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## Managing healthcare systems: Assessing employee and patient satisfaction in private and public institutions



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### ABSTRACT

A successful healthcare organization is indispensable in achieving both the quality of care for the patients and individual well-being. In Croatia, patients can access health care from either public or private providers. This study assessed satisfaction levels from 423 patients who accessed services from both public and private healthcare institutions through questionnaires. Furthermore, 71 workers from public and private healthcare institutions answered a comprehensive questionnaire regarding job satisfaction. The results demonstrate that patients are more satisfied with private healthcare services, though the treatment is usually sought from a public healthcare facility due to the affordability of services provided. On the other hand, employees in private health facilities have expressed a high level of job satisfaction that has a positive effect on their motivation and the care provided.

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### 1. Introduction

Effective organization is essential for ensuring quality work in all sectors, including healthcare, as it significantly impacts the level of service provided to patients (Darzi et al., 2023). In Croatia, healthcare services are offered by both public and private institutions. Public healthcare institutions, such as hospitals, are typically managed by government bodies at the national, regional, or local levels. In contrast, private institutions, such as clinics and polyclinics, are operated by individuals or private entities. Hospitals have traditionally been more familiar to the Croatian population due to their long-standing presence, while private healthcare institutions began to appear in the Croatian market only in the late 1990s, making public healthcare the more established option.

The establishment of private healthcare institutions has provided patients with a new way to receive health services. Generally, the level of operation in private institutions, including those in healthcare, often operates on a completely different level than public ones. Most private healthcare

institutions in Croatia, when it comes to ownership by physical persons, are based on smaller facilities with fewer employees, namely clinics specializing in specific areas. Only to a lesser extent are there larger teams with broad specializations. The organization of clinics and polyclinics is the subject of this study (Nikodem et al., 2022).

The organization of private healthcare institutions is undoubtedly different from that of public healthcare institutions and is unique in many ways. By delving into its core, its quality, and its success, it is possible to assess the quality of human resource management, as well as the increase in service quality and employee motivation (Lucifora, 2023). A more successful organization enhances the quality of service to patients, which is crucial for private healthcare institutions. This is because, in most cases, polyclinics and clinics are not funded or subsidized by the Croatian Health Insurance Fund (HZZO) and thus rely on their success or failure. They must attract patients who voluntarily choose whose health service to use through their quality. Public healthcare institutions offer services covered by the Croatian Health Insurance Fund, directly costing nothing, while services provided by private healthcare institutions are paid for immediately by patients, without any privileges, bonuses, or discounts. Polyclinics and clinics must rely on their quality, expertise, professionalism, and efficient organization to attract as many patients as possible to survive in the open market.

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The foundation of this scientific paper is based on factual data and research focused on quality organization and directed toward the management of human resources. This study aims to understand the satisfaction of healthcare service users with the services received and their future choices between public and private institutions, considering the cost of services and other criteria. On the other hand, it explores how employees perceive working in public and/or private healthcare institutions and their level of satisfaction.

In this research, the following hypotheses were set: H1: Employees of private healthcare institutions experience higher levels of satisfaction compared to employees of public healthcare institutions; H2: Customer Satisfaction with Provided Services: Customers report higher satisfaction with the services provided by private healthcare institutions than those provided by public healthcare institutions; H3: Decision Influenced by Costs: Due to the higher costs associated with the private healthcare sector, individuals are more likely to opt for services from the public healthcare system.

By gaining a deeper understanding of the functioning of the healthcare system in the Republic of Croatia, clear guidelines for improvement can be established that would satisfy all involved parties. Furthermore, this research can serve as a basis for further in-depth analyses of the reasons behind satisfaction/dissatisfaction and can assist healthcare management in future strategic planning.

## 2. Literature review

The study by Šostar and Ristanović (2023a), highlighted that personal and psychological factors play a crucial role in shaping consumer behavior over time. Several studies have investigated patient satisfaction with medical care across both private and public health institutions (Alumran et al., 2021; Arasli et al., 2008; Endeshaw, 2021). According to Ferreira et al. (2023), the factors most influencing patient satisfaction include medical care, patient communication, waiting time, patient age, perceived health status, and patient education. Wulandari et al. (2024) showed that factors such as the physical environment, customer-oriented atmosphere, responsiveness, communication, privacy, and safety in healthcare services positively correlate with patient loyalty to a hospital's image. The study by Manzoor et al. (2019) demonstrated that healthcare services such as laboratory and diagnostic care, preventive healthcare, and prenatal care significantly enhance patient satisfaction. The study particularly highlights that physicians' behavior plays a crucial role in moderating the impact of healthcare services on patient satisfaction. The theory suggests that customer satisfaction in services is influenced by both the traditional marketing mix and specific factors such as service organization, quality, wait times, physical evidence, and contact personnel—elements often overlooked by managers (Bulatnikov and Constantin, 2023).

Adombor's (2020) research highlighted five key elements for client satisfaction in healthcare settings: Responsiveness, Assurance, Communication, Reliability, and Tangibility. Also, Duc Thanh et al. (2022) added that facility quality, outcomes of service provision, transparency in information, administrative processes, accessibility, and the staff's interaction and communication are all essential factors. Gavurova and Kubak (2022), in their study, noted that there are significant differences in patient satisfaction across healthcare institutions, indicating that the level of satisfaction is not uniform across all facilities. While public transport and available parking are important factors when visiting a healthcare facility, once patients arrive, they tend to focus more on various elements within the facility itself (Alibrandi et al., 2023). Nonverbal communication is essential across all service areas, including healthcare (Šostar et al., 2022).

The research by Munawarah et al. (2023) showed that patients with higher levels of education and better-paying jobs tend to have higher satisfaction with healthcare services, while Kang et al. (2023) and Nantabah et al. (2023) concluded in their study that patients with higher levels of education are significantly dissatisfied with the services received, particularly in rural areas. Kruk's et al. (2024) research showed that women have significantly less trust in the healthcare system compared to men. Aljarallah et al. (2023) strongly recommend improvements in hospitals' payment policies and medical care, while also praising the explanations and skills of doctors and the availability of relevant medical specialties. However, they rate lower satisfaction with the time doctors spend with them, the quality of medical care, trust in diagnosis accuracy, and the scheduling process. Research by Suryadana (2017) finds that services designed to build relationships with patients and those provided significantly enhance patient recall and satisfaction, which is also influenced by the performance of services, as well as the courtesy and friendliness of nurses and the quality of healthcare facilities.

Šostar (2011) emphasized that managers should make decisions without fear of mistakes, as this fear limits the growth and development of any system. In researching patient satisfaction in healthcare institutions, key determinants identified include organizational characteristics, physical environment, technical care aspects, service quality, interpersonal care aspects, accessibility, affordability, waiting times, communication, and "patient-related determinants" such as age, gender, education, income, socio-economic status, health status, care outcomes, and patient experiences (Akthar et al., 2023). The main factors impacting patient satisfaction levels include the influence of doctors, nurses, and medical equipment, with additional contributions from the level of cleanliness, and the quality and comfort of the furniture and equipment provided to patients (Asnawi et al., 2019). The study by Diakos et al. (2022) indicated that the satisfaction

of healthcare workers is crucial for achieving patient satisfaction with healthcare services. The research findings of [Cantarelli et al. \(2023\)](#) indicated that environmental factors, organizational management, and team coordination significantly influence professional satisfaction. Further analysis suggests that improved activity planning, a strong team identity, and competent managerial oversight by supervisors are associated with increased job satisfaction within the unit. Job dissatisfaction in healthcare can lead to absenteeism, decreased productivity, higher staff turnover, and both physical and mental health issues, including burnout among healthcare workers ([Yilmaz and Karakuş, 2023](#)). The study by [Kuo et al. \(2018\)](#) indicated that system quality, information quality, and service quality are significant predictors of physicians' satisfaction. Job satisfaction hinges on the alignment of three key elements: the employee's knowledge, skills, and personal traits; their motivation and energy for work; and the quality of the work environment, including technology, materials, information, managerial structures, and systems necessary for task execution ([Adamopoulos, 2022](#)). The research of [Hussein and Wahidi \(2018\)](#) concluded that employee job satisfaction is positively correlated with two key factors: inspirational motivation, which includes training and project monitoring, and individualized consideration, such as actively listening to employees' work-related issues. The study conducted in Sri Lanka by [Chamal and Dilina \(2018\)](#) showed that healthcare institution employees are much more satisfied at work when social events such as workplace celebrations, lunches, after-work gatherings for drinks, or even a thank-you letter for their work are organized.

