

# Evaluating Strategies to Improve Patient Satisfaction in Hospitals

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## ABSTRACT

This study sought to identify the best strategies for healthcare executives to utilize to improve patient satisfaction with a hospital. It is important to evaluate these types of strategies because making improvements to one's service quality could lead to an increase in overall patient satisfaction levels, have a direct relationship with patient behavioral intentions, subsequently play a very critical role in the process of delivering quality patient care and overall healthcare, and could ensure a healthcare organization's ability to remain financially solvent.

We based our comprehensive evaluation of these strategies on the distillation from numerous studies regarding patient satisfaction in a healthcare setting. Specifically, we analyzed data from various studies. Several of the strategies that we evaluated, when employed, could potentially lead to improved patient satisfaction scores, including: empowered nurses and physicians, patient-centered care, focused staff on improving patient satisfaction scores, mandated education, service vs. quality, choose us, public reporting, and report cards.

It is important to evaluate strategies as a means to improve patient satisfaction and the quality of care patients receive. Key in this evaluation is the idea that patient satisfaction could help increase hospital revenue, could be a proxy for treatment quality, is associated with increased adherence, and is a means for health service research. Based on our findings, and in most cases, the adjusted bigger impacts would be the breadth-based strategies of empowered nurses or patients, and mandating education just before report cards. They would recommend these for

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those hospitals that are looking to improve their patient satisfaction scores. Additionally, coupled with this, they would recommend that healthcare management utilize customer satisfaction data, patient satisfaction analysis, and other patient feedback tools to mirror overall patient satisfaction before and after changes in the system to evaluate the change. (Silvera et al.2021)

**KEYWORDS:** nursing staff, patient satisfaction, healthcare systems.

## 1. Introduction

The delivery of healthcare services has been traditionally focused on clinical outcomes rather than customer experiences; however, that is changing. An increasing emphasis on patient satisfaction originated from research showing improved clinical outcomes with better patient experiences. The expansion of consumerism and information availability has made patient satisfaction and experiences even more relevant. As such, evaluations of hospital strategies and operational characteristics that lead to an improvement in satisfaction are important and relevant. It is expected that patients whose preferences are met in the hospital will rate the hospital experience and care provided as more satisfying than those patients whose preferences are not met while in the hospital. It is also expected that future recommendations of the hospital and future care obtained by the patients will be better for the patients whose preferences are met. (Eze et al., 2020)

Patients come to hospitals with certain expectations or desires of being made well from a specific malady. Patients also come to the hospital with certain values about how the care process should proceed. Meeting the patients' desires, in addition to multiple aspects of the service process, should lead to increased satisfaction levels as a result of the service encounter. The importance of understanding the patient view has been emphasized. Understanding the patients' perspective and better attending to the needs of the marketplace is fundamental to the mission of the health system. As such, 'patient satisfaction' is becoming an important outcome standard.



### 1.1. Background and Significance

Patient satisfaction has a long history dating back more than 2 millennia, but only recently has it assumed prominence, dominating the policy and practice debates in many health systems around the world. It has been recognized as a significant component in the assessment of healthcare quality. Patient satisfaction is influenced

by service quality, clinical outcomes, patient characteristics like age and gender, and determinants of surprise and expectancy.

The recent importance of patient satisfaction stems from the observation that there is a positive relationship between patient satisfaction and patient loyalty for hospitals, creating a requirement for a more consumerist and pro-competitive approach to healthcare delivery in a large number of countries. Evidence-based medicine and the doctor-centered approach to healthcare have been replaced with a multidisciplinary patient-centered care. The patient-centric care helps in defining the clinical outcomes and in defining and meeting patient expectations. The patient has now been acknowledged as the customer in most countries. There is 150 years of written evidence that patient satisfaction matters to patients; there is also emerging written evidence that patient satisfaction matters to hospital management, and the evidence that patient satisfaction matters to doctors is anecdotal. The pressure now on healthcare providers is to establish the factors influencing patient satisfaction, enhance the satisfaction levels of patients, reduce the stress on doctors, help them increase profitability, and grow in a competitive environment. There is little disagreement on this issue. Patients' assessment of their care quality has been significantly correlated with health outcomes and patients' loyalty. The top-ranking hospitals believe that being a top 10% hospital in patient satisfaction is a strategic goal that drives investment in marketing and promotion. There are approximately 100 to 150 categories of awards issued each year based on patient satisfaction among various local, state, and national hospital competitions. Since the project is now mandatory, there is huge financial pressure on hospitals to keep the score below the national average to avoid payment cuts or to increase revenue. Similarly, the multi-million dollar losses quoted are primarily pertaining to the payer cutting the payments kept in abeyance or revenue losses from the payer lockout in an environment where the majority of funding will come from payers. (Dayan et al.2022)

