

RELATIONAL MODEL OF HEALTH RESORT MANAGEMENT THE CASE OF THE GOCZAŁKOWICE-ZDRÓJ HEALTH RESORT

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Purpose: The aim of the article was to formulate an integrated Relational Model of Health Resort Management. The research identified factors influencing the satisfaction level of patients and employees. The analysis also involved organising the results in a relational model, enabling the identification of intersections and differences between the expectations of patients, the interests of the owner, the requirements of the NFZ¹ (payer) and the strategic expectations of the health resort municipality (Goczałkowice-Zdrój). This made it possible to take into account the formal, economic and organisational requirements affecting the long-term effectiveness and development of these facilities.

Design/methodology/approach: The primary data collection tool was a survey conducted over a period of six months on a sample of 601 patients. The results undergone the statistical analysis, including response frequency, correlation and regression analysis. In-depth interviews were also conducted with representatives of stakeholder groups at the Goczałkowice-Zdrój resort, meaning that a mixed method was used, combining both qualitative and quantitative approaches.

Findings: The research and analyses confirm that the effectiveness of a modern entity operating in the market for public services in the health resort industry depends on the implementation of a systemic approach. Such a model should assume a partnership-based approach to stakeholders, integrating the perspectives of patients and medical staff, as well as financing institutions, supervisory authorities and local government.

Research limitations/implications: As a case study, the research focused on a single centre, which makes it difficult to generalise the results on a national or European scale. Another limitation was the number of in-depth interviews conducted with the health resort stakeholders, which may not fully reflect the views of all groups influencing its functioning.

Practical implications: The article fills a research gap, which consisted in the lack of an integrated approach to the planning, organisation and supervision of the functioning of a health resort, taking into account the relational management model, i.e. the overlap of the preferences of patients and employees, as well as the requirements of the owner, the expectations of the payer and the interests of the health resort municipality.

Originality/value: The developed Relational Model of Health Resort Management integrates the preferences of patients, the opinions of medical experts, the requirements of the NFZ, the owner's goals and the needs of the health resort municipality. It therefore allows for the identification of realistic and accommodating directions for development that suit all key

¹ PL NFZ (*Narodowy Fundusz Zdrowia*) – National Health Fund; translator's note.

stakeholders. The implementation of the proposed solutions, based on the synergy of marketing strategy and the creation of a positive customer experience, may contribute to the improvement of the quality of services, enhancing the competitiveness of Polish health resorts and shaping their position on the domestic and international market.

Keywords: Customer Experience, health resort, health spa treatment, relational management model, optimisation of organisational functioning.

Category of the paper: Research paper. Case study.

1. Introduction

In today's rapidly changing world, concern for health and well-being is becoming a priority for an increasing number of people. However, patients have diverse needs and expectations, both in terms of treatment methods and ways of taking care of their health. The growing interest in alternative medicine, supplementation, diets and holistic practices raises a key question: how to effectively manage health resorts to meet this diversity? Identifying patients' preferences is a significant challenge that has a direct impact on the preparation of an adequate and attractive accommodation offer. There is no universal model of a health spa treatment that would suit everyone – differences in genetics, lifestyle, experiences or past illnesses mean that the approach to therapy must be individualised.

Health resorts should therefore use their potential in a way that is accessible and friendly to everyone, regardless of social status. Although traditionally the main criteria were the patient's health and the range of treatments provided, currently, health spa treatment – understood as a form of rehabilitation based on the use of natural medicinal resources and the properties of the climate – covers a much broader context. Health spa therapy combines stimulating, physiotherapeutic and supportive treatments, and increasingly also preventive and recreational activities. It is worth emphasising that the patient is not only a passive beneficiary in the health resort management process. They become a full stakeholder, alongside medical staff, facility owners, the NFZ and local authorities.

The article presents the results of the author's research, which show the importance of a relational approach in health resort management. The case study was based on the activities of the Goczałkowice-Zdrój Health Resort, showing how stakeholder cooperation affects the effectiveness and development of such entities. The relational model of health resort management takes into account not only the cooperation of various entities, but also the role of marketing strategy and customer experience (CX) in building a competitive advantage in the public services market.

2. The importance and functions of marketing strategy for the relational approach

Marketing strategy plays a key role in the process of creating value for the customer, as well as in obtaining return value from the customer for the organisation. The creation process involves understanding consumer needs and desires, deciding which target markets a company or organisation is best able to serve, and creating an attractive value proposal which will help the company acquire and retain target customers. This act can guarantee market share, profit and an expanded customer base (Amstrong, Kotler, 2015, p. 15). Another definition states that "strategy is a comprehensive plan for achieving the organisation's goals. Strategic management, in turn, is an approach to economic opportunities and challenges – it is a comprehensive and sustainable management process focused on formulating and implementing effective strategies. Such effective strategies are distinguished by the fact that they promote a better fit between the organisation and its environment and the achievement of strategic goals" (Griffin, 2018, p. 227) [own trans.].

