



## Primary Health Care Managers' Perceptions of the Quality of Health Services

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## Abstract

**Background:** The effectiveness of all areas of managerial activities is determined by managerial knowledge and skills, as well as a profound understanding of the management goals. The aim of the study was to determine the perception of health service quality by primary health care facility managers. **Methods:** A total of 145 heads of primary health care centers in the Lodz region were surveyed using a questionnaire. **Results:** The prevailing perception of health-care quality concerned attempts to meet patients' expectations and to satisfy them (44%). The majority of respondents (76%) stated that the competences possessed by medical staff affect the quality of services provided by their facility. In addition, 52% of the respondents believe that a staff incentive system stimulates improvements in health services quality. Satisfaction surveys, conducted in 67% of studied institutions, are a source of information about errors or deficiencies in outpatient clinics. Over 74% of respondents noted that the quality of health services is affected by treatment standards. **Conclusion:** To ensure effective and efficient primary care, there is a need to develop a clear-cut definition of health service quality by primary health care facility heads, and to change their understanding, perception and treatment of the issue.

**Key words:** healthcare quality, primary health care, managers, heads of primary health care, health care services.

## Introduction

The perception of quality in the health care sector has changed over past few years. Providing high quality health care services has become a priority for all medical institutions, starting with primary healthcare. This is where the patient comes into the first contact with the health care system. Whether or not the patient will have to use more specialized forms of health care depends on how he/she will be diagnosed at this stage. An efficient primary health care system allows to provide continuous care of patients, makes health care services more accessible, improves their quality, reduces costs, and improves the experience of patients and health care professionals. It also improves patient's health [1]. According to the European Commission for Effective Ways of Investing in Health, primary care involves widely available, integrated, person-oriented, comprehensive health and social services provided by a team of specialists responsible for satisfying most of health needs of individuals [2]. Primary health care systems in many countries are based on this model.

In Poland, the Act of 27 October 2017 on primary health care (Journal of Laws 2017, Item 2217) is a legal act regulating all aspects related to the provision of primary health care services [3]. Health care services providers are obliged to monitor the quality of health services provided by the primary health care. The monitoring includes: (1) availability of services, (2) comprehensive health care services, (3) regularity of services, (4) administration of health care services, (5) development of a health effect. Primary health care entities expect await criteria for monitoring the quality of primary health care services which will be formulated by the Minister of Health. The criteria will allow to offer good quality services as well as ensure safety for their recipients. The health care service provider is encouraged to get engaged in programs aiming at improving the quality of primary health care services, and thus providing appropriate quality of medical services as well as ensuring the safety of the recipient and achieving a health effect. However, the provider is neither obliged to participate in training on quality nor given any bonuses for implementing

quality measures. Qualitative improvement of medical entities is a kind of an attempt of a comprehensive approach to the problem of an individual patient but also to difficulties of the whole society. Effective quality management in primary healthcare should involve the use of existing assets of the unit, both tangible and intangible. Actions to improve quality should start with the formulation of principles of the quality management policy, which means that it is necessary to set clear goals, introduce a clear division of employees' responsibilities, as well as engage the management personnel to be more involved and responsible as they are the most important factor in the process of achieving objectives of the quality policy [4]. They decide about taking action to identify needs and to plan changes aiming at improving quality. A selection of ambitious and creative employees, obtaining resources, not exclusively financial, building an action plan and its implementation, as well as assessing the results are components of the quality improvement process which the manager of the institution is responsible for [5]. Quality management includes all management activities that determine the quality policy, objectives and their implementation within the quality system with the use of the following measures: quality planning, quality control, quality assurance and quality improvement. A lot of different quality improvement processes have been described in the literature. The management personnel decides about the choice of a method or methods implemented in their health care institution. However, a lack of understanding and improper perception of the management object lead to implementation of only some activities to improve the situation but these activities are based on randomly selected and instrumented techniques. The knowledge of the subject and the objective of management are conditions for effective and efficient management of anything. In the health care environment, management personnel faces the need to translate their specific understanding of the quality of health services into specific activities in order to improve the quality of services provided by the institution which they manage [6]. The aim of the study presented in this article was to find out the opinion of the management staff on the way of perception of the

quality of health care services in primary health care as well as to define, select and prioritize the factors that determine the health care.