## 1.2. Purpose of the Study

The overall purpose of the study is to provide healthcare administrators and policymakers with a systematic understanding of the strategies and practices currently used by hospitals to enhance patient satisfaction and improve the patient experience with hospital care. To achieve this overall goal, we will address the following specific questions in the balance of the study: What mechanisms are currently used to monitor the patient experience with hospital care, and how do they use the information for quality improvement? What formal evidence-based or settings-based strategies are currently used or have been used recently in hospitals to improve the patient experience with hospital care, and how is their effectiveness measured or evaluated? What best practices or recommended strategies are being marketed to hospitals to improve the patient care experience, what evidence is available regarding the effectiveness of these practices, and what other current efforts are being offered to provide training, guidance, or assistance to hospitals to improve patient satisfaction? (Adams et al.2021)

Although patient satisfaction is a multi-dimensional outcome, with cognitive, evaluative, and affective components, all must be considered to accurately reflect

patients' experiences. This paper will focus on improvement in patient satisfaction scores as the crucial indicator of quality. The need to focus on improvement in patient satisfaction scores is underscored by research that finds they are commonly used by hospitals as a marketing and financial technique. Consequently, hospitals prioritize patient perceptions of care when developing improvement goals and anticipate improved patient satisfaction scores will attract greater market share, because patients are likely to attribute good scores to a high level of care quality. This study will provide knowledge to assist hospitals in making recommendations to improve patients' experiences, in addition to helping hospitals continue their ongoing efforts to enhance patient satisfaction and perceptions of care in the future.

### 1.3. Scope and Limitations

This study's primary focus is to evaluate inpatient satisfaction strategies. There are other areas where rural hospitals provide care, such as rural health clinics, critical access hospitals, and federally qualified health centers. The patient satisfaction strategies described in this research are specific to inpatient medicine services at one particular geographic location. All results and conclusions are contained within these mentioned populations of people and should not be implied to exist in any other service lines, facilities, locations, or patient populations. This research evaluates quantitative inpatient and discharged patient data. Other populations' data are not included in this research. Limitations may exist based on the scope of services obtained at each facility or based on unique legalities. Fundamentally, this is an operational research piece to provide strategic planning for inpatient medicine services. (Becker et al.2021)

Potential limitations that influence consumer or patient satisfaction data, as well as potentially not exhibited in this data set, are all the same. For different geographic locations or patient populations, the use of testable satisfaction strategies is not tested; it is only limited to this one location in the Nevada region at the end of data collection. Satisfaction outcomes can be impacted by other non-customizable variables, such as newspaper articles, the internet, television, and relocation of corporate businesses into or out of the vicinity. Qualitative research has limitations due to the subjective responses received. Delays may result from information processing time, as well as the complexity of terms and strategic comprehension that must accompany qualitative or analytical written work. Quantitative or analytical descriptions may not yet be available.

## 2. Literature Review

The earliest comprehensive studies on patient satisfaction sought to understand the links between patients' opinions of care, health outcomes, and quality of care. Since then, many studies have been conducted to assess the factors influencing patient satisfaction. Factors that have been reported to influence satisfaction include patient demographics such as age, gender, and education, along with factors affecting care including communication, wait times, and hospital environment. These studies have reported that age, gender, and race, among other factors, contributed to satisfaction among people who are hospitalized or seek care in an emergency department. A

patient-centered approach to assessing satisfaction is essential for building quality improvement programs. However, studies assessing approaches did not find the patient-centered approach superior to the facility-centered approach. This study sought to help coordinate these two practices by identifying additional steps that may affect patient satisfaction. Satisfaction is an important indicator of the patient experience and can be useful in validating patient-centered care and other practices.

Quality of care research has also reflected this interest in patient satisfaction, with numerous studies conducted to identify determinants of patient satisfaction. The hospital environment has been a primary focus in work designed to examine determinants of patient satisfaction. One study of patient complaints demonstrated that communication factors were the most common complaints. Still, other research has revealed that communication between staff and physicians can have a small yet significant effect on outcomes. Themes in patient and family satisfaction and dissatisfaction are diverse. Baseline performance expectations, demographics, experiences, and expectations all contribute to ratings. For a happier patient and a more positive experience, significant financial investments are often required. More research is needed to determine how even small changes within the healthcare sector would cause beneficial responses to customer treatment, satisfaction, and results. (Kalaja, 2023)(Ali et al.2021)