"Marketing strategies define how goals are to be achieved; broadly formulated methods for achieving specific goals; specific actions; steps that will follow according to a daily or monthly schedule are tactics; in order to develop a strategy, it is necessary to: identify the target market, define the product and determine its position in the minds of potential buyers, set the right price, deliver the product to the right place at the right time, and communicate information about the product" (Filipiak, Panasiuk, 2008, p. 302) [own trans.]. The very concept of marketing strategy is indefinable, but without defining and formulating it, there are no guidelines on how and in which direction to go. Without it, it is impossible to assess the usefulness of emerging opportunities and the use of one's own resources, which leads to so-called "day-to-day" management, which will not succeed in the long run (Filipiak, Panasiuk, 2008, p. 311). Planning and implementing a strategy involves long-term actions, which, according to H. Ansoff, are "the basis for marketing decisions". They must be based on strategy. According to Ansoff, strategy defines "the position and relationship of a company/organisation in its environment in a way that ensures continued success and protects against surprises" (Ansoff, 1985, p. 50) [own trans.]. The aforementioned marketing expert defines marketing strategy as "the selection of objectives, principles or rules that, within a specified time frame, give direction to the company's marketing activities, determining the size, combination and allocation of resources depending on the changing market situation (environmental conditions and competition)" (Kotler, 1984, p. 44) [own trans.]. Strategic communication is also important, as it is relatively easy to implement, cost-effective and influences the level of audience approval (Cafferla et al., 2025, p. 11). The future of these strategies lies in artificial intelligence, which processes vast amounts of data to create marketing plans tailored to customer needs (Beyari, Hashem, 2025, p. 18), and innovation is crucial for maintaining the competitive advantage of individual entities and driving economic growth (Alhassan et al., 2025).

The presented literature review clearly emphasises the importance of marketing strategy as a process of creating value for the customer and obtaining return value for the organisation. This is the foundation of the relational approach – a health resort does not operate in isolation from its environment, but remains in a network of relationships that it must consciously shape.

The essence and functions of Customer Experience (CX) and for the relational approach

CX – customer experience – is an inspiring and attractive idea because it is a product of what arises in the customer's mind based on their impressions at points of contact with the company in order to achieve their own goal. "Value for the consumer is therefore everything that they consider to be of value. Little has changed in this regard since 1954, when Ducker wrote: *So what the customer considers to be of value is so complex that only they can answer the question about it* (Baran, 2013, p. 26) [own trans.]. Nowadays, when the amount of stimuli provided is enormous, consumers almost always make their choices automatically or mechanically, without reflection or much thought. "British philosopher Alfred North Whitehead argues that the development of civilisation entails an increase in the number of stereotypical behaviours, i.e. those undertaken without reflection" (Wojciechowska, 2020, p. 18) [own trans.]. So how should Customer Experience (CX) be understood? It is a holistic experience that encompasses the customer's cognitive, affective, emotional, social and physical responses to an entity, material good or service (Calder, Hollebeek, Malthouse, 2018; Verhoef et al., 2009; Gołąb-Andrzejak, 2021, p. 17). At this point, it is worth noting that the aforementioned customer experience finds its place in the concept of service dominance logic. Customer experience is all aspects of a customer's perception of an organisation throughout their entire relationship with the organisation. The essence of CX is related to the concept of experience, which must be understood in a broad context, not only in terms of observed facts and experiences, but also as a whole, understood as a set of various types of experiences resulting from interaction with a given brand or what has been heard or seen. "Experience = expectations vs. reality. This formula suggests that experience arises when expectations meet reality. This encounter can sometimes be painful when brands have built up high expectations but are unable to meet them. This creates a so-called "expectation gap", which has a huge impact on the customer's experience and the entire journey" (Michalak, 2024, p. 17) [own. trans.]. It is easy to see that there is an implication that the experience is good when it is better than expected, and the last good experience with brand X immediately becomes a basic expectation of brand Y. The traditional approach to public service provision is no longer sufficient, and customer experience (CX) management plays a key role in building relationships with users. In the presented literature review, Customer Experience (CX) is presented as a holistic experience encompassing the cognitive, emotional, social and physical reactions of the customer to a service or brand. In the context of the relational model, this means that the relationship cannot be understood solely in economic terms – it must encompass the entirety of the customer's feelings and expectations.

3. Subject and purpose of the research

The research conducted by the author aimed to understand not only the preferences of patients at the Goczałkowice-Zdrój health resort, but also the opinions and requirements of key stakeholders, such as doctors, physiotherapists, representatives of the NFZ, health resort owners and the authorities of the health resort municipality. This analysis made it possible to determine how to balance patient expectations with formal and strategic requirements, creating an integrated health resort management model. The main objective of the research was to identify which aspects of the services are most important from the perspective of both patients and other stakeholder groups. In particular, the study aimed to identify the most important factors influencing patients' satisfaction and loyalty to the health resort, and to analyse the perspective of doctors and physiotherapists on the effectiveness of health spa therapy. The study also aimed to compile the results in a relational model that allows for the identification of intersections and differences between the expectations of patients, the interests of the owner, the requirements of the NFZ and the strategic objectives of the health **resort municipality**.

Previous research and development strategies for health resorts have been based mainly on the preferences of customers (patients), ignoring the opinions and requirements of key stakeholders, such as the owner of the health resort, the payer (NFZ), the authorities of the health resort municipality, and medical and non-medical staff. As a result, strategic decisions concerning health resorts were often made without fully considering the formal, economic and organisational requirements that affect the long-term effectiveness and development of these facilities. The research gap lies in the lack of an integrated approach that would take into account a relational model of health resort management – i.e. overlapping the preferences of patients and the requirements of the owner, the expectations of the payer and the interests of the health resort municipality, which, as a local government body, is closely linked to the activities of the health resort, as it cannot exist without it.