## Materials and Methods

105 people managing primary health care facilities in Łódź and 40 people holding managerial positions in primary health care in the Pabianice powiat agreed to participate in the study. The majority of the respondents had university education (68%). At the time of the study, they had held their positions between 1 and 24 years; most of the respondents had held their current positions for 4 years ( $M \pm SD = 7.62 \pm 4.27$  years). The study was conducted using the author's own questionnaire, which consisted of 22 questions, both qualitative and quantitative. The questionnaire included open questions on: the average waiting time for admission, the range of health services satisfying patients' needs, the definition of the quality of health care services, the amount of advice given in 2017. The demographic questions related to the academic degree/professional title of the respondents, the position held in the institution and the number of years in the current position. The obtained results were encoded in the Excel database of Microsoft Office 2016, and subject to a statistical analysis with the application of the Statistica 13.1 program under the license of the Medical University of Lodz. For measurable variables, the mean, median, modal, modal number, maximum and minimum were calculated. Structure indices were calculated and expressed as a percentage in the whole study group. Data obtained for subgroups were expressed in fractions.

## Results

Before discussing the determinants of the quality of health services provided in primary health care, assessed and hierarchized by the management personnel, we should define the concept of quality of health services. All answers obtained in the study were analyzed. In total,

145 answers were obtained. They are presented in Figure 1. The majority of the respondents identified the quality with a process aimed at meeting patients' expectations and satisfying their needs (63 respondents). The quality of health services also involved: comprehensive health care services (38 respondents), a prompt diagnosis and providing comprehensive diagnostic and therapeutic services (28 respondents), health care activities to meet people's health needs (10 respondents), competences and a quick diagnosis and treatment (6 respondents).

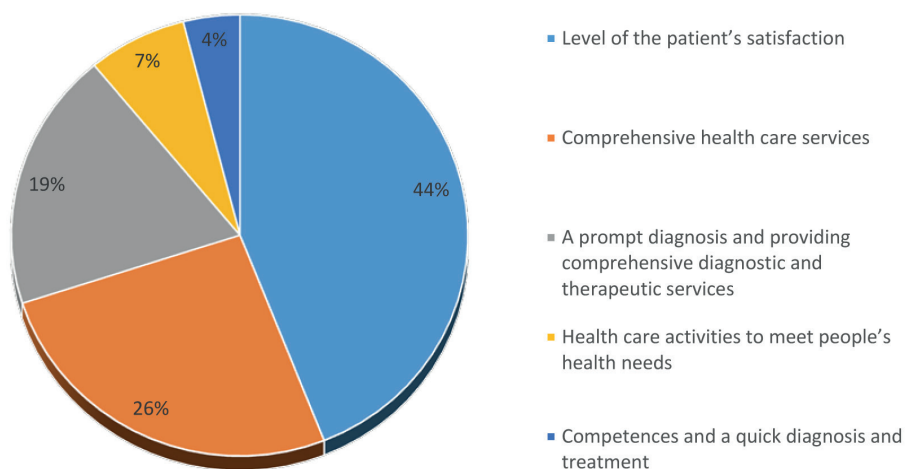


Figure 1. The concept of the quality of health services in the respondents' opinion

In the opinion of the management personnel, the quality of services in primary health care depends on competences, i.e. knowledge and skills of employees. A great majority of the respondents (76%) stated that competences of the medical staff significantly affect the quality of services they render in their primary health care centre. Slightly fewer respondents (65%) stated that the education and professional experience of the management personnel have a significant influence on the quality of health care services. Finally, 58% of the respondents think that the level of education and professional experience of the administrative personnel contributed to the quality of services.

Table 1. Respondents' opinion on factors influencing the quality of health care services

Questions	Answers										
	n	I definitely disagree		I disagree		I have no opinion		I agree		I definitely agree	
		n	%	n	%	N	%	n	%	n	%
The quality of health care services depends on competences (knowledge, skills) of the <b>medical personnel</b>	145	0	0	1	0	4	3	30	21	110	76
The education and experience of the <b>administrative personnel</b> affect the quality of health care services	145	0	0	0	0	8	6	84	58	53	37
The education and experience of the <b>management personnel</b> affect the quality of health care services	145	0	0	0	0	3	2	48	33	94	65

The respondents stated that the number of medical personnel employed in outpatient clinics is sufficient in relation to the number of patients. Less than 2/3 of the respondents (60%) said that the number of nurses is sufficient and almost the same percentage of the respondents (57%) considered the number of medical doctors sufficient, too (Table 2). With regards to waiting time for admission to the clinic, the respondents said that the average waiting time was 2 days (range: 0–7 days,  $Mo \pm SD = 1.66 \pm 1.04$  days).