To address low job satisfaction among nurses, management should conduct individual satisfaction assessments, provide more positive feedback from supervisors, include experienced workers in organizational decisions, hold individual meetings to address specific needs and enhance staffing by offering internal employees compensation for weekend and evening/night shifts instead of relying on external hires. The study of [Gu and Itoh \(2020\)](#) compared healthcare employee satisfaction in Japan and China, finding a common satisfaction model with additional patient relationship factors in China; differences in satisfaction levels between professions and countries highlight the need for culturally and professionally specific improvement strategies. Female employees in healthcare institutions are twice as likely to leave their jobs due to dissatisfaction, a concerning trend given that, aside from female doctors, most auxiliary medical staff are women ([Al-Surimi et al., 2022](#)). [Kitsios and Kamariotou \(2021\)](#) indicated that relationships with colleagues and achievement levels are primary motivators for hospital employees, while rewards and job characteristics are less influential; thus, management should foster a strong workplace climate and recognize employee efforts to enhance performance. Nurses experienced higher levels of

burnout and lower satisfaction compared to other healthcare workers, with factors such as educational level, shift work, and perceptions of understaffing contributing to these outcomes ([Galanis et al., 2023](#); [Alumran et al., 2021](#)). The study reveals that dissatisfaction among hospital staff primarily stems from inadequate salary and benefits, with workload and administrative challenges also impacting job satisfaction. Unlike professional pride or relationships with colleagues, compensation issues are crucial for retaining skilled personnel, urging management to focus on improving these aspects for nurses ([Olaniyan et al., 2023](#)).

The COVID-19 pandemic has adversely affected the job satisfaction of healthcare workers, mainly due to poor preparedness, heightened stress levels, and increased burn-out ([Afulani et al., 2021](#); [Leskovic et al., 2020](#)). Despite this, [Capone et al. \(2022\)](#) highlighted that employees in healthcare institutions were extremely satisfied with organizational support and other dimensions of non-specific non-technical skills that contributed to combating the COVID-19 pandemic. On the other hand, during the COVID-19 pandemic, consumers behaved unpredictably, tending to venture out less from their safe environments and experiencing changes in their needs ([Šostar and Ristanović, 2023b](#); [Šostar et al., 2023](#)).

Most facilities are ill-equipped to handle the challenges of increased longevity and sudden disruptions, while the healthcare professional-to-patient ratio continues to decline in our rapidly aging society ([Zsarnoczky-Dulhazi et al., 2023](#)). [Nguyen et al. \(2021\)](#) recommended that private healthcare providers and the government in Vietnam should invest in improving service quality and adopt social branding and e-services to better engage customers. It also suggests that future research should analyze the cost-effectiveness of different service quality dimensions in influencing customer behavior. Patients generally have a favorable view of private health services when they perceive the quality to be credible, reliable, tangible, and responsive, despite feeling a lack of empathy from the health provider ([Mrabet et al., 2022](#)). [Kalaja and Krasniqi's \(2022\)](#) analysis indicated that all aspects of service quality significantly impact overall patient satisfaction in public hospitals, underscoring the importance of incorporating patients' perspectives in healthcare assessments and informing healthcare managers and policymakers in Albania to consider these insights for future healthcare reforms. Collaborating with private medical institutions can significantly enhance the expertise and skills of medical staff in regional public hospitals ([Mallat et al., 2021](#); [Woo and Choi, 2021](#)). [Škoko et al. \(2011\)](#) highlighted the crucial role of the central government in enhancing healthcare system conditions to increase citizen satisfaction by reducing waiting lists and improving the quality of healthcare services.

The study by [Yasin et al. \(2024\)](#) concluded that the COVID-19 pandemic significantly reduced job

satisfaction among nurses, primarily due to increased workload and emotional stress. Healthcare workers experienced a significant decline in physical and mental health due to the increased workload and emotional stress during the pandemic (Chemali et al., 2022). The pandemic increased the risk of "compassion fatigue" among healthcare workers, which can have long-term effects on their well-being and the quality of care (Hui et al., 2023). Additionally, the long-term effects of the COVID-19 pandemic are likely to further burden nurses, with increased demand for hospital care and growing workloads (Berlin et al., 2022). The COVID-19 pandemic has had a profound negative impact on the mental health of healthcare workers, including increased stress, anxiety, depression, as well as other types of mental disorders (Chen and Durr, 2022; Embrett et al., 2023). The study by Wlazło et al. (2024) emphasized that healthcare system staff should be provided with adequate psychological support, along with the promotion of a healthy lifestyle among healthcare staff to create a sustainable high-quality healthcare service system. On the other hand, the COVID-19 pandemic had a negligible impact on satisfaction with the services provided in the healthcare system. The study by Gotthardt et al. (2023) and Gashaw et al. (2024) concluded that there is no significant difference in patient satisfaction between in-person and telehealth consultations during the pandemic, indicating that both forms of healthcare delivery were equally accepted by patients. The systematic review by Kaur et al. (2022) revealed that patients were generally satisfied with telemedicine services during the pandemic, mainly due to convenience and easier access to healthcare, although some expressed concerns about the lack of personal interaction with doctors. When it comes to specific types of examinations, such as urological exams, telemedicine was found to be inadequate due to the limitations of virtual physical examination (Holzman et al., 2023). Additionally, patient satisfaction with telemedicine was related to the continuity of care and the ability to express concerns, while dissatisfaction often stemmed from a perceived lack of support and poor communication during telehealth consultations (Pogorzelska et al., 2023). Despite this, older patients and those with chronic illnesses generally preferred in-person consultations, while younger patients and those with a higher quality of life were more satisfied with telemedicine consultations (Splinter et al., 2023). During the pandemic, issues with accessibility and timeliness of care were recorded, particularly in the context of regional differences and socio-economic factors (Saeed et al., 2024).

### 3. Materials and methods

The aim of this study is to determine the level of satisfaction among users of public and/or private healthcare services, as well as the reasons for choosing one over the other. Furthermore, by

determining the level of satisfaction among employees of public and/or private healthcare institutions, we will gain a better understanding of the attitudes of healthcare service users themselves.

The starting point of the research is a theoretical framework where the research objectives and hypotheses are set, comparing one's own findings with others, and linking one's own findings to theory. This is followed by conducting secondary research, which involves analyzing relevant scientific and professional literature, and primary re-search, namely communication with key participants. As mentioned earlier, surveying is carried out in healthcare institutions that relate to both public and private healthcare institutions, to determine the existing level of service quality in both types of institutions, patient satisfaction in private healthcare institutions - polyclinics, employee motivation, and the impacts on increasing the speed of service to patients. The respondents are experts in daily work in private or public healthcare institutions, and the sample is selected purposively, according to the researcher's decision. For the research, two survey questionnaires were conducted, one to determine the level of satisfaction among users of healthcare services (423 respondents) and the other to determine the level of satisfaction and motivation for work among healthcare workers in the mentioned sector (71 respondents – 50 from public and 21 from private health institutions). The respondents who participated in the survey were selected through random sampling. Random sampling in research, particularly in the healthcare sector, is crucial because it ensures that the sample accurately reflects the broader population, including both patients and employees. Random sampling eliminates selection bias, as every individual, whether a patient or an employee, has an equal chance of being included in the study. This is especially important when investigating various characteristics and the satisfaction of patients and employees, such as age, gender, health conditions, or working conditions, to obtain valid and comprehensive results. Additionally, this approach allows the research results to be more easily generalized to the broader population, which is essential for understanding and improving the quality of healthcare services and working conditions in the real world. In interpreting the results, descriptive statistics, t-test for dependent samples, degrees of freedom, significance level, and chi-square test will be used. The questionnaires used in the research underwent a process of validity and reliability testing before being applied to the sample of respondents.