The research was conducted using a mixed method, combining both qualitative and quantitative approaches. The data collected through surveys was subjected to statistical analysis, including response frequency, correlation and regression analysis, in order to identify the key preferences of patients and their impact on service quality. In addition, data from in-depth interviews were subjected to content analysis, which allowed for the identification of main topics related to service development needs and stakeholder recommendations. The survey was the main tool for data collection. The questionnaire contained closed and open-ended questions. The survey involved 601 patients who visited the health resort within six months. In-depth interviews (IDI) were conducted with representatives of various stakeholder groups of the health resort. The interviews were conducted with health resort employees, a representative of the NFZ and representatives of the health resort municipality. Despite the large sample size of 601 patients, certain limitations of the study should be noted. First of all,

it focused exclusively on one health resort, which limits the possibility of generalising the results to other centres of this type in Poland. In addition, although in-depth interviews were conducted with representatives of various stakeholder groups, their number was limited, which may affect the completeness and representativeness of the collected data.

The analysis allowed for the development of a relational model of health resort management that integrates the preferences of patients, the opinions of medical experts, the requirements of the NFZ, the objectives of the owner and the needs of the health resort municipality. This makes it possible to define realistic and accommodating directions for development that suit all key stakeholders. In the relational model, patients are treated not as clients but as partners actively participating in creating added value for the spa enterprise. A key goal is to ensure loyalty and develop long-term relationships.

4. Relational model of health resort management

The development of a relational model for managing a health resort, based on the example of the Goczałkowice-Zdrój Health Resort, taking into account the identified relationships, involved the following stages, as shown in Figure 1.

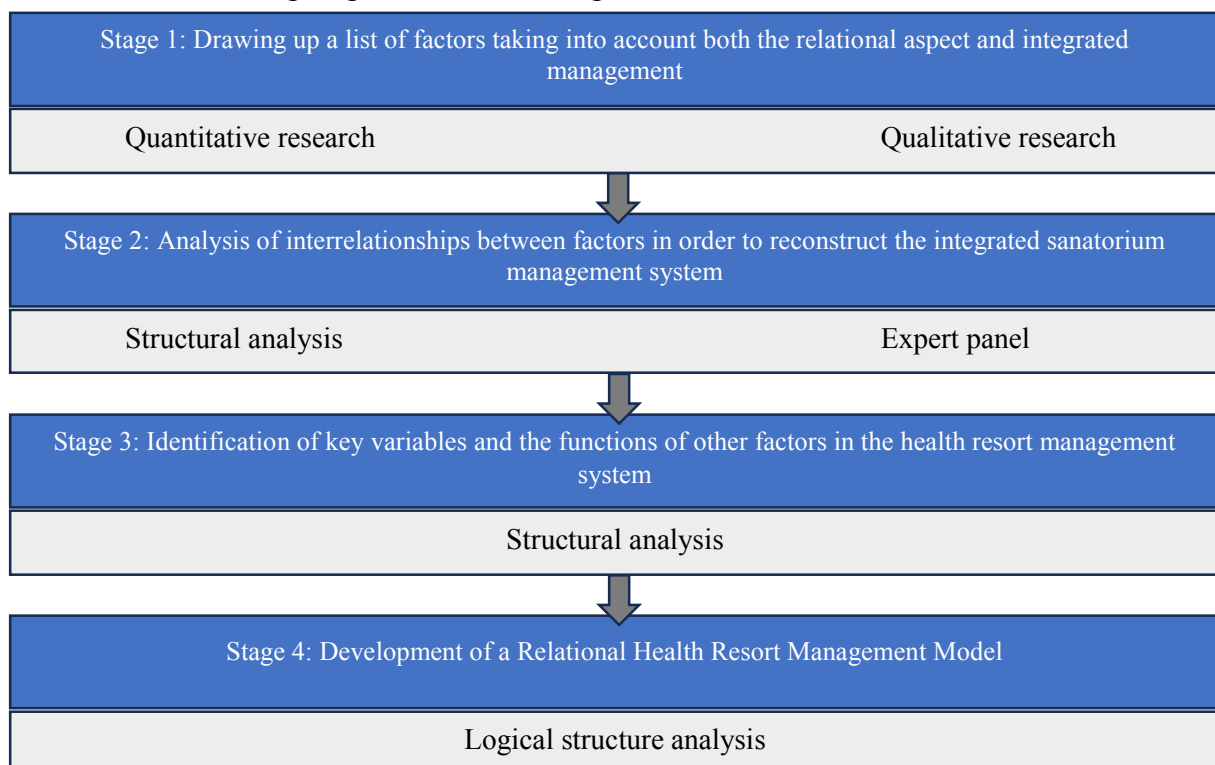


Figure 1. Diagram of research stages for the development of a Relational Model of Health Resort Management based on the example of the Goczałkowice-Zdrój Health Resort. The conclusions were obtained after further analyses.

Source: own analysis.