Over half of the respondents (57%) stated that the funds allocated to treatment in their outpatient clinics in 2017 were insufficient in relation to the needs of patients. Over 1/3 of the respondents (37%) said that these funds covered the needs of patients. The majority of the surveyed management personnel (34%) stated that there is no relationship between the amount of funds allocated to treatment of patients and the level of quality of health care services; 29% of the respondents stated definitely that there is no such relationship.

The respondents were asked about the range and variety of health care services and whether this offer is suitable for current and future health needs of patients. In the opinion of 57% of the respondents services offered by their health care facility satisfy the needs of patients, both current and future.

Almost half of the surveyed people (49%) replied that employees of their outpatient clinics participated in conferences/symposia/training on quality; however, 44% of the respondents replied that their employees did not participate in pro-quality activities. 49% of the respondents believe that such training/conferences/symposia on pro-quality issues are highly useful, and every fourth respondent (25%) said that they are extremely useful.



Table 2. Opinion on the appropriate number of medical personnel in relation to the number of patients

Questions	Answers							
	I definitely disagree		I disagree		I have no opinion		I agree	
	n	%	n	%	n	%	n	%
Your clinic employs a sufficient number of medical doctors in relation to the number of patients	145	0	18	12	8	6	36	25
Your clinic employs a sufficient number of nurses in relation to the number of patients	145	1	8	6	10	7	39	27
							87	70
							83	57

Table 3. Participation in conferences/symposia/trainings on quality and evaluation

Questions	Answers					
	n		Yes		I do not know	
	n	%	n	%	n	%
Did employees of your clinic take part in conferences/symposia/trainings on quality?	145	71	49%	10	7%	44%
					64	

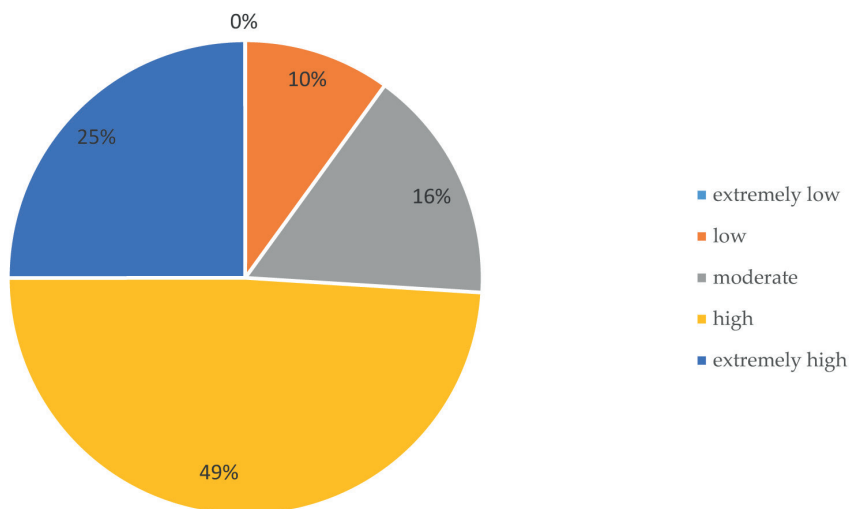


Figure 2. Usefulness of employee participation in training/conferences/symposia on pro-quality issues

Over half of the respondents (52%) believe that the staff incentive system encourages employees to get engaged in initiatives aiming at improving the quality of health care services. According to 41% of respondents, training for medical staff of the outpatient clinic is a motivating factor which increases efficiency of their work.

With regards to the outside and inside of the clinic building, 54% of the respondents managing the buildings considered it good. According to 44% of the surveyed respondents, the outpatient clinics were well-equipped and 40% said the equipment in the clinics is very good.

Over half of the respondents (54%) said that their clinics do not conduct questionnaires on patient satisfaction. Considerably less respondents (39%) claimed that such questionnaires are conducted in their clinics and for a huge majority of the personnel (67%) results of such surveys are a source of information about mistakes or shortcomings.

