

OPPORTUNITIES FOR IMPROVING THE ACCESSIBILITY AND QUALITY OF COLONOSCOPY SERVICES

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INTRODUCTION

The World Health Organization states that all people should have access to all necessary quality healthcare services without experiencing financial hardship (Geneva, 2024). Constant changes, growing competition, and the desire to improve and expand push healthcare institutions to offer new and accessible services. Special attention is given to service quality, which must align with the latest scientific knowledge, current national legislation, quality standards, and sustainable patient relationships, as well as attracting and retaining competent, continuously improving staff.

Like many developed countries, Lithuanian healthcare institutions are now focusing heavily on day services - day hospital and day surgery services, including digestive system procedures such as sigmoidoscopy, colonoscopy, and radiological colon examinations. Expanding these services improves overall accessibility, increases patient satisfaction, and ensures a quicker return to everyday life and work.

It is understood that personal health is an individual's primary goal and interest, but it also plays a crucial role for society, as national economic growth, development, and strength depend on the population's health. Worldwide, including Lithuania, efforts are made to achieve the highest, people-centered healthcare quality (Rupšienė, Ratkevičienė, Saveljeva, 2021). Although patient satisfaction is emotional and subjective, it is considered one of the key indicators of healthcare quality (Janušonis V., 2018). Therefore, evaluating patient satisfaction remains essential to providing high-quality services and ensuring healthcare access without financial barriers—or at minimal cost if a patient seeks special attention.

Research objective - To evaluate patients' perspectives on the quality and accessibility of colonoscopy services.

Research methods. A quantitative study was conducted - an anonymous questionnaire based on practice and scientific literature. The sample included 347 patients who underwent colonoscopy. The study adhered to ethical standards and was conducted in national, regional hospitals, and a private clinic from December 2024 to February 2025. Data were analyzed using descriptive and statistical analysis methods.

Theoretical basis. When choosing a healthcare institution, the patient faces the problem of accessibility to the required service - waiting lists. Managing queues to optimize the service delivery process and quality is a very important yet complex task. It is a challenge faced by all OECD member countries. The waiting time for various healthcare services, regardless of the type of healthcare service needed, depends on whether the demand for healthcare services exceeds supply (OECD 2020). Insufficient service supply can result from a shortage of specialists, excessive referrals for services, and inefficiencies in healthcare service delivery. These factors lead to long service waiting lists. The undesirable outcomes of this process are delayed differential diagnosis, delayed treatment, and, ultimately, severe consequences. A report compiled from data collected in 34 OECD member states highlights in which countries waiting lists are considered a major priority (Figure 1) (OECD 2020).

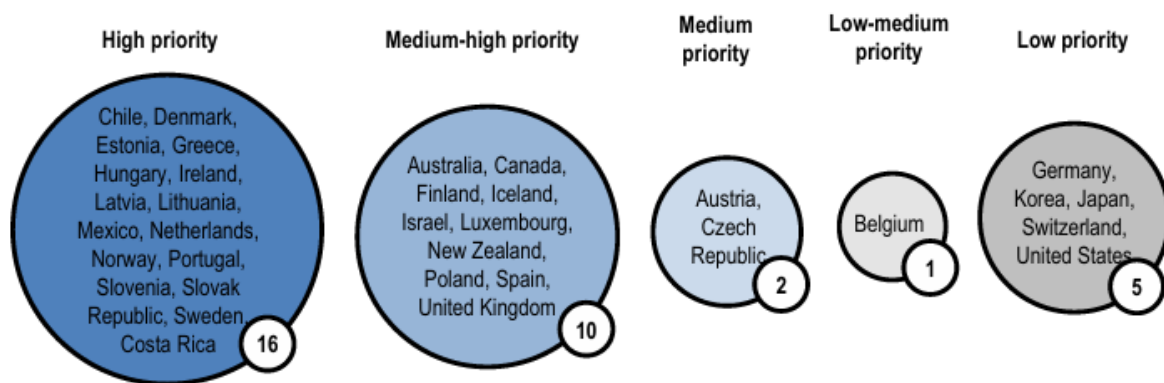


Figure 1: Waiting time priorities in OECD countries.

Source: compiled by the authors of the work based on the OECD report.