The first research stage involved identifying key factors affecting the functioning of a health resort. The aim of this process was to create a complete list of elements essential for effective management and improving the quality of services provided. As part of this stage, a literature review, qualitative research (expert interviews) and quantitative research were conducted, which made it possible to determine the importance hierarchy of the individual factors and their impact on the effectiveness of the management system. The list of factors included both internal factors (e.g. staff work organisation, infrastructure quality, availability of treatments) and external factors (e.g. NFZ financing, cooperation with local government, trends in health tourism). This made it possible to comprehensively assess the health resort management system, which served as a starting point for further analysis of its structure and process optimisation.

The second stage of the research focused on identifying and describing the relationships between the factors influencing the functioning of the health resort. The aim of this stage was to reconstruct the management system, which meant identifying the hierarchy and dependencies between the individual elements that make up the effective management of a health resort. The scope of activities in this stage included determining which factors have a key impact on the functioning of the health resort and how they are interrelated (structural analysis), as well as conducting consultations with representatives of various stakeholder groups in order to determine the interdependencies between the factors (expert panel).

The expert panel assessing the interaction of 17 factors (Figure 2) consisted of 6 people representing stakeholders involved in the process of providing services in B2C relations. The strength of the factors' influence was assessed on a four-point scale, where 0 meant "no influence", 1 meant "weak influence", 2 meant "medium influence" and 3 meant "strong influence". The participants of the expert panel were selected in a way that ensured the representativeness of the stakeholder groups.

Acronyms	Full name of factors
DTZ	Well-equipped treatment area
POF	Professional physiotherapy care
KLI	Mild lowland climate
KON	Contractual requirements of the NFZ
KRE	Crenotherapy at the medicinal water pump room
OPS	Publicly accessible health resort car park
SPZ	Walks in the health resort park
ČBS	Exercises in the brine pool
OPL	Round-the-clock medical and nursing care
SSP	Tasty and fresh meals
DSZ	Good standard of accommodation
WSN	Own natural resources
KOP	Cultural and courteous non-medical staff
OKR	A wide range of cultural and entertainment options
NOB	Natural mud wraps
INH	Inhalations near the spring
PCE	Positive Customer Experience

Figure 2. List of factors determining the Relational Model of Health Resort Management.

Source: own analysis.

As part of stage 2, a matrix of the mutual influence of factors was prepared, based on individual matrices completed by each of the experts during the panel discussion. The values in the resulting matrix were determined based on the experts' assessments of the strength of the influence of individual factors on other factors. The degree of mutual influence of individual factors determining the identification of key preferences of patients and the opinions and strategic requirements of stakeholders (such as doctors, physiotherapists, representatives of the health resort management board, the NFZ and the authorities of the health resort municipality) was determined in this way.

	DTZ	POF	KLI	KON	KRE	OPS	SPZ	ĆBS	OPL	SŚP	DSZ	WSN	KOP	OKR	NOB	INH	PCE	total
DTZ	0	1	0	3	3	1	1	3	2	0	0	3	0	0	3	2	0	22
POF	1	0	0	3	1	0	0	3	1	0	0	1	0	0	3	1	0	14
KLI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KON	3	3	3	0	3	2	1	3	3	2	2	3	1	2	3	3	0	37
KRE	3	1	2	2	0	1	1	0	1	0	0	3	0	0	0	0	0	14
OPS	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
SPZ	1	0	3	2	1	1	0	0	0	2	0	1	0	0	0	2	0	13
ĆBS	2	3	0	3	0	1	0	0	1	1	0	3	1	0	0	0	0	15
OPL	0	1	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	5
SŚP	0	0	2	2	2	0	2	2	2	0	0	0	2	0	0	1	0	15
DSZ	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	4
WSN	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
KOP	0	0	0	3	0	0	0	0	0	2	3	0	0	0	0	0	0	8
OKR	0	0	2	1	0	1	1	0	0	1	1	0	3	0	0	0	0	10
NOB	3	2	0	3	0	0	0	0	1	0	0	3	0	0	0	0	0	12
INH	3	1	3	3	0	1	1	0	1	1	0	3	1	0	0	0	0	18
PCE	3	3	2	0	3	3	3	3	3	3	3	2	3	3	3	3	0	43
total	22	17	21	28	13	14	10	14	15	12	9	22	13	5	12	12	0	

Figure 3. Matrix of direct influences.

Source: Own analysis.

A structural analysis based on total influence strength (SSW)² and total dependence strength (SSZ)³ allows to determine which factors play a key role in the functioning of a health resort and how they affect other elements of the management system. Total influence strength determines how much a given factor affects other elements of the system. A high total influence strength value means that a given factor is crucial for shaping the strategy and functioning of the health resort. The greatest influence is exerted by the contractual requirements of the NFZ (KON), which determine the conditions of financing, the length of patients' stays and the range of available treatments. Other important factors include well-equipped treatment facilities (DTZ), which affect the quality of treatment and the effectiveness of therapy, natural resources (WSN), which are the basis for the functioning of the health resort, and a mild lowland climate (KLI), which is important for climate therapy and the attractiveness of the resort.

² PL *Sumaryczna siła wpływu (SSW)*; translator's note.

³ PL *Sumaryczna siła zależności (SSZ)*; translator's note.