### 2.1. The Concept of Patient Satisfaction

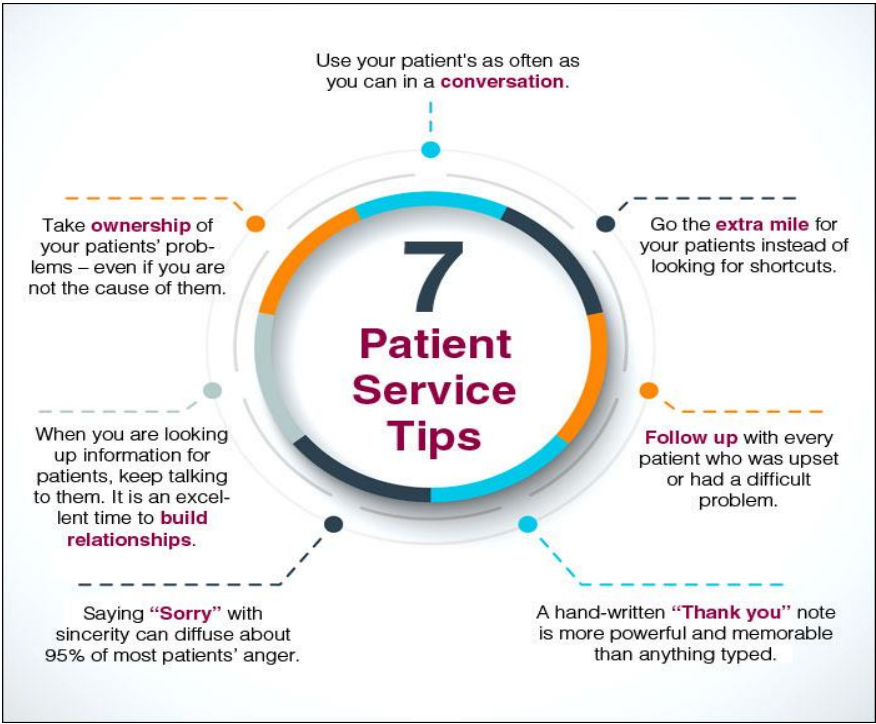
Patient satisfaction consists of patients' cognitive evaluation of the care they receive and an emotional response to that care. Despite the alternative definitions of patient satisfaction, a common distinction is made between a subjective element and an objective one. The subjective element indicates that satisfaction is determined by a patient's perceptions of his or her experience and is influenced by background and demographic characteristics. The objective element indicates that satisfaction is viewed as an explicit function of the technical quality of care, emphasizing the use of patient satisfaction as an outcome measure. The duality of patient satisfaction has created two traditional approaches resulting in the development of distinct conceptual models: process models and outcome models. In the process models, patient satisfaction is believed to be a large system factor leading to higher levels of patient treatment compliance, less likelihood of complaints, or malpractice suits. (Shah et al., 2021)

In outcome models, patient satisfaction appears as the final outcome of an interaction between patients and providers. A conceptual framework illustrates that patient satisfaction is considered an important dependent variable in determining patient service quality as a service outcome and a fixture to customer loyalty. In healthcare, patient satisfaction is an important part of patient-centered treatment. The importance of patient satisfaction is already shown by both the practitioners' concern and the theorists' response, as they produce considerable strands of research on how to improve service quality and customer satisfaction. To patients, their satisfaction can be a useful decision-making and feedback mechanism for continuous improvement. The aforementioned definitions indicate that the patient satisfaction concept covers both functional and emotional characteristics.

2.2. Factors Influencing Patient Satisfaction

On the basis of a select review of the literature, several factors appear to be critical in understanding patient satisfaction. Factors that contribute to patients’ positive satisfaction ratings may be grouped under four dimensions, including the patient’s perception of clinical quality, perception of communication or discharge instructions and care received, and perception of both accessibility and professionalism or “first impressions” of the services at the hospital. Hospital executives will need to address primary service areas of environmental or relational care variables that promote a positive experience and personalized care methods that contribute to higher levels of satisfaction.

Sixteen factors that contribute to a favorable service rating of “satisfied” or “very satisfied” among hospital patients may be categorized into three groups: two clinical quality dimensions, eight physician/nursing standards of care dimensions, and six hospital standards of care dimensions. An assessment of what factors influence patients’ overall perception of quality of care must be understood for an overall service area quality improvement plan to be developed. Abandonment care is seen as an act of indifference toward the patient, and relationships with providers in a hospital setting are important in terms of patient satisfaction with trauma care. Patients in hospital emergency departments are found to be influenced by the determinants of personalization, patient-oriented response, quality of care, physician communication, provider attitudes, compassion, caring, trust, and confidence. (Yu et al., 2021)



### 2.3. Previous Studies on Strategies to Improve Patient Satisfaction

Many studies exist that focus on strategies to improve patient experience scores. The overall patient experience, evaluation of doctors, continuity of treatment, and respect for patient preference are the main determinants of patient experience. Within the context of health, factors such as patient age, educational background, patience, length of hospital stay, condition, communication, recovery, and the hospital's policy on reminders and checking methods influence patient satisfaction. Attention to the patient is the first step in quality service and treatment alone is not sufficient for patient satisfaction. Pain management during the first 24-hour period in the hospital, nurses' attention and care, and the provision of quietness and tranquility are the main reasons for positive patient opinions.