In an effort to improve service accessibility, the Ministry of Health of the Republic of Lithuania, together with the National Health Insurance Fund and the State Data Agency, created a new tool for monitoring queues to see doctors—the scoreboard. The scoreboard, displaying data from the Preliminary Patient Registration (PPR) information system, allows the monitoring of queue dynamics, identification of problems, and evaluation of the effectiveness of implemented measures (VLK 2023). However, the implementation of the scoreboard has not significantly reduced waiting times.

During the implementation of healthcare system reforms and the restructuring of the network of healthcare institutions (ASPI), a transformation of healthcare services is proposed to reduce waiting times: the aim is to increase the volume of day hospital services to 30% by 2025 and to 50% by 2030. The number of day surgery cases is expected to increase by 20% in 2025 and by 30% by 2030, compared to 2019 (LR, 2023).

Healthcare quality and costs largely depend on competition—where there is greater competition, there is higher quality and greater patient satisfaction. According to V. Janušonis, competition in healthcare services is influenced by the relationship between the public and private healthcare sectors. By signing contracts with the National Health Insurance Fund, the private sector gains the right to provide not only paid but also insured services to patients, just like the public sector. Patients are free to choose where and which services they want to receive. Their choice is usually influenced by waiting times, trust in the institution and staff, the need or ability to co-pay, previous experience, and other factors.

The Law on Patient Rights and Compensation for Health Damage of the Republic of Lithuania establishes clear patient rights related to the accessibility and choice of healthcare services. According to Article 4, Part 1, the patient has the right to freely choose a healthcare institution as prescribed by legal acts, and according to Article 4, Part 2, the patient may also choose a healthcare specialist, following the procedure set by the institution's head. Furthermore, based on Article 5, Part 1, the patient must be provided with information about available services, their prices, and the possibilities of accessing them. These provisions highlight the patient's role as an active participant in the healthcare system and emphasize the need to ensure information accessibility and freedom of choice in healthcare services.

Research results

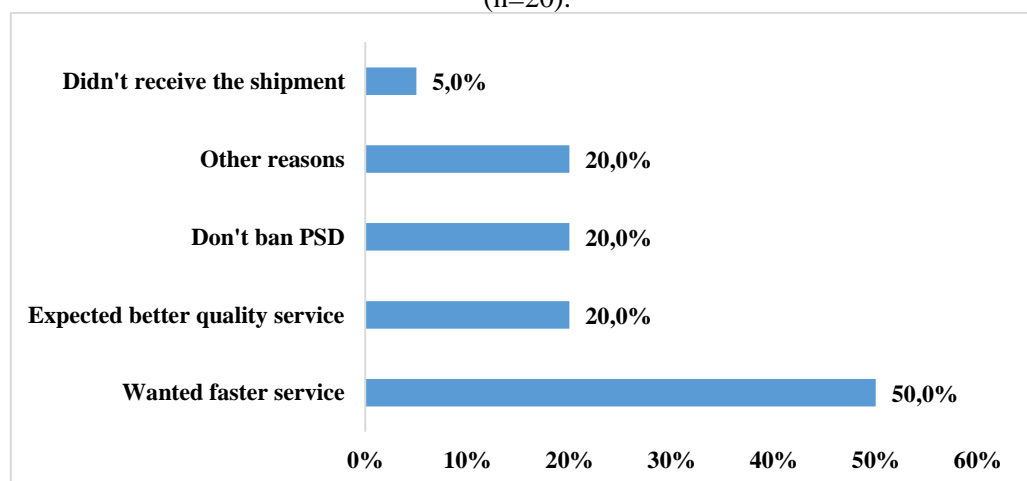
Table 1. Distribution of study participants by registration and examination waiting times based on the healthcare institution (N=347).

Characteristics	Place of study, n (%)			χ^2 ; IIs; p
	Republic level hospital (n=115)	District level hospital (n=116)	Private clinic (n=116)	
Time to registration				
Same day	11 (9,6)	10 (8,6)	22 (19,0)	17,8; 6; <0,001
<2 weeks	8 (7,0)	21 (18,1)	31 (26,7)	
2-4 weeks	6 (5,2)	39 (33,6)	41 (35,3)	
>4 weeks	90 (78,3) *	46 (39,7)	22 (19,0)	
Time from registration to examination				
<2 weeks	10 (8,7)	18 (15,5)	42 (36,2)	37,6; 4; <0,001
2-4 weeks	6 (5,2)	45 (38,8)	53 (45,7)	
>4 weeks	99 (86,1) *	53 (45,7)	21 (18,1)	

*- $p < 0.05$, compared with those who registered and completed the study at the district level hospital and private clinic (z test with Bonferroni correction)

Source: compiled by the authors of the work based on the research results.