In turn, the total dependance strength shows the extent to which a given factor is shaped by other elements of the system. A high SSZ value means that this factor does not function independently, but is strongly dependent on other management decisions and processes. In this category, the highest value was obtained by Positive Customer Experience (PCE), which is the result of the quality of services, conditions of stay, infrastructure and patient care. The second important dependent factor is the contractual requirements of the NFZ (KON), which, although they have a strong impact on the entire system, are also influenced by regulations and administrative decisions. High dependence is also shown by well-equipped treatment facilities (DTZ), whose functioning depends on the available resources and organisation of the health resort's work, and inhalations near the mineral water source (INH), whose effectiveness is conditioned by both access to natural resources and appropriate infrastructure.

Among the factors that stand out for their high impact and high dependence, the contractual requirements of the NFZ (KON) and well-equipped treatment facilities (DTZ) deserve special attention. These elements play a key role in the health resort management system – on the one hand, they determine the quality of services provided, and on the other, they are subject to restrictions resulting from financing and resource availability. Optimising these areas can bring the greatest benefits to the functioning of a health resort, improving both its efficiency and competitiveness.

Factor	Full name	Total influence (SSW)	Total dependence strength (SSZ)
DTZ	Well-equipped treatment area	22	22
POF	Professional physiotherapy care	17	14
KLI	Mild lowland climate	21	0
KON	Contractual requirements of the NFZ	28	37
KRE	Crenotherapy in the medicinal water pump room	13	14
OPS	Public health resort car park	14	3
SPZ	Walks in the health resort park	10	13
ČBS	Exercises in the brine pool	14	15
OPL	Round-the-clock medical and nursing care	15	5
SSP	Tasty and fresh meals	12	15
DSZ	Good standard of accommodation	9	4
WSN	Own natural resources	22	6
KOP	Cultural and courteous non-medical service	13	8
OKR	A wide range of cultural and entertainment options	5	10
NOB	Natural mud wraps	12	12
INH	Peritonic inhalations	12	18
PCE	Positive Customer Experience	0	43

Figure 4. Table with SSW and SSZ.

Source: own study.

The research conducted involved a structural analysis of factors influencing the functioning of the health resort management system, with particular emphasis on their interdependencies and impact. The results indicate that the factors with the highest total impact, such as the regulations of the NFZ, treatment infrastructure and the natural resources of the health resort, play a key role in shaping the system and are its main determinants. Optimising these areas can

contribute to a significant improvement in the quality of services provided and increase the efficiency of the health resort's operations. At the same time, research has shown that factors with a high degree of dependence, including patient experience, availability of inhalation treatments and accommodation standards, are directly shaped by decisions made in other areas of the system. Their quality is the result of the functioning of overarching elements, such as the organisation of treatment, financing conditions and availability of resources.

This means that effective improvement of these aspects requires not only operational measures, but also strategic decisions affecting the entire structure of the health resort management system. The study paid particular attention to factors with both high influence and interdependence. Their analysis made it possible to identify areas where management intervention will bring the greatest benefits. Optimising these elements can effectively improve the standard of health resort services, thereby contributing to increasing the competitiveness of the health resort and better adapting its offer to the expectations of patients and the requirements of the healthcare system.

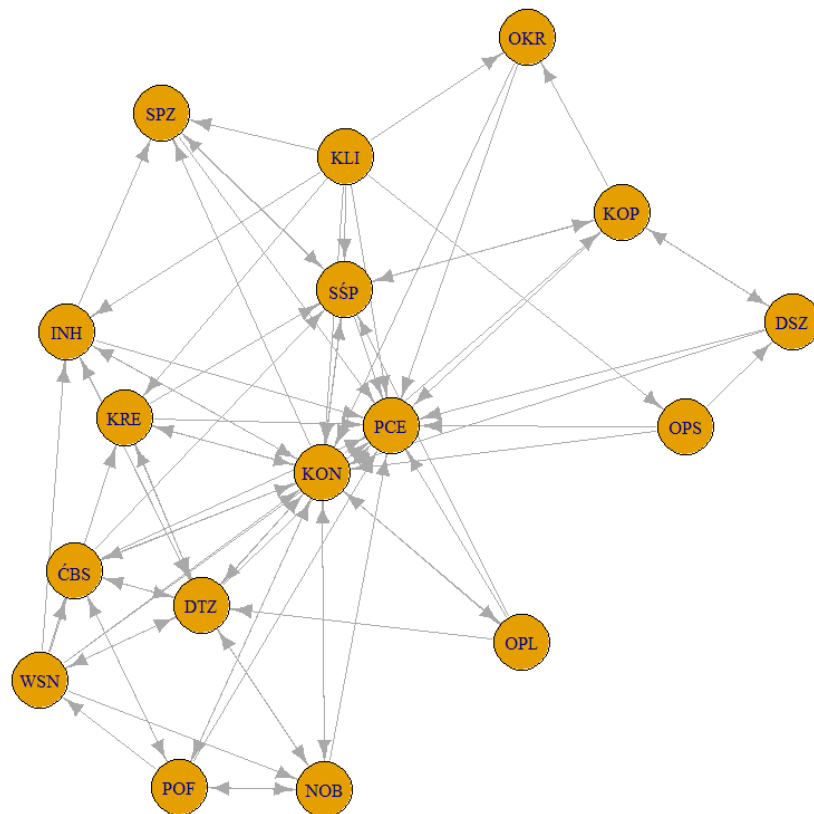


Figure 5. Graph showing only dependencies with a strength of "2" or "3". Illustration of the interrelationships between key factors.