In contrast, strategic plans for achieving higher patient satisfaction have also been observed to fail. Previous studies have found that communication with the patient is essential for patient satisfaction. The literature supports our hypothesis: to achieve higher satisfaction among patients, particularly in primary care, policymakers and hospitals should focus on improving their wait time, provision of quality services, satisfaction with doctors, and hospitals that implement effective communication services. It is estimated that as many as 94% of all complaints by patients are related to poor communication. The main objective of this study is to reveal the effect of patient satisfaction on the performance of services in health sectors. This review of past studies is extremely useful to reveal which factors are related and effectively delineated from the patient service system. (Guo et al., 2022)

## 3. Methodology

In this section, we describe our research design, consisting of the construction of a conjoint experiment to be submitted to hospital patients. With the conjoint analysis, we evaluate the preferences that patients have concerning five-dimensional health care factors. The unit of analysis of empirical investigation is the single patient involvement in the investigation, as obliged by the nature of the conjoint analysis. Each patient is asked to evaluate seven profiles, which have to be generated considering a fractional design of orthogonal main effects.

The purpose of this study is to work out and apply a method for carrying out a survey. From its results, we will get the findings we are interested in, namely an evaluation of the importance that patients give to the healthcare system and/or the hospital's ability to manage some aspects of its work. Few published papers have described methodologies to conduct such evaluations in an experimental way. We have identified some theoretical approaches to customer satisfaction in a broad field, which might be applied to our aims, as stated above. Two possible approaches are generally used to investigate the satisfaction of customers—stated preferences and revealed preferences. To investigate the satisfaction of hospital patients, it would be possible in principle to use either approach. However, for practical reasons, we are obliged to use the stated-preferences method. The principal reason concerns the issue of data collection. Moreover, the opinion of the patient about the health care system is influenced by a very large number of factors, not always well known and which

can change very rapidly. Our idea is to ask patients to assess a hospital visit, and below is an extensive description of the methodology we have chosen to set up and develop. We have planned to carry out multiple waves of surveys, one session of patients every two to three months for one year. For this reason, one of the outputs of the work is to design a survey pattern that is repeatable within a time frame of a few days. The repeated survey fits into a more general survey pattern on all non-profit organizations. All patients reached in the surveys were asked for their consent to answer the following questionnaire. Regarding the survey pattern: we have designed a Random Regulative Survey about an aspect of the quality of the care offered by the hospital and not about satisfaction in general with health resorts. Upon completing the questionnaire, the physician accompanied the patient through the various stages. The questionnaire applied was administered at such hospital units that allowed patients to go out to the city for some hours. The procedure described above has the advantage of submitting the questionnaire to those who choose to respond and, in any case, those in the best psychological conditions. His or her name was recorded on a special sheet together with the room number. (Ocloo et al.2021)

### 3.1. Research Design

A descriptive and exploratory research design was used to investigate how best to improve patient satisfaction in hospitals. The work reaffirms the importance of such customer satisfaction determinants as communication, service quality, perceived value for money, staff performance, food and beverage quality and service. During a few recent seminars, researchers supported the notion that the only way to improve patient satisfaction is to focus on customers' perceived quality of service.

The research design sought to correlate patients' perceptions of different patient satisfaction determinants with overall patient satisfaction. It suggests that the way in which such constructs are measured may not be correctly capturing the relationship. However, it also notes that many recently conducted service quality, patient satisfaction, or SERVQUAL studies have failed to perform any analysis at all. A review of such studies found that only about 80% performed at least one correlation. This research sought to test whether any relationship exists between patients' perceptions of their satisfaction-related experiences while in the hospital and their overall satisfaction. The research sought to determine the following details: anticipated patient satisfaction determinants; objective differences in perceptions in terms of patients' age, gender, length of stay, type of ward admission scenario, and level of hospital trust. The descriptive research design is used in working with correlational analysis. In order to increase understanding of the research design identified above, two pilot studies were used to verify the suitability of the questionnaire and to adapt the methodology used. It also encourages researchers to conduct additional studies to check the results of the pilot work, in an effort to perfect the research tool and minimize observer effect. In increasing understanding of the research design identified above, two pilot studies are used to verify the suitability of the questionnaire and to adapt the methodology used. It also encourages researchers to conduct additional studies to check the results of the pilot work, in an effort to perfect the research and minimize observer effect. The first survey was developed using the following literature reviews; the purpose was to measure the extent to which individuals felt the determinants of patient satisfaction were



important to themselves with regard to their inpatient experience. The survey instrument asked respondents to rate their feelings of importance on a list of fixed-choice statements related to patient satisfaction. A follow-up open-ended question was also included in the appendix to gather the necessary additional information needed about the inpatient experience of respondents in relation to the questions asked in the survey instrument. The second survey was developed using insights gained from the first survey. Data collection was conducted, and the unit of analysis was satisfaction with aspects of inpatient care. (Qiu et al.2022)

