2	1	1	1	0.1374
5	3	2	1	2	0.2203
6	2	1	1	1	**0.5294**
7	1	1	2	1	0.2836
8	2	1	2	2	0.1598
9	1	2	1	1	0.2470
10	2	1	1	1	0.3807
11	2	1	2	1	**0.6328**
12	1	1	1	2	0.1047
13	1	1	2	1	0.2625
SV_2	1.62	1.23	1.38	1.46	**0.3237**
SD_2	**2.7716**	**1.0518**	**1.9724**	**1.7913**	

Source: author
Note: SV - mean; SD - standard deviation

The discrimination criterion (KD average) is 0.4730. Therefore, all discrimination coefficients that have a value greater than this criterion can be classified (classified) in group 1, and those below that criterion are classified in group 2. Table 4 presents the classification matrix.

Table 4
Classification matrix

		Classified		Group size
		Group 1	Group 2	
As is	Group 1	9	4	13
	Group 2	3	10	13
		12	14	

Source: author

Nineteen healthcare institutions (directors included in the perceptual course of management in healthcare institutions) are well classified, or 73.08%, which can be interpreted as a significant discriminatory indicator. Of the 13 subjects in the first group, 9 or 69.23% were well classified and 10 or 76.92% in the second group.

Discussion

The results of this discriminatory analysis indicated a clear difference between the profiles of health care directors who have a positive perception of management implementation in health care institutions and those who do not have such a perception. The path of implementation of management in healthcare institutions in Croatia is likely to depend on the level of education of health care directors in the field of management. In the world, historically, the development of health management as a scientific discipline has largely been accompanied by the development of medical sciences and the growth of hospitals. In transition conditions, this path will certainly be different. It will not depend so much on the development of the medical sciences but will take place through the process of creating a new climate within the health system towards the further education of health and non-health professionals in the field of health management. The implementation of management in health is not a necessity, but a global trend, as pointed out by the World Health Organization (WHO), and by several authors such as Johnson, Lighter and Fair. It will certainly be necessary to explore the practical and scientific reach of healthcare management in a transitional society, as there has been little or no such research, since the lessons learned by Lekhan, Habich, Ginneken, Ferguson and Irvine may not only be a landmark but not a roadmap. The negative perception of directors towards the implementation of healthcare management that we observed in the second group of this analysis confirms Ginter's findings by claiming that managers of health care institutions without management training cannot successfully manage such facilities.

Like the first, the second initial direction of implementation of management in health care institutions was identified in the first group of respondents to this discriminatory analysis. Patient relationship management is most commonly considered among the five management postulates in healthcare settings. This study found that the traditional physician-patient relationship was abandoned and that patients were actively involved in planning their therapy and rehabilitation. This was not the case with another discriminatory group where traditional relationships were maintained. The traditional patient-doctor relationship is a past in which patients often had a high level of boundless trust in their physicians. Such relationships were blind obedience and patient confidence in the physician, and they arose and developed because of the mystification of health and medicine in general, but also of insufficiently informed and health-educated patients. These relationships are being abandoned today with the power of greater patient health literacy, IT support, processes of demystifying physician work, enhancing social awareness,

movement and criticality towards public services, etc. Instead of passive actors, patients are increasingly becoming creators of their health and wellness in a community where they work and live.

Conclusion

Since no management has been implemented in any of the 26 healthcare institutions involved, the results of this short survey send a very clear message not only to the owners of these institutions but also to the general public. This message reads Directors, as managers of health care institutions, have a well-defined place and role in the implementation of management in healthcare, or are one of the key factors hindering this implementation. Healthcare management is a path that has no alternative and is not stopping. It depends not only on the processes of creating perceptions of health care directors but also on a trend that has a broader, global flow and is unstoppable in nature. The galloping growth of health needs and health spending that no country in the world has and will not be able to address in the traditional way of financing health is present. Health facilities exist for the sake of patients and they are the key to solving the accumulated difficulties of health systems. Healthcare management, through its approach to managing patient relationships and by constantly adapting its overall human resources primarily to patients' needs, can realistically provide a satisfactory answer to all stakeholders and stakeholders of healthcare systems. Several limitations are characteristic of this research. Managers and administrations in health care institutions do not have basic knowledge of management, as well as experience in running health care institutions in the world on the principles of management. The possible distortion of their opinions could have affected the answers they offered. Besides, there is no (according to the authors) research of this type and content in Croatia, nor in transition countries, so that the results obtained in this research can be compared. Based on the results obtained in this research, the author intends to continue the same in the direction of research of certain management functions, especially the management of satisfaction of health care users, and the management and organization of health care institutions.

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About the author

Filip Barić is employed at the General County Hospital in Vinkovci, Croatia as a senior expert advisor. He graduated with a degree in Economics. He is currently pursuing a PhD in Business Economics at International University Travnik, B&H. His doctoral thesis is Building Patient Relationships as a Component of Emerging Health Intelligent Organizations. So far, he has published a book in Healthcare Management and seven scientific papers presented at international scientific conferences. All his scientific works are in the field of healthcare management – mostly patient relationship management. The author can be contacted at email **filip.baric1019@gmail.com.**