Source: Own work.

The structural analysis presented in the graph illustrates the interrelationships between the key factors influencing the functioning of the health resort, taking into account both their strength of influence and their dependence on other elements of the system. The nodes represent individual determinants of the quality of health resort services, while the arrows show the

direction and intensity of the influence of some factors on others. Analysis of the graph allows for the identification of central elements that play a key role in the system, as well as dependent factors whose functioning is determined by other variables. Among the most important central nodes are KON (NFZ contractual requirements) and PCE (Positive Customer Experience). KON, as an element strongly linked to many factors, plays a key role in the health resort management system, determining the availability of financing, the length of patients' stays and the range of services offered. Its impact is particularly evident in relation to treatment infrastructure (DTZ), physiotherapy care (POF) and factors directly related to health resort therapy, such as inhalations (INH) and crenotherapy (KRE). At the same time, the contractual requirements of the NFZ are also strongly dependent on other variables, which indicates their dynamic nature and susceptibility to decisions made at the system level.

The second important node is PCE (Positive Customer Experience), which represents the overall quality of the experience of patients using health spa services. PCE is a factor that is strongly dependent on other elements of the system, such as the quality of medical and health resort infrastructure, the organisation of treatment and the conditions of stay. Its strong correlation with the contractual requirements of the NFZ suggests that regulations concerning financing and the length of stay have a significant impact on patient satisfaction. In addition, PCE is closely related to factors supporting patient comfort, such as the standard of accommodation (DSZ), cultural and entertainment offer (OKR) and the quality of non-medical services (KOP). The structure of the graph also indicates strongly related infrastructure factors that play a key role in the therapeutic process. DTZ (well-equipped treatment area) and CBS (exercises in a saltwater pool) show numerous dependencies with both factors affecting service quality and external regulations. Both elements are directly related to WSN (own natural resources), which emphasises the importance of the availability of local natural resources in the provision of health spa therapy. These factors also influence the organisation of medical care, which is reflected in strong links with OPL (24-hour medical and nursing care) and POF (Professional physiotherapy care). On the periphery of the graph are supporting factors which, despite having fewer links, play an important role in shaping the overall quality of health spa services. SPZ (Walks in the health resort park), OKR (Rich cultural and entertainment offer) and OPS (Publicly accessible health resort car park) play a complementary role, influencing the comfort of stay and the overall attractiveness of the health resort. Their importance to the system is more indirect, which means that changes in their functioning do not have as strong an impact on other elements of the system as medical and infrastructural factors.

To conclude the analysis, the graph shows the hierarchy and interrelationships between the factors shaping the health resort management system. The contractual requirements of the NFZ and positive patient experiences are the main elements of the system structure, the optimisation of which could bring the greatest benefits in terms of improving the quality of services. Closely related medical and infrastructural factors play a key operational role, determining the effectiveness of therapy and the quality of healthcare. Supporting elements, such as recreational

activities and accommodation conditions, influence the overall attractiveness of the health resort, but their impact on the effectiveness of treatment is less direct. The results of the structural analysis indicate that an integrated approach to management, taking into account both systemic requirements and patient needs, is key to optimising the functioning of a health resort.