The content validity of the questionnaires was ensured through a detailed literature review and consultations with experts in the healthcare field to ensure that the questions covered all relevant aspects of the constructions being studied. The test-retest method was also conducted, demonstrating the stability and reliability of the results upon repeated measurement.

In the mentioned survey (Table 1), a higher response rate was shown by the female population. Of the 423 adequately answered surveys, 301 were completed by women and 122 by men. The majority of those who completed the survey have a university degree, followed by individuals with a high school education, and those with a master's or doctorate degree, with only four individuals having completed primary school. Regarding the socio-economic status of the respondents, the majority, 198 respondents, consider themselves to be living at an average level. Nearly 90 respondents consider themselves to be somewhat above average, and only 8 believe they live significantly above average. Among the respondents, there are also those who consider themselves to be living below average, 48 respondents, and those who consider themselves to be somewhat below average, nearly 79 participants. The respondents were asked to assess their current health status, ranging from extremely satisfied with their health to very poor health. Nearly 152 respondents consider themselves to be in good health, followed by 142 respondents who consider themselves to be in very good health. Those who consider themselves to be in excellent health are 45 respondents, followed by those who consider themselves to be somewhat in poor health, totaling 72 respondents. The smallest number of respondents consists of a group that considers themselves to be in poor health or in very poor health, with 11 respondents and 1 respondent in very poor health, respectively. Regarding the survey among employees of public and/or private healthcare institutions, it was conducted without collecting or analyzing demographic indicators of the respondents, with a sample of 71 participants (50 from public and 21 from private healthcare institutions).

#### 4. Results and discussions

When discussing research related to private and public healthcare institutions and focusing on human resource management and their organization, there are not many authors who have tackled the challenges countries face. However, a few foreign authors have ventured into such research. One of them is certainly Begun and Kaissi (2004) who discussed successful examples from practice and analyzed the lack in existing healthcare organizations, as well as the impact of good human resource management because of patient satisfaction. Notably, research and comparisons of the long-standing operational methods of healthcare institutions considering market changes, such as advancements in technology, the informed and educated nature of today's patients concerning the availability of information, global transitions, and the shortage of medical staff, are significant. Working in such rapidly changing situations while continuously investing in teamwork, education, training, strategic planning, and motivating employees with the goal of improving service quality and patient satisfaction

presents a considerable challenge. Conducted analyses and comparisons are precisely those that provide a realistic insight into the operations or navigation among the challenges inherent to healthcare institutions. Real indicators of the state and engagement in the above-mentioned areas and activities are visible in surveys conducted among patients and among employees of private or public healthcare institutions. The research is conducted to demonstrate the effectiveness of organized and quality management of human resources, primarily in private healthcare institutions – polyclinics, and their impact on increasing the level of service quality, increasing employee motivation levels, and the possibility of enhancing synergy between public and private healthcare within the Republic of Croatia.

**Table 1:** Descriptive data of healthcare institution service users

	Frequency	Percentage
<b>Gender</b>		
Female	301	71.2
Male	122	28.8
<b>Education level</b>		
Primary school	4	0.9
High school	177	41.8
University degree	182	43
Master's/PHD	60	14.2
<b>Financial status</b>		
Significantly below average	48	11.3
Somewhat below average	79	18.7
Average	198	46.8
Somewhat above average	90	21.3
Significantly above average	8	1.9
<b>Health status</b>		
In very poor health	1	0.2
In quite poor health	11	2.6
Somewhat in poor health	72	17
In good health	152	35.9
In very good health	142	33.6

In subsequent analyses (Table 2), responses were directly compared where respondents evaluated how satisfied they were with certain aspects of their work in private and public healthcare institutions, and based on this analysis, it was determined in which segments there are statistically significant differences. In addition to the arithmetic mean and standard deviation, tools used include t-test, degrees of freedom, and level of significance.

In public healthcare institutions, compared to private ones, employees are more likely to assess that there are many tasks they must perform besides working with patients ( $t= 3.59, df=69, p<0.01$ ). The unavoidable work that doctors themselves perform besides patient care amounts to administrative tasks. Doctors themselves enter diagnoses, anamneses, patient histories, and therapies. If necessary, they also contact other specialist departments for consultations and to coordinate the therapy of a specific patient, which significantly takes away the time that should be spent in direct contact with the patient. According to the results, employees, primarily doctors in private healthcare institutions, do not perform this task themselves or not to the extent that doctors in public healthcare institutions do. In private healthcare institutions,

compared to public ones, employees are more likely to believe that the way of working in their institution is functional ( $t=3.26$ ,  $df=69$ ,  $p<0.01$ ). These results suggest better organization within private healthcare institutions, leading to a higher quality relationship between employees and departments, as well as a closer and more quality relationship between doctors and patients. Employees of public healthcare institutions, more than those in private

healthcare institutions, believe that any other systematization or work organization would achieve greater functionality ( $t=4.31$ ,  $df=69$ ,  $p<0.01$ ). Noticing the deficiencies and shortcomings they themselves suffer, employees of public healthcare institutions call for a different and better systematization or work organization within their institution.

**Table 2: Satisfaction of doctors and medical staff with working conditions in public and/or private healthcare institutions**

	Institution type	M	SD	t	SS	P
There are many tasks I need to perform (e.g., administration) besides working with patients*	Private	3.19	1.692	-3.585	69	.001
	Public	4.30	.909			
The workflow in the healthcare institution where I work is very functional*	Private	4.00	1.183	3.260	69	.002
	Public	3.00	1.178			
A different systematization or work organization would achieve greater functionality*	Private	2.76	1.375	-4.314	69	.000
	Public	4.02	1.000			
I believe changes are necessary for the entire hospital system to be more efficient*	Private	3.38	1.499	-3.800	69	.000
	Public	4.44	.837			
I am satisfied with the level of communication between different departments*	Private	3.57	1.363	3.181	69	.002
	Public	2.60	1.088			
I am satisfied with the level of communication between doctors and medical technical staff	Private	3.81	1.250	1.224	69	.225
	Public	3.42	1.214			
I am satisfied with the level of communication between management and employees	Private	3.43	1.399	1.848	69	.069
	Public	2.78	1.329			
I am satisfied with the level of communication of medical staff with patients	Private	4.14	1.108	1.828	69	.072
	Public	3.68	.913			
Generally, I am satisfied with the work organization at my workplace*	Private	4.10	1.091	2.790	69	.007
	Public	3.26	1.175			
I think the system is efficient, but it overburdens employees*	Private	2.57	1.287	-2.427	69	.018
	Public	3.34	1.189			
I am dissatisfied with the overall work organization*	Private	2.29	1.384	-3.202	69	.002
	Public	3.22	.996			
I am satisfied with the working conditions at my workplace*	Private	4.14	1.062	2.961	69	.004
	Public	3.22	1.250			
My workplace allows me to work with patients at a high level without interruptions	Private	3.52	1.250	1.864	69	.067
	Public	2.94	1.185			
I am satisfied with the level of safety at my workplace	Private	3.86	1.352	1.787	69	.078
	Public	3.24	1.318			
I would be more satisfied with my job if I had fewer patients*	Private	2.62	1.658	-3.869	69	.000
	Public	3.86	1.010			
Many patients prevent me from dedicating more time to each patient*	Private	2.57	1.630	-5.225	69	.000
	Public	4.20	.969			
I believe I provide patients with the highest level of service	Private	4.24	.831	1.770	69	.081
	Public	3.78	1.055			
If my working conditions allowed it, I would spend more time with patients*	Private	3.33	1.683	-3.835	69	.000
	Public	4.44	.760			
I think it is necessary to change the workflow to ensure longer consultations per patient*	Private	3.24	1.670	-3.710	69	.000
	Public	4.36	.875			