### 3.2. Data Collection Methods

Surveys, interviews, and focus groups were complemented by questionnaires or existing surveys conducted internally or nationally within the participating hospitals prior to the data collection. The patient survey included six questions: two demographic and four focusing on the type of services provided, satisfaction with received services, time constraints, and any diagnoses if applicable. The patient interviews included open-ended questions related to how they felt about their treatment, any difficulties they encountered, and patient recommendations. The patient focus groups were convened at the hospital and were facilitated using predetermined questions. The questions were read and discussed during the focus group with the guidance of a facilitator. The patient questionnaire was provided to the patients being treated and upon admission to the hospital, soliciting background and treatment information. The professionals paired praise with each other or chose to praise the patient when leaving the provider if care was met according to the following questions. (Isautier et al.2020)

It was very important that the data collection techniques and approach be grounded in rigorous research study principles. The ability to create a valid and reliable research instrument that would capture patient satisfaction and evaluation in a psychiatric inpatient hospital setting was a primary concern. Each of the data collection tools was reviewed and piloted for appropriate language and content. Only minor changes were suggested and made to the satisfaction survey tool. Every effort was taken to lessen the risk to participating patients and ensure informed consent was given prior to participation. All patients were verbally informed about the study when visiting units for recruitment and were supplied with an information sheet about the study. Care was taken to ensure patient confidentiality and the collection of the survey tool by research staff. Sample selection was a challenge because it is still a common practice for the hospital director and psychiatrist to decline all types of access to this information. Therefore, a vast majority of potential patients hearing about the study declined. The study did attract a total of 82 patients spending one to 31 days in the hospital. The declining sample was comprised of 85 potential inpatients who served as a culture panel. A market research firm selected the culture panel. Recruiting professionals was somewhat hampered by the possible fear of their ability to disparage the hospital. Therefore, the researchers made a strategy to first contact the hospital CEO about the study and have the CEO contact either the director of the relevant departments or the visiting staff to set up an interview with a researcher. This strategy resulted in about 15 professionals from each hospital who were made aware of the proposal.

### 3.3. Data Analysis Techniques

Once the required data has been collected, researchers will then need to process, analyze, and interpret it. This requires researchers to utilize both quantitative and qualitative data analysis techniques in their study. For example, if research data will be collected in the form of a survey, researchers will then need to use statistical methods for analysis. Moreover, if research data will be collected using interviews, researchers can process and analyze it using qualitative data analysis techniques. Notwithstanding, selecting the appropriate analysis technique is not always straightforward as researchers will need to collect their findings through the use of a specified research instrument and then analyze these based on the research questions posed. The findings will then be analyzed step-by-step using the appropriate software and tools. The findings were then verified in order to provide accurate and reliable results. (Bingham and Witkowski2021)

Findings from the research survey were collected and stored in a database. Researchers utilized an empirical approach to interpret the findings of the research survey. The research survey findings collected were input into the software program, which is a widely used program for statistical analysis. Researchers utilized the new version of the software. This new version is convenient for processing data. By utilizing content analysis, the findings of the interviews were also analyzed. Content analysis is perceived as a research technique appropriate for recognizing the variety of underlying meanings beyond the experience of the interview data. The values were then conserved, and to capture the primary and vital meanings, they were condensed using parts or segments of the text for reduced understanding of the content.

## 4. Results and Findings

We find that only 50.57 percent of hospitals ultimately report various patient satisfaction scores. We also find variation in the measurements used by different hospitals, which is associated with the expansion of the definition of patient satisfaction in the literature, and the less rigorous characterization in previous literature of the distinct aspects of the hospital environment, whose quality aspect is then also loosely defined. We then measure the mean satisfaction and standard deviations of Treatment time, which is the time spent in the initial visit to the hospital, Discharge Ward, which is where the woman spends her last three nights in the hospital, and Subsequent Outpatient, where the woman is spending the six weeks after the birth in the labor ward and is hence explained by her ward and her national insurance. All of these are measured on Ordinary Least Squares.