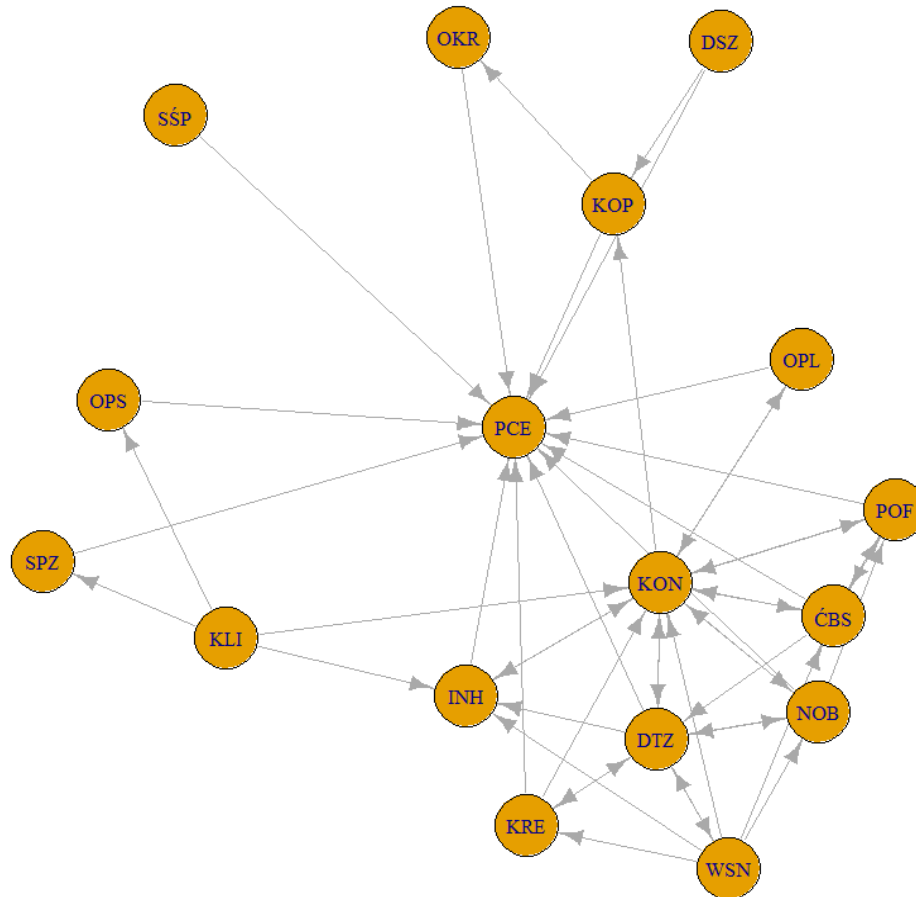


Figure 6. Relationships with a strength of "3". Illustration of the strongest relationships between key factors.

Source: Own work.

The graph analysed above shows relationships with a strength of "3" between key factors influencing the functioning of a health resort, indicating both their strength of influence and their dependence on other elements of the system. Each node represents one of the factors relevant to the quality management of health resort services, while the arrows illustrate the direction of influence – from the element influencing others to the factors that are dependent on it.

The structure of the graph allows for the identification of factors of greatest systemic importance, which play a key role in shaping the functioning of the health resort, as well as those that are more determined by other variables. Analysis of the graph indicates the existence of two central factors that play a fundamental role in the structure of health resort management. The first is PCE (Positive Customer Experience), which acts as a dependent factor, meaning that its value results from the impact of many other elements of the system. The quality of the

patient experience is shaped by the availability and quality of medical infrastructure, accommodation conditions, the organisation of treatments and additional amenities offered by the health resort. The second key node is KON (Contractual Requirements of the NFZ), which affects the availability of health services by determining, among other things, the length of patients' stays and the scope of therapies offered. The NFZ contractual requirements act as a regulatory factor that determines the functioning of the health resort, but at the same time is itself subject to the influence of other variables, which indicates its strong embeddedness within the healthcare system. Closely related to the central factors are the infrastructural and operational elements, which play a key role in ensuring the quality of health resort services. DTZ (well-equipped treatment facilities), CBS (exercises in a saltwater pool) and WSN (own natural resources) show numerous correlations with both the contractual requirements of the NFZ and the overall quality of patient experience. The availability and development of these elements are key determinants of the effectiveness of health spa therapy, suggesting that their modernisation could bring significant benefits to the functioning of the system. In addition, INH (inhalations near the spring) and KRE (crenotherapy in the medicinal water drinking hall) are strongly linked to the treatment infrastructure and natural resources, which emphasises the importance of natural resources in the health spa treatment process.

The analysed graph also highlights supporting factors that have less impact on the system but contribute to improving patient comfort and increasing the attractiveness of the health resort. GSA (Good standard of accommodation), CEA (Rich cultural and entertainment offer) and CSE (Cultural and courteous non-medical service) contribute to positive patient experiences, but do not play a decisive role in the effectiveness of treatment. Their importance lies mainly in improving the quality of services accompanying the stay, which can translate into patient satisfaction and their willingness to use the health resort's services again. In summary, the graph shows the hierarchy and interrelationships between the factors shaping the health resort management system. PCE and KON play key roles in the system, with PCE reflecting the quality of patient experience and KON setting the framework for the financing and organisation of health services. Infrastructural and operational elements are also important, as their development can significantly improve the effectiveness of treatment. Supporting factors play a complementary role, influencing the comfort and overall attractiveness of the stay, but their importance for therapeutic processes remains indirect. The results of the structural analysis suggest that the optimisation of the health resort management system should focus on adapting the contractual requirements of the NFZ, modernising the treatment infrastructure and improving the quality of natural resources and health spa therapies, which will consequently translate into higher patient satisfaction and better treatment effectiveness.

The third stage of the research was devoted to identifying the key variables determining the functioning of the health resort and determining the role of other factors in the facility management system. This process was of fundamental importance for the further construction of the Relational Health Resort Management Model, as it made it possible to identify areas

requiring special optimisation and to design improvement measures. Based on the analyses carried out, the factors with the greatest impact on the quality and effectiveness of the system were identified, roles and functions were assigned to other elements, and a hierarchy of relationships between variables was developed, which formed the basis for planning development and optimisation strategies. The conclusions obtained at this stage were used to develop a Relational Health Resort Management Model, taking into account both the key determinants of the centre's operation and the interrelationships between them. The contractual requirements of the NFZ (KON) proved to be the most influential factor – they determine financing, length of stay and scope of therapy. Positive Customer Experience (PCE) has the highest degree of dependence – it depends on the quality of infrastructure, therapy, accommodation and service. The following factors are of key importance: well-equipped treatment facilities (DTZ), own natural resources (WSN) and a mild climate (KLI). The comfort of the stay is also shaped by supporting factors such as the standard of accommodation (DSZ), tasty meals (SŚP) and cultural offerings (OKR).