\*: Statistically significant based on the t-test results; M: Mean; SD: Standard deviation; t: t-test statistic; SS: Sample size; P: P-value

Employees of public healthcare institutions, compared to private healthcare institutions, are more likely to believe that changes are necessary for the entire system in the hospital to be more efficient ( $t=3.80$ ,  $df=69$ ,  $p<0.01$ ). Reducing administrative burdens is one way to reorganize work in public healthcare institutions. By doing so, as the employees themselves emphasize, they would have much more time and a closer relationship with the patient. Such reorganization inevitably encourages better synergy between doctors and patients, ultimately leading to a better outcome for the patient and a more satisfied doctor. Employees of private healthcare institutions, compared to public healthcare institutions, are more satisfied with the level of communication among different departments ( $t=3.18$ ,  $df=69$ ,  $p<0.01$ ). It is worth noting that private healthcare institutions are, in most cases, smaller organizational units, making the organization among departments easier and thus more efficient. Large systemic units opt for a more

complex organization, which in turn leads to more complex communication between departments. Numerous diagnostic departments in hospitals, in a good organization, can also be at an advantage over smaller private healthcare institutions. If the organization and communication within the hospital are at a high or functional level, it can be very beneficial for both the patient and the doctor, as well as for public healthcare institutions. Employees of public healthcare institutions and private healthcare institutions are equally satisfied with the level of communication between doctors and medical technical staff ( $t=1.22$ ,  $df=69$ ,  $p>0.05$ ). If we remember that this is about the healthcare sector and patient health should indeed be a priority, then such a result in communication between doctors and medical technical staff is nothing more than expected. This result is commendable for both doctors and medical technical staff. Employees of public healthcare institutions and employees of private healthcare institutions are equally satisfied

with the level of communication from management to employees ( $t=1.85$ ,  $df=69$ ,  $p>0.05$ ). If any of the institutions have clearly set criteria and work priorities, then it is clear how to function and what to expect from the system and organization. All of this comes through management, which in these cases has positioned itself correctly. Any communication breakdown among any "member" of a healthcare institution would lead to dissatisfaction among employees, and between specialist departments, ultimately negatively affecting the service and patient dissatisfaction, which is in no one's interest. Employees of public and private healthcare institutions are equally satisfied with the level of communication between medical staff and patients ( $t=1.83$ ,  $df=69$ ,  $p>0.05$ ). Setting the right priorities for employees, in this case, medical staff, that the patient and their health come first results in a high level of satisfaction for both patients and medical staff. Employees of private healthcare institutions, compared to those in public healthcare institutions, are more likely to state they are generally satisfied with the organization of work at their workplace ( $t=2.79$ ,  $df=69$ ,  $p<0.01$ ). Establishing a healthy organization, correct priorities, and continuous communication naturally leads to satisfaction. Employees of public healthcare institutions, compared to those in private healthcare institutions, are more likely to think the system is efficient but at the expense of the employees ( $t=2.43$ ,  $df=69$ ,  $p<0.05$ ). It's inevitable to mention that as the population increases and the number of doctors decreases, this logically leads to the overburdening of the doctors. Such a work mode leads to employees' "burnout." Indeed, the moral and ethical duty of a doctor is primarily the care of the patient's health. Refusing examinations, delaying treatments, and saving at the patient's expense are not permissible. Besides, doctors swear to "unconditional" help to the patient at any time and under any circumstances, but this does not specify the quota a doctor is capable of handling. Therefore, large systems like hospitals, according to results, are more efficient and complete regarding a broader spectrum of services or specialist departments but as stated, "at the expense" of employees. Employees of public healthcare institutions, compared to those of private healthcare institutions, are more likely to state they dislike the overall organization of work ( $t=3.20$ ,  $df=69$ ,  $p<0.01$ ). As previously mentioned, a hospital as a large and extensive healthcare institution requires a more complex and demanding organization than smaller private healthcare institutions. It also involves a larger number of departments, and a larger number of medical staff who also believe that they and their department are more of a priority. Often this relates to funding, renewal of a certain department, and working conditions but primarily investment in new, modern equipment necessary for quality diagnostics today. As technology advances rapidly today, funding is more frequent and often far greater than in previous generations. Also common are old hospitals or

buildings where healthcare activities take place. This is clearly frustrating among doctors and medical staff, and thus they are forced to work and organize in the conditions they find themselves in. Employees of public healthcare institutions, compared to those of private healthcare institutions, are more likely to state they are satisfied with conditions at their workplace ( $t=2.96$ ,  $df=69$ ,  $p<0.01$ ). Private healthcare institutions are relatively new institutions that carry their advantages and drawbacks. In this case, the advantage would certainly be working conditions. New buildings with adapted clinics also contribute to better organization and more efficient work. Modern equipment allows easier work for doctors, which in turn results in a higher level of satisfaction among patients. On the other hand, hospitals still offer a more comprehensive spectrum of diagnostic departments in one place. Employees of public and private healthcare institutions equally believe their workplace allows them to work with patients at a high level without interruptions ( $t=1.86$ ,  $df=69$ ,  $p>0.05$ ). With such an equal result, medical staff express how important the workplace is for their work with patients to be quality and consistent with every patient's expectation. Conversely, dissatisfaction arises primarily among doctors, which ultimately reflects on patients. Employees of public and private healthcare institutions are equally satisfied with the level of safety at their workplace ( $t=1.97$ ,  $df=69$ ,  $p>0.05$ ). According to these results, we conclude that the standards and safety conditions in the Republic of Croatia, in both public and private healthcare institutions, are at a satisfactory level. In any case, it can always be better, but according to these results, it is important to emphasize that the medical staff in the Croatian healthcare system feels safe. Employees of public healthcare institutions, compared to those of private healthcare institutions, are more likely to state they would be more satisfied with their work if there were fewer patients ( $t=3.87$ ,  $df=69$ ,  $p<0.01$ ). The already mentioned fact, easily forgotten, is that the population of patients is increasing, and the emigration trend is rising. In such an unfavorable situation, both doctors and patients suffer. The organization of public healthcare institutions becomes more demanding, and the service provided to patients is not adequate. This is a problem of the entire system, not just the healthcare system but broader. Various attempts at reform have still not put an end to this problem, which affects everyone and is clearly visible in the results of this survey. Employees of public healthcare institutions, compared to those of private healthcare institutions, are more likely to state that many patients prevent them from dedicating more time to each patient ( $t=5.23$ ,  $df=69$ ,  $p<0.01$ ). The excessive number of patients per doctor in public healthcare institutions is a chronic problem throughout Croatia. The reason why this is not as much of a problem in private healthcare institutions is that services in such institutions are paid for directly by patients or indirectly through health insurance companies with



which the private institution has a contract. In this case, patients can have their appointments at a time that suits them and in a very short period, which is mutually beneficial. However, this raises the question of morality and ethics, namely the equality of service quality to the patient. Employees of private healthcare institutions and public healthcare institutions equally believe they provide patients with the highest level of service ( $t=1.77$ ,  $df=69$ ,  $p>0.05$ ). Doctors and other medical staff have pledged to provide healthcare services to patients at any time and under any conditions they find themselves in. At that moment, the doctor or medical worker provides their service and knowledge to the patient at the highest level they are capable of. Employees of public healthcare institutions, compared to those of private healthcare institutions, are more likely to believe they would dedicate more time to patients if their working conditions allowed it ( $t=3.84$ ,  $df=69$ ,  $p<0.01$ ). The working conditions mentioned refer not only to the conditions in which doctors work but also to the organization they work. In such cases, the organization is more demanding and complex. It requires more time, resulting in less time spent with the patient. Thus, this is another additional complicating situation that goes "at the expense" of both doctors and patients. Employees of public healthcare institutions, compared to those of private healthcare institutions, are more likely to believe that changing the way of work would ensure longer consultations per patient ( $t=3.71$ ,  $df=69$ ,  $p<0.01$ ). Today, despite all the technology and faster ways of life and living, according to these results, it is considered that doctors do not have enough adequate time to spend with patients. On one hand, technology, whether computer or medical, has alienated the closer relationship between patient and doctor. Today's work is made easier for doctors in terms of diagnostics and treatment prevention, but on the other hand, it is made harder precisely because of weaker contact with patients. Therefore, changes brought by more recent times also require changes in the way of work within the healthcare institution. According to the results, this is more necessary in public healthcare institutions because, as already mentioned, public healthcare institutions are more extensive in diagnostics and departments than is the case in private healthcare institutions. Based on everything stated in the analysis of attitudes and interpretation of employee satisfaction in public and private healthcare institutions, we can CONFIRM HYPOTHESIS 1, which proves that the level of employee satisfaction is higher in private healthcare institutions. If the approach to human resource management, as in private healthcare institutions, were applied, employee satisfaction and ultimately patient satisfaction would be much higher.