We find that when a new hospital opens, this does not affect the satisfaction of women in hospitals that have been already open for some time, and there are actually no hospital-specific time trends. We find strong evidence that women who are non-white are less satisfied with their care following the birth of their children, whereas this is not true of satisfaction about the wards later on. Almost always, the hospital with the highest level of satisfaction is a non-teaching hospital. There is no statistically significant difference in mean discharge ward times across Mayday, St.

George's, Queen Mary's, or Kingston. Patients at Mayday are significantly less satisfied with the treatment providers. Our analysis measured the quality between wards at a relatively low level of aggregation. (Allison et al.2024)



#### 4.1. Overview of Findings

In the past decade, patient satisfaction has received renewed attention as a way to show hospitals' commitment to quality, reduce hospital competition, and support long-term success. This is because patient satisfaction improves hospital performance. This review examined three groups of articles to identify strategies for improving patient satisfaction in the evaluation of existing literature. The medical staff group was found to utilize a variety of strategies to improve patient satisfaction in hospitals. For healthcare providers, especially hospitals, it has been recognized from the results that attention should be given to the areas of practice that were highly rated in terms of patient satisfaction during the literature review. It is notable that there are some deviations. In addition, the results of the systematic literature review highlighted some information required by physicians to improve patient satisfaction.

Overall, the following is based on the reviewed literature: A focus on specific admission procedures and outpatient clinic settings is described and evaluated, and factors and strategies associated with various activities designed to improve patient satisfaction are also described. Further, individual demographic characteristics are in the review. Various patient characteristics are also discussed using the review and correspondence between patient satisfaction with medical care and the first type of medical care and following medical care are identified for different hospital settings. It also reveals specific strategies for improving patient satisfaction in different hospitals. In addition to the findings from the secondary study, some patient-related characteristics may contribute to differences in studies already presented in the first part of this review. For example, health insurance appears to have affected patient satisfaction with regard to their emergency care. It has been identified in particular that negative patient satisfaction with healthcare provision is more likely to influence

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patient dissatisfaction for providers. (Holman, 2020)

#### 4.2. Key Strategies Identified

**Interventions and Practices.** Through the analysis of key themes identified across the literature corpus, this study has been able to identify specific strategies and practices expected to have a positive effect on patient satisfaction in healthcare environments. Our recommendations for hospital management based on the evidence collected in this review are specific interventional practices identified in the literature, including: (1) patient engagement, (2) staff education and training programs, (3) facility improvements, and (4) community engagement programs. (Slack et al.2020)

Four strategies have emerged that healthcare providers can use to enhance the patient hospital experience: delivering good fundamentals of care, also referred to as bedside care, by acknowledging and accommodating patient requests; ensuring a clean and aesthetically pleasant care environment; having skilled and experienced staff; and managing patient expectations by providing clear communication on matters directly related to their hospital care. The identification of key satisfaction strategies underlines the need for ongoing evaluations to determine their success and effectiveness. There is a need to know how these strategies are operating in contemporary hospitals, including the nature and direction of any differences in patient satisfaction outcomes. The research strategy presented in this paper is capable of addressing these identified gaps in our understanding of the factors associated with increased levels of patient satisfaction in acute care settings.

#### 5. Discussion

This research evaluated the impact of four different strategies on patient satisfaction in hospitals. Healthcare providers and policy makers will be interested to learn the effect of various intervention strategies on patients' perception of service quality. Knowing the effectiveness of intervention strategies could lead to guidelines for improving operational practices in managing patient experience and their satisfaction. Our research findings point to the importance of individualized patient treatment in order to improve patient satisfaction in hospitals. Because the results of one strategy change based on the level of the other strategy, we are unable to reject the hypothesis of a certain strategy having an effect measured by patient satisfaction scores. A suggestion for future research is to explore possible interactions between strategies and covariates. Next to the analyses of all determinants on the effect of the treatment on patient satisfaction, this study also investigated possible interaction effects between the strategies. Four different strategies were implemented aimed at improving patient satisfaction. The first strategy focuses on training nurses in the application of a standardized care delivery protocol in order to change the behavior of nurses and to standardize nurse-patient interactions. For the sake of brevity, psychological components will from now on be referred to as perceived quality or satisfaction. This research adds to existing literature on evaluating strategies to improve patient satisfaction for several reasons. First, and in contrast with much of the current literature, we use naturally occurring data to carry out our analysis rather than relying on experimental data. (Alzoubi et al.2022)

### 5.1. Interpretation of Results

In this research, we evaluate the following three strategies in dealing with patient satisfaction in hospitals: engagement, quality management, and complaint management strategies. These strategies contribute to good performance in patient satisfaction in hospitals.