Figure 2. Distribution of patients who paid for colonoscopy according to the reason for payment (n=20).



Source: compiled by the authors of the work based on the research results.

Table 2. Distribution of study participants according to the causes of anxiety before colonoscopy, depending on the institution where the colonoscopy was performed (N=347)

Causes of excitement/anxiety		Colonoscopy site, n (%)			χ^2 ; IIs; p
		Republic level hospital (n=115)	District level hospital (n=116)	Private clinic (n=116)	
Bad bowel preparation for the test	Excited	60 (52,2)	66 (56,9)	49 (42,2)	5,2; 2;
	Not worried	55 (47,8)	50 (43,1)	67 (57,8)	0,075
Long wait for service	Excited	62 (53,9)	61 (52,6)	32 (27,6)	20,6; 2;
	Not worried	53 (46,1)	55 (47,4)	84 (72,4) *	<0,001
Pain/discomfort during the examination	Excited	69 (60,0)	61 (52,6)	42 (36,2)	13,7; 2;
	Not worried	46 (40,0)	55 (47,4)	74 (63,8) *	0,001
Possible complications during the procedure	Excited	41 (35,7)	57 (49,1)	38 (32,8)	4,3; 2;
	Not worried	74 (64,3)	59 (50,9)	78 (67,2)	0,084
Inaccurate diagnosis	Excited	29 (25,2)	50 (43,1) **	28 (24,1)	12,3; 2;
	Not worried	86 (74,8)	66 (56,9)	88 (75,9)	0,002
Long wait for test results	Excited	37 (32,2)	50 (43,1)	21 (18,1)	16,9; 2;
	Not worried	78 (67,8)	66 (56,9)	95 (81,9) *	<0,001

*- $p < 0.05$, compared with colonoscopy performed in a Republican-level and district-level hospital;

** - $p < 0.05$, compared with colonoscopy performed in a Republican-level hospital and a private clinic (z test with Bonferroni correction)

Source: compiled by the authors of the work based on the research results.

CONCLUSIONS. Analyzing the time patients waited for registration and for colonoscopy depending on the institution, it was found that statistically significantly more patients waited longer than 4 weeks for registration at the national-level hospital (78.3%), and from registration to colonoscopy performance (86.1%). In some cases, it was indicated that they waited a year or more. Compared to the same waiting times at regional hospitals and private clinics, the difference was significant ($p < 0.001$) (Table 1).

The results showed that 5.8% of patients paid a set price for the colonoscopy service. Half of the paying patients indicated that they wanted to receive the service faster than the institution could provide under the regular procedure (50.0%). One-fifth expected higher-quality service (20.0%), another fifth were uninsured under the Compulsory Health Insurance (20.0%), and others paid for different reasons (20.0%). Other reasons for paying for the service most often included living and working abroad (Figure 2).

The results also showed that women were statistically significantly more anxious than men about possible poor bowel preparation for the examination (60.4%), the long wait before undergoing

colonoscopy (50.7%), possible pain or unpleasant sensations during the procedure (56.0%), and possible complications during the procedure (44.9%) ($p < 0.05$) (Table 2).

The assessment of patients' perspectives revealed that the majority of study participants were satisfied with the effectiveness of the colonoscopy examination and the quality of services. However, patients most frequently experienced anxiety about inadequate bowel preparation, unpleasant sensations during the procedure, and waiting times. It was also observed that women and patients with higher education levels experienced greater anxiety before the procedure, which may be associated with greater awareness, higher expectations, a more critical approach, and a greater sense of responsibility for their own health.

In order to improve the quality of colonoscopy services, it is recommended to:

- Shorten waiting times and seek more flexible registration opportunities, especially for working patients.
- Improve patient information by providing clear, understandable preparation guidelines in various formats (printed brochures or electronic mail).
- Expand pain relief options for patients to reduce stress and discomfort during the procedure.
- Strengthen trust in the diagnostic accuracy of regional hospitals by publicizing the qualifications of doctors, medical equipment updates, and the implementation measures to ensure examination quality.

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