In the following analyses (Table 3), responses were directly compared where respondents evaluated their satisfaction with various aspects of private and public healthcare institutions; a t-test for dependent samples was used for this analysis. A total

of 423 respondents participated in this part of the research, but not all responded to all questions, and those who did not provide an answer for specific questions were not included in the analysis for those questions. Therefore, the degrees of freedom (df) are less than the total number of results. A significant t-test means that the respondents' answers differ significantly in two conditions (public or private institution), and respondents are more satisfied in the case (public or private institution) where the arithmetic mean (AM in Table 3) of responses is higher. All t-tests have been shown to be significant.

Patients are, on average, more satisfied with the doctor-patient relationship in private than in public healthcare institutions ( $t=14.29$ ,  $df=298$ ,  $p<0.01$ ). Patients' positive experience in private healthcare institutions is undoubtedly higher due to better system organization, thereby allowing doctors to spend more time with each patient. Patients are more satisfied, on average, with the courtesy of doctors in private healthcare institutions than in public ( $t=13.80$ ,  $df=292$ ,  $p<0.01$ ). The absence of pressure from many waiting patients creates a more relaxed atmosphere and greater intimacy between the patient and doctor, a component missing in public healthcare institutions due to the large number of patients, making patients feel like they are "on a conveyor belt." Patients are more satisfied, on average, with communication with the doctor in private compared to public healthcare institutions ( $t=14.35$ ,  $df=291$ ,  $p<0.01$ ). When a doctor knows there is enough time for each patient, there is room for more suitable and in-depth communication, creating a quality mutual relationship, ensuring transferred information is not left unclear, and allowing the patient's health condition to be explained in detail.

Patients are more satisfied with the professionalism of doctors in private compared to public healthcare institutions ( $t=12.57$ ,  $df=292$ ). Every doctor in the Republic of Croatia has pledged to privacy of information, and patient confidentiality, which also covers aspects of doctor professionalism in their work and towards patients. Ideally, this should be the case in every healthcare institution, private or public, but the moment of discretion, intimacy, and confidentiality is more present in private healthcare institutions than in public. The results of this survey clearly show the advantage when it comes to the professionalism of doctors and other medical staff. Patients are more satisfied, on average, with the attention and professionalism of nurses and technicians in private compared to public healthcare institutions ( $t=11.64$ ,  $df=285$ ,  $p<0.01$ ). The fact that services in private healthcare are paid directly by the patient means it is in every institution's interest to make their patient feel comfortable, safe, and satisfied.

Otherwise, private healthcare institutions could not survive in the market, and the future of such a company would not be long-term. Every patient and every examination means a step forward for the healthcare institution. Patients are more satisfied, on

average, with the duration of consultations in private compared to public healthcare institutions ( $t=13.29$ ,  $df=289$ ,  $p<0.01$ ). The time allowed in private

healthcare institutions is certainly an advantage over public institutions.

**Table 3:** Analysis of user satisfaction with services of public and private healthcare institutions

	M	SD	t	SS	P
Satisfaction with the doctor-patient relationship in private healthcare institutions	4.21	0.879	14.29	298	0
Satisfaction with the doctor-patient relationship in public healthcare institutions	3.25	1.029			
Satisfaction with the courtesy of doctors in private healthcare institutions	4.29	0.854	13.80	292	0
Satisfaction with the courtesy of doctors in public healthcare institutions	3.28	1.062			
Satisfaction with communication with doctors in private healthcare institutions	4.23	0.841	14.35	291	0
Satisfaction with communication with doctors in public healthcare institutions	3.22	1.103			
Satisfaction with the amount of treatment costs in private healthcare institutions	3.00	1.133	-7.31	289	0
Satisfaction with the amount of treatment costs in public healthcare institutions	3.60	1.100			
Satisfaction with the overall treatment costs (such as transportation to the hospital, accommodation, medication, etc.) in private healthcare institutions	2.94	1.081	-3.54	275	0
Satisfaction with the overall treatment costs (such as transportation to the hospital, accommodation, medication, etc.) in public healthcare institutions	3.19	1.076			
Satisfaction with the price-quality ratio of the service received in private healthcare institutions	3.72	1.053	8.21	289	0
Satisfaction with the price-quality ratio of the service received in public healthcare institutions	3.05	1.106			
Satisfaction with the professionalism of doctor-patient interactions in private healthcare institutions	4.25	0.838	12.57	292	0
Satisfaction with the professionalism of doctor-patient interactions in public healthcare institutions	3.41	1.087			
Satisfaction with the care and professionalism of nurses and technicians in private healthcare institutions	4.21	0.864	11.64	285	0
Satisfaction with the care and professionalism of nurses and technicians in public healthcare institutions	3.27	1.187			
Satisfaction with the duration of consultations in private healthcare institutions	4.11	0.902	13.29	289	0
Satisfaction with the duration of consultations in public healthcare institutions	3.07	1.155			
Satisfaction with the speed of receiving results in private healthcare institutions	4.25	0.986	13.49	293	0
Satisfaction with the speed of receiving results in public healthcare institutions	3.14	1.265			
Satisfaction with the waiting time for an appointment in private healthcare institutions	4.18	1.068	22.60	291	0
Satisfaction with the waiting time for an appointment in public healthcare institutions	2.12	1.205			
Satisfaction with the wait time from entering the healthcare facility to the consultation in private healthcare institutions	4.12	1.017	21.53	290	0
Satisfaction with the wait time from entering the healthcare facility to the consultation in public healthcare institutions	2.26	1.174			
Satisfaction with the coordination between doctors, nurses, and administration within the hospital in private healthcare institutions	4.11	0.895	15.65	289	0
Satisfaction with the coordination between doctors, nurses, and administration within the hospital in public healthcare institutions	2.92	1.029			
Satisfaction with privacy protection (keeping intimate information about your health condition) in private healthcare institutions	4.25	0.886	8.20	288	0
Satisfaction with privacy protection (keeping intimate information about your health condition) in public healthcare institutions	3.70	1.157			
Satisfaction with the time doctors dedicate to your health in private healthcare institutions	4.08	0.939	13.43	288	0
Satisfaction with the time doctors dedicate to your health in public healthcare institutions	3.02	1.169			
General satisfaction with the quality of service in private healthcare institutions	4.08	0.806	13.44	286	0
General satisfaction with the quality of service in public healthcare institutions	3.13	1.001			