The fourth and final stage of the research process was devoted to the development of a Relational Model of Health Resort Management, which aimed to integrate all the identified determinants and capture the multidimensional relationships between stakeholders. The activities included not only the consolidation of the results of previous analyses, but also the systematisation of the hierarchy of dependencies and connections, which enabled the creation of a coherent and logical relational system. This model was based on seventeen factors determining the functioning of a health resort, which were organised in a ring structure. The patient was placed at the centre, whose positive experience (PCE) is the primary goal and result of the entire system's functioning. The first ring consists of elements related to staff and infrastructure, including 24-hour medical and nursing care (OPL), professional physiotherapy care (POF), the quality and freshness of meals (SŚP) and the standard of accommodation (DSZ). The second ring includes resources and therapies, which include a well-equipped treatment area (DTZ), crenotherapy in a medicinal water pump room (KRE), exercises in a brine pool (ĆBS), inhalations near the spring (INH), natural mud wraps (NOB) and our own natural resources (WSN). The third ring refers to the supportive and regulatory environment, i.e. external factors such as the contractual requirements of the NFZ (KON), the mild lowland climate (KLI), a publicly accessible health resort car park (OPS), walks in the health resort park (SPZ), cultural and entertainment offer (OKR) and cultural and courteous non-medical service (KOP). The architecture of the system constructed in this way indicates that the positive patient experience acts as a central dependent variable, representing the synergy of all other elements. At the same time, the contractual requirements of the NFZ emerge as a critical regulatory factor, whose direct and indirect impact determines the scope, financing and organisation of health spa services.

The relational nature of the model proves that management effectiveness is not the result of individual actions, but a consequence of dynamic links between institutional, infrastructural, therapeutic and environmental factors, which together shape the quality of services and the ultimate patient experience.

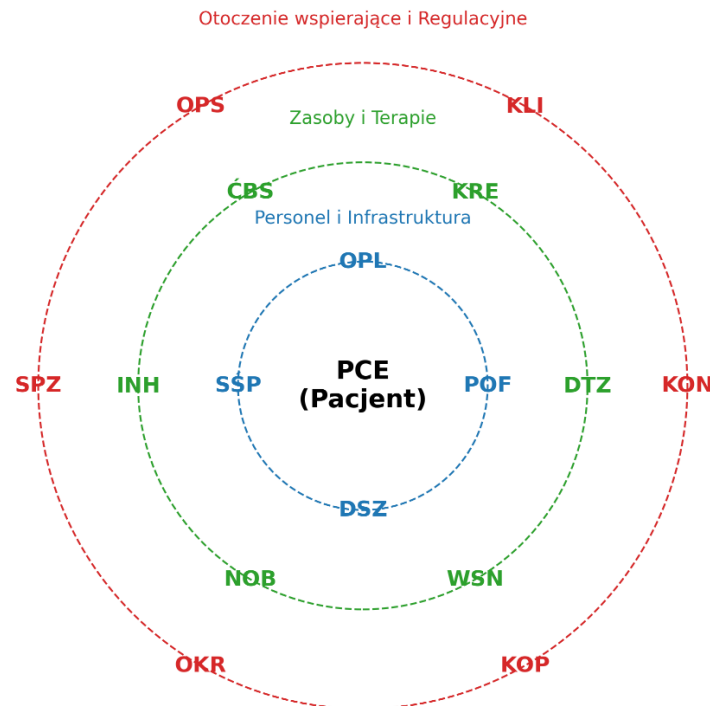


Figure 7. Relational Model of Health Resort Management. The key role of two nodes of the system - positive patient experience and the financial and organizational framework.

5. Summary of research results

The research has shown that the effective functioning of a modern health resort requires a systemic approach that integrates the perspectives of patients and medical staff as well as the interests of financing institutions, owners and local authorities. The developed Relational Health Resort Management Model shows a complex network of relationships between seventeen factors determining the quality and effectiveness of services, emphasising the key role of two nodes of the system: positive patient experience (PCE) and NFZ contractual requirements (KON). PCE is the central result of the functioning of the entire system, reflecting the effectiveness of treatment, the standard of stay and the overall satisfaction of patients, while KON defines the financial and organisational framework, determining the availability of services and the range of therapies offered.

The results of the analysis indicate that improving the quality of health spa services requires the simultaneous optimisation of treatment and rehabilitation infrastructure, the effective use of natural resources, raising the standard of accommodation and catering, and diversifying sources of financing. A key element of development is also a marketing strategy, whose task is not only to effectively attract patients, but also to build long-term value by strengthening relationships with stakeholders and shaping competitive advantage. In this context, the importance of Customer Experience (CX) is growing, understood as a holistic patient experience covering medical, emotional, social and infrastructural aspects. The quality of CX determines the loyalty of patients, their willingness to recommend the health resort and their perception of its brand compared to the competition. It should be noted that the presented research has certain limitations resulting from the analysis of a single health resort and a limited number of in-depth interviews. The results obtained should therefore be a starting point for further comparative research covering other centres and for an in-depth analysis of factors in a broader systemic context. Implementing the model in other facilities would require, among other things, an in-depth system analysis, approval of the corporate governance structure and organizational support from the NFZ.

In summary, the proposed model is not only a tool to support strategic and operational decision-making, but also a concept that points to the need to combine the institutional perspective with the patient's experience. The implementation of a relational approach to health resort management, based on the synergy of marketing strategy and the creation of a positive customer experience, can significantly contribute to improving the quality of services, strengthening the competitiveness of Polish health resorts and building their sustainable position on the domestic and international market.

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