Table 4. Questionnaires on patient satisfaction conducted in surveyed units

Questions	Answers						
	n	Yes		I do not know		No	
		n	%	n	%	n	%
Do you conduct questionnaires on patient satisfaction in your clinic?	145	57	39%	10	7%	78	54%

## Discussion

The presented study defines a number of factors affecting the quality of health services. The first questions of the survey questionnaire concerned the effect of competences and experience of personnel of various departments, employed in primary health care facilities; an analysis of results showed the importance of knowledge and skills of medical and managerial staff in the process of shaping the quality of health services. Respondents, no matter how long had held managerial positions in the analyzed institutions, clearly stated that competences of employees of primary health care facilities contribute to pro-quality activities. In a study by Rybarczyk-Szwajkowska et al. [7], conducted in the Łódź region in public hospitals, a group of respondents comprised of people performing managerial functions in hospitals also confirmed that the quality of health services depends on competences and experience of employed staff, in particular medical and management personnel, but also administrative staff. It should be emphasized that units which have modern equipment and those implementing innovative therapeutic methods will not meet needs of patients without experienced and competent staff. The burden put on family doctors has significantly increased in recent years, which affects their ability to provide high-quality services. Hence, more consideration should be given to nurses. Unfortunately, there is little information on how nurses perceive their role in health services, but it is important to understand their point of view, listen to their needs and know their vision of developing and improving health services [8].

PHC providers are in a central position to coordinate a person's care needs, from prevention to disease management to curative care [7]. The next part of the study focuses on the number of medical and nursing staff which is contrasted to the number of patients. Most respondents believe that the facilities which they manage employ too few doctors to satisfy the needs of patients; with regards to the number of nursing staff the situation looks slightly better. In the aforementioned study of Rybarczyk-Szwajkowska et al. [8], on the perception of the quality of hospital services by the management personnel, more than half of the respondents believe that the ratio of the number of doctors to patients is appropriate. With regards to the number of nursing staff the opinions were versified. Hiring an adequate number of medical employees in the health care system is a significant problem. Due to the problem of deteriorating health of the Polish society, directly related to demographic changes and hectic lifestyle, numerous and effective systemic changes should be implemented. The shortage of medical professionals has become very severe since Poland's accession to the EU in 2004, as it encouraged many of them to leave the country. The number of doctors per 1,000 inhabitants (2.4) is the lowest of all EU countries. The age of doctors is another worrying problem as about a quarter of practicing doctors have already reached statutory retirement age. In certain specializations, such as general surgery, almost 40% of specialists have reached retirement age. The number of nurses (5.1 per 1,000 inhabitants) is also one of the lowest in the EU [10]. Providing sufficient access to medical personnel and thus satisfying patients' needs is one of the most important challenges for a modern health care system. This availability depends, among other things, on the distribution of staff working with the recipient of medical services. An analysis of distribution of medical staff reveals huge territorial differences. The largest numbers of doctors per 10,000 population the population were noticed in the Łódź and Mazowieckie voivodeships (almost 27 doctors), whereas in the Wielkopolskie Voivodeship, the number was the smallest (16 doctors). In 2017, the number of nurses working directly with patients, calculated per 10,000 population, was the lowest in the

Wielkopolskie Voivodeship (38.6 nurses) and in the Pomeranian Voivodeship (41.1 nurses), while the largest number of nursing staff was recorded in the Lubelskie and Świętokrzyskie voivodeships – 58.2 and nearly 60 nurses per 10,000 population, respectively [11]. An important problem that the Polish health system is struggling with is a small number of specialists, being a consequence of a small number of resident doctors. Ageing specialists are not being replaced with young medical professionals. As a result, a growing number of disappointed patients have to wait longer and longer for appointments with medical specialists. Additionally, similar like in China [7], a lack of medical professional affected care coordination in whole system.

The impact of financial resources on the quality of health care services was another considerably important aspect of the study. Most respondents, i.e. 70% of the managerial staff [8], stated that too little money is allocated to basic health care so it does not cover patients' needs. The healthcare financing system in Poland undoubtedly faces many difficulties; there are disputes on the amount of funds that should be spent on the primary health care. The deepening financial problem of the health care system negatively affects the quality and availability of medical services offered to patients. According to data of the National Health Account [11], current expenditure on the health care in 2016 was 121.1 billion PLN and it was about 6.6 billion PLN higher than in 2015. The percentage of the Gross Domestic Product (GDP) spent on health care is significantly lower in Poland than in the EU (9.8%). In 2017, only 6.5% of GDP was spent on the health care. €1,507 per capita was allocated to the healthcare (the amount corresponded to a different value of purchasing power), which was the sixth weakest result in the EU [10]. It should also be noted that the greatest financial resources and most funds are allocated to hospitals. Disproportions regarding allocation of financial resources to various medical specializations are really noticeable. Cardiology is well-financed whereas psychiatry is completely neglected. Giving importance to the primary health care by providing general practitioners with more powers and health care institutions with necessary diagnostic