The large number of patients "suffocating" doctors in public institutions prevents doctors from dedicating enough time and attention to each patient, ultimately leading to dissatisfaction among patients and often among doctors as well. Patients are more satisfied, on average, with the speed of receiving results in private compared to public healthcare institutions ( $t=13.49$ ,  $df=293$ ,  $p<0.01$ ). Due to the large number of patients in public healthcare institutions, obtaining test results requires a longer waiting period. If the duration of waiting for results requires a longer time, it often leaves the patient with a feeling of uncertainty, resulting in dissatisfaction. It is known that people generally dislike waiting, especially if it concerns significant health results, which do not contribute to patient satisfaction. Patients are more satisfied, on average, with the waiting time for an appointment in private compared to public healthcare institutions ( $t=22.6$ ,  $df=291$ ,  $p<0.01$ ). In cases where further specialist examinations are necessary, in many instances in public healthcare institutions, the wait can be several months or even up to a year. The same examinations can be conducted in private healthcare institutions immediately or within a week or two, highlighting private healthcare institutions

and breaking into the "open" market. Moreover, this is a problem at the level of the entire healthcare system within the Republic of Croatia. The saturation of patients and their diagnostic examinations create a long waiting list, while private healthcare institutions can conduct the same examinations in a very short time. Therefore, according to these results, there is a basis for establishing synergy between public and private healthcare institutions. Patients are more satisfied, on average, with the wait time from entering the facility to the consultation in private compared to public healthcare institutions ( $t=21.53$ ,  $df=290$ ,  $p<0.01$ ). As private healthcare institutions have an established practice of scheduling patients, this does not create long waits for consultations or crowding in waiting rooms. A realistic number of patients is scheduled according to the anticipated time spent in the clinic with the doctor. This part of the job requires good organization, an understanding of the nature of the work within each private healthcare institution, the demand for examinations, and the type and complexity of patient needs. The complexity of patient needs is expected due to the payment for certain examinations. The results of this survey show how private healthcare institutions are aware of this

and adapt to patients' demands and expectations; in other words, they listen to patient needs and adjust accordingly. The rapid adaptation to the market is facilitated by the smaller system of private healthcare institutions compared to the large systems like public healthcare institutions. Patients are, on average, more satisfied with the coordination between doctors, nurses, and administration in private compared to public healthcare institutions ( $t=15.65$ ,  $df=289$ ,  $p<0.01$ ). The smaller system results in better coordination and organization within the medical staff, which is reflected in the patient and their satisfaction or dissatisfaction received in a specific healthcare institution. This also creates satisfaction or frustration among doctors and medical staff, who greatly desire good coordination and harmony within any healthcare institution. The above facts, as well as the previous ones, are also confirmed in the results of this survey question. Patients are more satisfied, on average, with the preservation of private information in private than in public healthcare institutions ( $t=4.25$ ,  $df=288$ ,  $p<0.01$ ). The very image of the chart "speaks" of the experience and satisfaction with privacy in private as much as in public healthcare institutions. Regardless of the vow of patient confidentiality, if human factors are involved, it is harder to maintain adequate quality. However, smaller institutions with fewer staff can provide private healthcare facilities with certain advantages over public ones. Patients are more satisfied, on average, with the time doctors dedicate to their health in private compared to public healthcare institutions ( $t=13.43$ ,  $df=288$ ,  $p<0.01$ ). The advantage of having fewer patients in private healthcare institutions brings these institutions another advantage that patients greatly appreciate. When it comes to health, it is essential for patients to be as informed as possible and to understand what to do and how to handle it. Often, patients seek a "second" opinion if the first opinion is not clear enough or if they are unsure how to proceed, and need help with such an important decision. Trust is what is built and created with patients. Such a relationship requires time spent with the doctor, which is precisely what is lacking in public healthcare institutions. Patients are generally more satisfied with the quality of service in private compared to public healthcare institutions ( $t=13.44$ ,  $df=286$ ,  $p<0.01$ ). Taking all the examples, arguments, facts, and results of this survey question, it is easy to present the result of general satisfaction by comparing these two similar yet different healthcare institutions. Most respondents "leaned" towards better experience in private healthcare institutions than in public ones. The facts that prevailed in favor of the private institution are security, trust, attention, courtesy, better communication with doctors and other medical staff, time spent and dedicated only to them, professionalism, intimacy, discretion, and the length or shortness of the waiting time for the scheduled examination to the speed of obtaining test results. This study CONFIRMS HYPOTHESIS 2, showing a higher degree of

satisfaction among healthcare service users with private healthcare institutions compared to public ones.

Patients are on average more satisfied with the cost of treatment in public compared to private healthcare institutions ( $t=7.31$ ,  $df=289$ ,  $p<0.01$ ). In most cases, examinations in private healthcare institutions are charged. The service in such institutions is more organized, faster, more comfortable, of higher quality, more personal, and significantly quicker regarding obtaining information, appointment scheduling, and waiting for the appointment. It should also not be overlooked that the technical equipment in private healthcare institutions is of higher quality, newer, or more modern. Working with such equipment not only makes working with patients easier but also boosts satisfaction among patients. A simple example would be the ultrasound examination of pregnant women on 2D ultrasound where the image is almost unrecognizable to any layman, while examinations on 3D or 4D ultrasound are much clearer, more interesting, and exciting to the patient. Indeed, such modern technical medical equipment requires a much larger financial investment than basic and older equipment. As such, it must be refunded for the business to survive. Patients have the choice of entrusting their health to a public healthcare institution, thereby obtaining the necessary information under basic but satisfactory conditions, or getting deeper information with modern medical equipment. Choices, possibilities, and the patient's own priorities are up to them to decide. Patients are on average more satisfied with the overall cost of treatment in public compared to private healthcare institutions ( $t=3.54$ ,  $df=275$ ,  $p<0.01$ ). Patients are on average more satisfied with the price-quality ratio of the service in private compared to public healthcare institutions ( $t=8.21$ ,  $df=289$ ,  $p<0.01$ ). If a patient needs treatment and it occurs in a public healthcare institution, medical care will be provided without any financial charge. In most cases, patients, employed people, military personnel, and mothers until the first year of their child, have assured healthcare in public healthcare institutions. In such a situation, the population feels and perceives healthcare as "free." Such a wrong or misleading perception of healthcare creates a false impression of public and private healthcare. Public healthcare requires the payment of health contributions that a patient deducts from their salary every month. Thus, many patients do not feel like they are paying for services in public healthcare while services in private healthcare have a price list by which the patient physically pays for a certain examination at that moment. The psychological aspect leaves a certain impression that is also visible in the survey results. These theses support the CONFIRMATION OF HYPOTHESIS 3, where it is clearly visible that a "free" healthcare system is far more acceptable to patients compared to a private one. The last four questions (Table 4) were analyzed using the chi-square test ( $\chi^2$ ), which is used when

we want to check if there are statistically significant differences in the proportions of certain responses (in this case, respondents had two possible answers: private or public institution). In this case, degrees of freedom are calculated as the total number of groups

we are comparing -1 (unlike the previous analysis where we calculated based on the total number of participants). In this instance, the groups we are comparing are respondents who provided one answer or the other.

**Table 4:** Patient preference when choosing between public and/or private healthcare institutions

	Public	Private	$\chi^2$	SS	P
In the case of minor health issues	370	53	237.56	1	0
For regular health check-ups	219	204	.532	1	.466
In the case of serious health conditions	258	165	20.447	1	0
In the case of seeking a second opinion	96	327	126.149	1	0

$\chi^2$ : Chi-square test statistic

In the case of minor health issues, respondents would more often opt for a visit to a public healthcare institution ( $\chi^2= 237.56$ ,  $df=1$ ,  $p<0.01$ ). This question resulted in favor of public healthcare because, for minor illnesses, the regular procedure is to go to one's general or family practitioner, who will then take care of prescribing the necessary therapy on prescription. In such cases, it's most often about a cold or flu or some other transient disease. In the case of severe surgical procedures, respondents would more often decide to go to a public healthcare institution ( $\chi^2= 20.447$ ,  $df=1$ ,  $p<0.01$ ). When it comes to severe surgical interventions, patients place their trust in public healthcare institutions. In such cases, the greater number of specialist doctors and a broader spectrum of equipment that can be crucial in life-threatening situations, which may not be available in private healthcare institutions, are counted on. Public healthcare institutions, or hospitals, hold this strength which is significantly felt among people or patients, and the survey results themselves show this. These two theses also CONFIRM HYPOTHESIS 3, where it is evident that the cost of treatment plays a significant role in a patient's decision-making regarding treatment, with many opting for private healthcare institutions.