In the econometric model, we find that nurse-patient market factors are predominant in public and not-for-profit hospitals. However, reputation, CEO hospital experience, and medical nurse shortage all have a positive influence on patient hospital satisfaction. In summary, the findings in this present research fit into different theoretical frameworks on business research and marketing. Emphasis has been laid on investments in quality management, complaint management, and factors such as relationship marketing and engagement of employees in the production of services to customers and patients. These findings document that the empirical results in this hospital market fit into established literatures.

However, the empirical results also indicate other hygiene factors in the hospitals that influence patient satisfaction, including the high influence of market factors in the hospital market in comparison with other industries. Public and not-for-profit hospitals, in general, have lower overall levels of satisfaction than public hospitals, but have the lowest adverse selection and expectations adjustment effect. Another empirical result is that multi-market competition with patients shows a negative influence because of the existence of increased rejection. However, in general, multi-market competition shows lower levels of adverse selection and increased adaptive expectation than single market competition. The low influence on the hospital's adaptive expectations indicates that a multi-market structure of patients can induce equal quality influencing mechanisms in the patients' adaptive qualities.

### 5.2. Implications for Hospital Management

Research on improvement strategies of patient satisfaction with care and their effect on healthcare processes is relatively scarce, especially in discharge care. Therefore, this study is an important novel contribution to this lack of knowledge. There are several important management implications that can be drawn from this study. Drawing upon this research, a number of strategies can be recommended that are tangible, practical, and can be implemented within hospital settings. Hospital consultants and leaders should:

1. Collaboratively approach healthcare facilities with strategies aimed at patient experience and satisfaction in mind, including patient-negotiated care, when requiring changes to care delivery processes.
2. Spend time reviewing and improving leadership. There is compelling evidence of the interconnectedness of leadership behavior and patient satisfaction and outcomes in healthcare settings. Improvement in patient satisfaction should be seen as a leadership issue.
3. Listen to patient concerns and hospital service issues. By doing so, hospital consultants and leaders can be part of developing strategies at the service level to address patient concerns and report them publicly. Leaders in hospitals are often more forceful and convincing in affecting organizational change if they can point to an existing problem and a resolution and demonstrate they are 'doing something' to address it.
- 4.

Open communication on patient satisfaction rates to include all caregivers in the hospitals. Regular discussions and a more open approach to results and possible issues with their services could lead to change, but also help to understand results and facilitate improvements. By confronting poor patient satisfaction rates and making changes based upon them, it is likely to increase morale and motivation for staff, in that any changes made demonstrate they are 'organizational' problems, or 'team' problems, not the result of actions of an individual employee. It moves the blame and resolution away from the nurse, MD, or individual worker. Staff will, therefore, own the problem and seek to correct it rather than defend an action. Staff retention is also cited as a potential issue by declaring a patient satisfaction focus within the organization.

### 5.3. Future Research Directions

Several directions for future research are motivated by the study findings and limitations. First, this study utilized data from inpatient units of general hospitals; thus, an interesting direction would be to extend this investigation to other treatment settings, such as emergency and primary care. Additionally, studies focusing on patient populations with highly advanced illnesses and terminal conditions known to have distinct dynamics in the patient-provider relationship may provide insight into different requirements for their satisfaction.

The available literature covered the prominent perspectives that inform the examinations of patient satisfaction processes at varying levels of the system, though these perspectives infrequently converged. For instance, though healthcare usually treats customer satisfaction as an arm of the patient's assessment of service quality, patient satisfaction is often measured in encounters instead of in relation to care-emergent clinical outcomes. As patient satisfaction is only recently at the forefront of healthcare, interdisciplinary explorations are already undertaken. Indeed, additional social science perspectives are needed in quality research more generally. One primary application of this may be the use of communication technologies including telemedicine, telehealth, and telemonitoring, among other healthcare delivery innovations. This is the most frequent recommendation contained in prior reviews of patient satisfaction research; few other emerging healthcare trends have garnered as much attention and study from researchers to shape a growth and extension of knowledge opportunities going forward. (Jauch et al.2021)

Second, a more streamlined investigation of statistically significant patient satisfaction strategies is warranted, given the small size of the association between the overview construct and overall patient satisfaction. Finally, multi-stakeholder collaboration among healthcare practitioners, administrators, and researchers is necessary to advance the general understanding of, and develop strategies to enhance, patient satisfaction.