would probably enable to save money on diagnosing and treating cases that do not require hospitalization or visits to outpatient clinics [12]. It may seem disturbing but more than half of the analyzed primary health care institutions do not carry out surveys on patient satisfaction. The recipient, being an observer of certain activities of the health care unit, cannot participate in management; however, their opinion may become an important factor in making improvements. A study by Marcinowicz et al. [13] on reasons for patients' dissatisfaction with care provided by family doctors distinguishes three main groups of reasons for dissatisfaction of health care recipients: (1) shortcomings in the primary health care system, (2) difficulty in organizing care and ensuring the quality of services, (3) problems related to attitudes, skills and work of medical and nursing staff. The authors of the study observed that patients are mostly dissatisfied with the wrong attitude of staff, lack of interest in the patient or routine treatment. Plentary et al. [14], in a study conducted on satisfaction of primary health care patients with medical and psychosocial care, observed that the general level of satisfaction of recipients of services offered by primary health care institutions is high; the patients positively evaluated the atmosphere in primary health care facilities, the attitude of medical staff who showed great interest in the health of their patients. The authors, however, pointed out limited activities regarding education and preventative activities and only partial knowledge of the patients' psychosocial problems. Both surveys on patient satisfaction and those regarding dissatisfaction with medical care are an important element in assessing the quality and a feedback for the healthcare provider. They enable to introduce effective changes. Satisfaction surveys are also an important element of the quality assessment system implemented in the facility – accreditation and/or ISO standards, provided that they are focused on identifying necessary systemic changes in the functioning of the therapeutic facility. The quality management system compliant with ISO 9001 standards is one of the basic and most common management systems, implemented and particularly scored by the National Health Fund in the procedure of concluding contracts for providing health services.

This system directly enables to increase the customer's satisfaction, i.e. the patient's by meeting their requirements and expectations [15]. The assessment of the effects of activities is the very chapter that directly refers to the necessity of analyzing the level of customer-patient satisfaction. Point 9.1.2, called "Customer satisfaction", clearly indicates the need to monitor the customer's perception of the quality of medical services. Therefore, each health care unit which has adopted the quality management system, compliant with ISO 9001 standards, is required to determine the method of obtaining, monitoring and reviewing such information. Besides, the standards propose examples of monitoring customer-patient satisfaction, which can be: (1) patient satisfaction surveys, (2) feedback from patients about rendered services, (3) meetings with patients, (4) market share analyses, (5) praises, (6) patients' claims and court cases [15]. Similarly, according to accreditation standards, both hospitals and primary health care facilities are obliged to carry out a systematic assessment of patients' opinions. A hospital accreditation program, called "Improving Patient's Quality and Safety" in Quality Improvement (QI) standard no. 3, points out regularity of the conducted examination and obtaining feedback on expectations, preferences and experiences of hospitalized patients [16]. A primary health care facility accreditation program in QI standard no. 1.6 points out a need to conduct own research on patients' opinions or to use external analyses (conducted in compliance with the methodology of social research), and also to oblige to consider conclusions of the research in the process of improving the quality of services rendered by the particular unit [17]. In the light of the above, developing a proper methodology for analyzing patients' opinions should be a priority in every health care institution, and a tool for obtaining invaluable knowledge on the level of quality of provided services, on meeting expectations and needs of patients, and a signpost for continuous improvement of all identified processes. It is also extremely important to study personnel satisfaction and factors affecting their motivation to work. Many studies [18,19,20] confirm a positive impact of the implemented accreditation system on improving satisfaction with performed duties,

which in the long run, improves the quality of medical services provided in primary health care.

## Conclusions

There is a need to introduce one definition of the concept of the quality of health services by managers of medical institutions.

The staff holding managerial functions in primary health care facilities identifies the quality of health services with a process aimed at satisfying patients' needs and meeting their expectations.

In the opinion of respondents holding managerial functions in primary health care institutions, the level of quality of health services is most contributed by: (a) competences (knowledge, skills), experience of employed medical and management personnel, (b) the number of medical professionals and nurses, employed in primary health care facilities in comparison with the number of patients.

According to the respondents, activities encouraging employees to improve the quality of services (trainings, motivational systems) positively affect the quality of work. Investment in an employee, by offering them adequate remuneration and possibility of continuous development, allows to keep a stable number of employees and ensure safety for a patient who, despite not having medical knowledge, can fully trust highly qualified medical personnel.

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