For regular health check-ups, respondents would equally often decide to visit either a public or a private healthcare institution ( $\chi^2= 0.532$ ,  $df= 1$ ,  $p>0.05$ ). Regular check-ups usually start with the family doctor, who sends the patient for more detailed tests if indicated. However, according to the results, many respondents still opt for regular or systematic examinations in private healthcare institutions. The reason for this is that such basic diagnostic exams are often performed at one location and in a very short time by private institutions. They collect all the findings of an individual patient and compile them into a document accompanied by the overall opinion of the doctor in a simple and understandable way to the patient, which is then received via mail or email. This method is acceptable to patients, but what public healthcare institutions lead in is the price, which patients do not pay in public institutions but are obliged to do so in private institutions. In the case of seeking a second opinion, respondents would more often decide to go to a private healthcare institution ( $\chi^2=126.149$ ,  $df=1$ ,  $p<0.01$ ). The lack of time spent with the doctor in public institutions, establishing intimacy, and trust

with the doctor "pulls" patients towards seeking that "second" opinion. In several cases, the same doctor who works in a hospital also conducts exams and consultations in private institutions, and in such cases, patients still decide to go to private institutions to see the same doctor. Such cases certainly raise questions about morality, ethics, and equality among patients or the actions of doctors, the same doctors who work in both private and public healthcare institutions. According to the results obtained from this survey question, as many as 327 respondents out of a total of 423 answered that they would go to a private healthcare institution for a second opinion. This fact shows the need for private healthcare institutions. These two theses also CONFIRM HYPOTHESIS 2, where there is a higher degree of trust and satisfaction in private healthcare institutions.

At the core of an exemplary healthcare system lies Knowledge Management (Fig. 1). This principle goes beyond mere data collection; it involves the strategic acquisition, sharing, and utilization of knowledge to foster clinical excellence, innovative research, and educational growth. Through effective knowledge management, healthcare professionals can access and apply the latest evidence-based practices and medical advancements, ensuring patient care is both current and efficacious. Another cornerstone is the Insurance of Safe Working Conditions. The health and safety of healthcare workers are paramount, not just for their own well-being but also for the maintenance of high-quality patient care. This involves rigorous adherence to health and safety standards, provision of personal protective equipment, and implementation of protocols that minimize risks and prevent workplace injuries. A safe working environment also contributes to job satisfaction and employee retention, which are crucial for stability and continuity of care. Equally important is the Provision of a Healthy Environment. This encompasses both the physical and psychological aspects of the healthcare setting. A clean, well-maintained facility reduces the risk of infection and enhances patient recovery, while a supportive, stress-free atmosphere promotes the mental well-being of both patients and staff. Creating a healthy environment also means addressing the social determinants of health, ensuring patients have access to the resources they need for a healthy life beyond medical treatment.

Quality Pay stands as a fundamental element in attracting and retaining skilled healthcare professionals. Competitive salaries, benefits, and rewards for excellence ensure that the healthcare sector remains an attractive career choice for talented individuals. Regular Employee Stimulation goes hand in hand with a robust incentive system. Continuous professional development opportunities, such as workshops, conferences, and training programs, keep staff engaged and abreast of the latest developments in their field. This not only enhances their job satisfaction but also ensures that patient care is administered with the most current knowledge and techniques. The Adequacy of Staff Numbers is critical to avoid overwork and burnout among healthcare workers. Adequate staffing levels ensure that each patient receives the attention and care they need, reducing waiting times and preventing errors. It also allows healthcare workers to spend more time with each patient, fostering a more personal and thorough approach to care. The implementation of Technological Innovations can revolutionize healthcare delivery. From electronic health records to telemedicine and advanced diagnostic tools, technology can streamline operations, improve diagnostic accuracy, and facilitate better patient outcomes. Moreover,

technology can enhance access to care, particularly for remote or underserved populations. Sufficient Patient Time is essential for understanding patient needs, building trust, and delivering comprehensive care. This means allocating enough time for consultations, ensuring healthcare providers can thoroughly assess, diagnose, and treat patients without rushing, leading to better health outcomes and patient satisfaction. Short Waiting Lists and High-Speed Diagnosis are indicative of an efficient healthcare system. They reflect an organization's ability to manage resources effectively and meet patient needs promptly. Reducing waiting times for treatments and diagnoses can significantly impact patient out-comes, particularly in time-sensitive conditions. Low Healthcare Costs, Transparency in Operations, Personalized Medicine, and Short Wait Times collectively contribute to a patient-centered healthcare system. Affordability ensures that high-quality healthcare is accessible to all segments of the population, while transparency builds trust and accountability. Personalized medicine represents the future of healthcare, where treatments and preventive measures are tailored to the individual's genetic profile, lifestyle, and health history, promising more effective and efficient care.

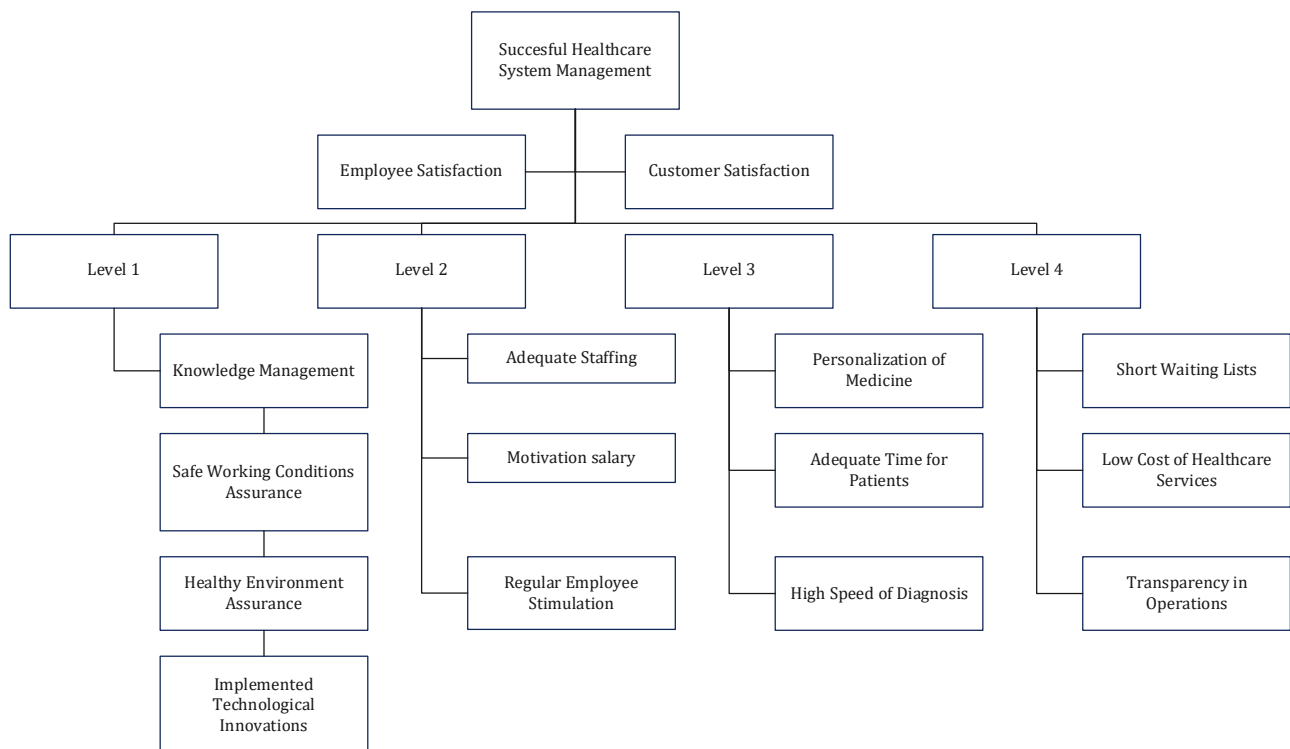


Fig. 1: Model of successful management of healthcare institutions

The study by Sultan et al. (2022) showed that it is necessary to improve public healthcare services during pandemic and crisis periods compared to private healthcare institutions to reduce patient and staff dissatisfaction. This also confirms hypotheses 1 and 2 of this study. Furthermore, the study by Sarkees and Ahmed (2022) confirmed that staff satisfaction directly affects their efficiency and motivation. On the other hand, the study by