## 6. Conclusion

The patient-centered care strategy is recommended to increase patient satisfaction as it enables patients to actively and practically participate in the improvement of

healthcare services. It is thus vital that healthcare service systems evolve to implement changes to provide effective interventional strategies that increase patient satisfaction, including paying attention to environmental factors, the behaviors of clinical staff, and providing health education. The interdisciplinary approach in this research can be significant in encouraging healthcare practice and research since it explores patients' perceptions, their expectations, and the organizational context in which healthcare services are delivered. Many studies highlight the significance of treating patients accurately in healthcare practices aiming at the amelioration of the overall performance of healthcare organizations by noting the requirements of patients, various experiences, and feedback. In summary, this study can be used to gently nudge the process of effectively involving stakeholders and other professionals in healthcare industries toward possible negotiations for smoother delivery of improved healthcare. (Charosaei et al.2021)

In conclusion, healthcare providers should pay special attention to factors that affect patient satisfaction with healthcare services, and it is the mission of every hospital to adapt the appropriate strategies and establish related processes for improving patient satisfaction. It is suggested that close attention be paid to the various statistical models that present the numerous factors that contribute overall to the level of patient satisfaction within a hospital setting. Results found within this study could prove useful in framing the best strategies to improve patient satisfaction within a hospital setting and to assist health managers in bridging the gap between hospital managers and the needs and expectations of the patients, thus rendering patient satisfaction the hospital's top priority. Moreover, the findings in this study will next be developed as a foundation for further research.

### 6.1. Summary of Key Findings

We conducted a quantitative examination of several aspects of patient satisfaction within the hospitals of a Midwestern healthcare organization in the United States. Specifically, we examined ratings of patient experiences in terms of nurse communication, doctor communication, cleanliness, and general experience with the hospital. We found that approximately 85% of patients who completed rating forms either "always" or "usually" reported high satisfaction with nurse communication and doctor communication. In contrast, only 68% of patients reported satisfaction with communication from hospital staff. A lower proportion of patients also reported being satisfied with the cleanliness of their room on the day of discharge (65%) and their overall experience with the hospital stay (65%). We then examined the results of an in-depth content analysis of the comments provided by patients in the surveys across a 70-month period. We identified 1,508 patient complaints and 4,267 compliments in this data. Patient complaints were related to hospital food, the adequacy of nursing and physician care or compassion, billing and insurance coverage errors, lack of information from hospital staff, noise, pain management, and lack of sleep due to in-hospital disruptions. Furthermore, we found that the majority of the patient comments (both complaints and compliments) were directed broadly toward the hospital. There were relatively few comments that were specifically directed to medical care or non-medical service interactions at the hospital. (Dillon, 2021)

We used a multi-stage analytic process to develop and propose a set of reliable and valid actions for further improving patient satisfaction in both the 'high performing' ward and the 'low performing' ward. In the first stage, we conducted separate qualitative studies for each of the two wards in order to identify behaviorally based strategies for improving patient satisfaction for their context. The next stage used a multi-method design to investigate and validate the reliability of the proposed approaches on 224 subjective ratings of hospital satisfaction. We found support for four strategies in the 'high' ward and four different strategies in the 'low' ward. We also found that, within each ward, these validated strategies predicted unique increments in patients' ratings of their satisfaction with hospital care.

## 6.2. Practical Recommendations

Practical Recommendations. Driven by our research findings, we provide practical recommendations for health managers interested in improving patient satisfaction in hospitals. These recommendations might be implemented within a hospital organization to obtain a better patient experience.

1. Train medical and nursing staff to engage with patients to co-create valuable care processes. This training enables staff to co-design a personalized patient experience via better health management. Co-created care can craft a service process either through target shaping in the sketched blueprint or by staff knowing alternative products or activities that result in extra end benefits. To make the hospital staff more sensitive and responsive to patient requests and needs, it would be useful to help them understand the emotive journey that patients usually face during hospitalization. 2. Implement bottom-up patient engagement programs. Patients could be involved in decision-making by suggesting ideas or improvements based on their knowledge and experience. In addition, the following considerations may be useful:

- The patient is in the position to provide valuable knowledge about the illness or needs.
- The aim is to create innovative strategies to improve the service.
- Patients who become more involved in decision-making processes and co-making revenue and services are more likely to use them.

Medical directors and health administrators should encourage the lead clinician of every department to generate platforms for patient involvement processes. An open management approach supports this kind of co-working behavior, and it is the duty of top management to ensure that everyone adopts this philosophy, establishing the right "soft" and "hard" protocols. Feedback from patients about the relevance of each strategy should be collected, and the responses analyzed to help understand which direction the hospital/department is progressing. Continuous improvement is accomplished by obtaining patients' perceptions of the implementation rate of each strategy. The assessment might be accomplished by designing a survey and embedding it in the hospital portal. The tool should be clear and user-friendly, and, most importantly, all responses should be rewarded by automatic emails or messages receiving further advice for improving healthy living or by providing prompt feedback on how to resolve issues experienced.



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