Alolayyan and AlFaraj (2022) did not support hypothesis 2 of this study, stating that patient satisfaction is not related to the pandemic, as patients are satisfied if they receive their medication regardless of the method. Similarly, Coman et al. (2021) noted that a doctor's behavior towards the patient is the most important factor for their satisfaction, while other limitations have a lesser impact. It is evident that during the pandemic, the

private healthcare sector was better organized, which resulted in a higher level of patient satisfaction in private clinics compared to public ones (Methammem and Abdallah, 2022). This confirms hypotheses 2 and 3 of this study. Furthermore, the research by Shaikh and Sarkar (2023) confirmed these hypotheses and emphasized that the public healthcare system needs better administration and decision-makers need to plan better to bring satisfaction in public healthcare systems closer to that in private ones, especially during pandemics and other crisis periods.

## 5. Conclusions

A successful organization founded on human resource management can achieve a higher quality of healthcare service received by patients, particularly in private healthcare institutions. With better organization within private institutions, it's not only the patients who are more satisfied but also the professional staff, for whom this organization has enabled the provision of quality service. Thus, by highlighting the quality organization within human resources with these facts, we contribute to the importance of mutual satisfaction resulting in better service quality. By achieving better strategies based on the services of private healthcare institutions, we demonstrate how organization plays a significant role in achieving business success, mutual satisfaction of both patients and staff and survival in the open market. Acknowledging the importance of quality and successful organization, and its strategic and conceptual advancement, is complex and demands the engagement of human resources, making the necessity for intelligent capacity management imperative. The foundation of this scientific paper is based on facts and research focused on quality organization directed toward human resource management.

Healthcare services available to patients in Croatia include public healthcare institutions and private healthcare institutions. Public healthcare institutions are accessible to all citizens of the Republic of Croatia. Every employed citizen is required to deduct from their monthly earnings for basic health insurance. Furthermore, every mother up to the first year of the child has assured basic health insurance, as do unemployed individuals who do not lose the right to use such health insurance. The public health system can be considered highly socially conscious. Such a state of healthcare is a double-edged sword for the system that supports it. On the one hand, it's good for the population, which will not be left uncared for or without medical assistance, while on the other hand, the population has become accustomed to this system and simultaneously believes that in healthcare, "almost everything is free" and available. Most of the population still does not have a sense of how much a preventive medical examination costs or how much a surgical operation requires in terms of financial resources or doctors' time. The population knows it

will be cared for, treated, and financially covered, leaving other issues to be borne by the system. Problems within public healthcare institutions arise in several areas, most often related to financial issues or lack of money, then poorly developed organizations or poorly implemented organizational structures.

Healthcare as a system is a very sensitive area where any change results in a strong reaction from the population. Sometimes attempts at reforms in healthcare bring betterment for the population, yet they often protest because changes are generally hard to accept among the population. Among the latest healthcare reforms was the one based on "merging hospitals" or staff for the redistribution of job-examinations according to the scope of patients in certain areas. It was observed that there was a lack of doctors, and an uneven ratio of the number of patients per doctor, with some doctors being overwhelmed by the number of patients while other doctors in nearby hospitals would have only a few patients in a day. Such reorganization was implemented only "on paper." Doctors remained in their hospitals as they had been working up to that point. In other words, the reform was implemented, but in practice, the situation remained unchanged.

A significant difference between public and healthcare institutions is indeed in healthcare services. Public healthcare institutions are at a higher social level than private ones, but that doesn't mean that in the case of urgent provision of healthcare services, the service in a private healthcare institution will be denied to the patient. Private healthcare institutions are based on what primarily public healthcare institutions are not able to provide to patients. Most often, this is based on the quality of service connected to the time spent with patients, resulting in their satisfaction. There are a few general facts to which the population is most sensitive, namely health and money. Patients not only seek but also expect their time spent with the doctor. In many cases, this is not possible in public healthcare institutions, and patients often seek their time and the quality of services in private healthcare institutions. What patients are most satisfied with in private healthcare institutions is the time spent with the doctor and the relationship and trust built between the doctor and patient, then the privacy of the patient's health condition, communication, professionalism, courtesy, consideration, and dedicated attention whether by the doctor or by nurses or medical technicians. Speed is a virtue in private healthcare institutions. Whether it relates to the speed of obtaining results, which patients certainly appreciate, the short waiting time for an appointment, or the lack of long waits in waiting rooms for certain examinations. Patients with experience in private institutions are also satisfied with the organization and communication within the private healthcare institution relating to doctors, nurses, or technicians, and administrative tasks related to patients. What patients object to are the costs they must cover on

the spot in that private healthcare institution. Namely, patients are required to pay for basic health insurance, and besides that, if they want additional services in private institutions, they must allocate additional funds, with which they are not satisfied.

The conditions in which doctors work, when employed in public healthcare institutions, are associated with a far lower level of satisfaction compared to doctors in private healthcare institutions. This is indicated by survey results conducted among doctors in both private and public healthcare institutions. The most common issues relate to the breadth of administrative work that doctors themselves must do, often due to a lack of staff such as nurses or technicians. Additionally, doctors point out the more complex communication and sluggishness of the system in public healthcare institutions. This is connected to challenging organizations and slowly implementable changes. The work atmosphere and technical and medical backwardness also complicate doctors' work in public institutions. The most critical issue is based on the large number of patients allocated to a single doctor. In such cases, not only are doctors not motivated, but it even leads to "burnout," which negatively impacts both the doctor and the patient, namely the quality of service provided. These conditions are not exemplary of work in public healthcare institutions; conversely, there's discussion about increasing motivation that synergistically affects the enhancement of service quality towards the patient.

It is essential to highlight the limitations of the study. Namely, the sample size and the possibility of generalization represent one of the significant limitations. Although the sample of 423 respondents who are healthcare users is relatively large, the sample of 71 respondents who are healthcare employees, especially those in the private sector (21 respondents), is considerably smaller. This discrepancy in sample sizes may limit the ability to generalize the results, as the experiences and satisfaction levels of the smaller group of respondents may not accurately reflect the broader population of healthcare employees. The study was conducted using purposive sampling for healthcare employees, which may introduce bias, as the selection of respondents depended on the researcher's decision. This could affect the representativeness of the sample, as not all employees had an equal chance to participate. While random sampling was applied to healthcare users, which increases the credibility of the results for that group, the imbalance in the method of employee selection may lead to distortion in the interpretation of results for that group. Although detailed demographic data were collected for healthcare users, such as gender, education level, and financial status, these data were not collected for employees. This lack of data may limit the possibility of a deeper analysis of the impact of demographic factors, such as age, education level, or years of work experience, on the satisfaction and motivation of employees in

the healthcare sector. In addition to these specific limitations, it is necessary to emphasize that the statistical models used, such as the t-test for dependent samples and the chi-square test, allowed for a thorough data analysis. However, every statistical model is subject to limitations related to the sample size and composition, as well as the nature of the data collected. Therefore, it is important to interpret the results with caution, particularly in terms of their applicability to the broader population of healthcare users and employees.

## Compliance with ethical standards

### Ethical considerations

This study adhered to ethical guidelines by obtaining informed consent from all participants, ensuring their confidentiality and anonymity, and minimizing any potential risks. The research was conducted transparently and responsibly, respecting the rights and well-being of all participants.

### Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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