

Analysis of the Impact of Outpatient Care Service Process Optimization on Patient Satisfaction

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Abstract: In order to explore the impact of outpatient nursing service process optimization on patient satisfaction, this study first analyzed the current situation and existing problems of outpatient nursing service process through a combination of literature review and empirical analysis, and then proposed corresponding optimization strategies. Questionnaires and interviews were used to collect patient satisfaction data before and after optimization. The results showed that the optimized outpatient nursing service process significantly improved patient satisfaction, and the key factors to improve patient satisfaction were to enhance the professional quality of nursing staff, optimize the service process and strengthen the information construction. This study provides a scientific basis for the optimization of outpatient care service process and a reference for improving the quality of medical services.

Keywords: Outpatient Nursing Service; Service Process Optimization; Patient Satisfaction; Information Management

1. Introduction

With the progress of society and economic development, people's demand for medical and health services is increasing, and patients have higher and higher requirements for the quality, efficiency and satisfaction of medical services. As an important part of the medical service system, the quality of outpatient nursing service directly affects the medical experience and satisfaction of patients. However, there are many problems in the existing outpatient care service process, such as low work efficiency of nursing staff, long waiting time of patients, and complex service processes, which seriously affect patients' medical satisfaction. Therefore, optimizing the outpatient care service process and improving service efficiency and quality have become the key to improving patient satisfaction. Studying the impact of outpatient nursing service process

optimization on patient satisfaction can not only provide a scientific basis for hospital management, but also help to improve the overall level of medical services and meet the public's demand for high-quality medical services. In recent years, there has been an increasing number of studies on medical service process optimization and patient satisfaction by scholars at home and abroad. Foreign studies have focused on the optimization of medical service processes earlier, and many studies have focused on how to improve the efficiency and quality of medical services through process redesign and information technology application. For example, some studies have succeeded in improving the efficiency of hospital service processes and reducing patient wait times by introducing lean management and Six Sigma methodologies. Although domestic research started late, it has also made remarkable progress in recent years, especially in the context of the increasing popularity of information technology, more and more studies have begun to pay attention to how to use information technology to improve the medical service process and improve patient satisfaction. However, most of the current research focuses on the improvement of a single service process or the application of technology, and there is a lack of systematic research on the relationship between the overall optimization of outpatient care service process and patient satisfaction. Therefore, this study aims to fill this research gap and explore the impact of outpatient care process optimization on patient satisfaction, in order to provide more comprehensive theoretical and practical guidance for medical service management.

2. Theoretical Basis and Research Methods

2.1 Overview of the Outpatient Care Service Process

The outpatient care service process is related to the key links such as initial reception of patients, health assessment, execution of medical orders,

health education and follow-up, and its optimization goal is to significantly improve service quality and efficiency through process redesign, improve work efficiency, strengthen information management and other measures, so as to improve patient satisfaction. Specifically, optimization measures may include, but are not limited to, streamlining the patient registration process and reducing wait times through electronic means, improving the responsiveness and quality of services for caregivers, such as implementing regular training and assessments, and using information technology, such as patient health information systems, to improve transparency and continuity of service processes. For example, by introducing a self-service check-in and appointment booking system, patients can reduce on-site waiting times, while hospitals can improve overall service efficiency by predicting peak hours and rationalizing nursing staffing through data analysis.

2.2 Theoretical Basis for Patient Satisfaction

Patient satisfaction is an important indicator to evaluate the quality of medical services, which reflects patients' subjective feelings and evaluations of the medical service process and its results. Starting from the service quality model, patient satisfaction is affected by multiple dimensions of service quality, including reliability, responsiveness, assurance, sympathy, and tangibility of service. In order to improve patient satisfaction, medical institutions need to consider and optimize these dimensions based on the needs of patients. For example, to improve service reliability to ensure that medical services can be completed accurately and timely every time, to enhance service responsiveness and quickly respond to patients' needs and problems, to strengthen service assurance, to improve the professional ability and service attitude of medical staff, to improve service compassion and pay attention to patients' emotional needs, to improve service tangibility, and to optimize the medical environment and facilities. Through these measures, the overall satisfaction of patients can be effectively improved.

2.3 Research Methods and Data Sources

This study adopted a mixed-methods study design, combining quantitative and qualitative studies, to comprehensively evaluate the impact of outpatient care process optimization on patient satisfaction. The study first identified the research framework and hypothesis through literature review and pre-survey, then collected patient

satisfaction data before and after service process optimization through questionnaire survey, and collected the views and experiences of hospital managers and nursing staff through in-depth interviews to deeply understand the specific measures and effects of process optimization. To ensure the validity and reliability of the study, the questionnaire design will refer to relevant service quality and patient satisfaction scales, and pre-test to adjust and optimize. In-depth interviews will be conducted in a semi-structured format to ensure that rich and in-depth information can be gathered. The questionnaire will be conducted by random sampling, with the goal of collecting data from at least 300 patients to ensure the representativeness and accuracy of statistical analysis. The questionnaire will include basic patient information and satisfaction evaluation before and after the optimization of the outpatient care service process. In-depth interviews will include at least 10 hospital administrators and 20 nursing staff to obtain detailed information on process optimization measures and implementation challenges and solutions. All data collection will be carried out with the consent of the participants and with their privacy ensured. The questionnaire data will be analyzed using statistical software such as SPSS, mainly including descriptive statistical analysis, difference tests (such as t-test or ANOVA), etc., to evaluate the specific impact of outpatient care process optimization on patient satisfaction. For qualitative data, content analysis is employed, with key themes and patterns extracted from in-depth interviews to gain a deeper understanding of the effectiveness and challenges of process optimization. By synthesizing the results of quantitative and qualitative analysis, this study aims to propose a set of implementation recommendations for the optimization of outpatient care service processes to improve patient satisfaction.

3. Analysis of the Current Situation of Outpatient Nursing Service Process

3.1 Current Status of Outpatient Care Service Processes

At present, there are certain common problems in the outpatient care service process of many medical institutions, which are mainly manifested in the efficiency and quality of patient reception, health assessment, doctor's order execution, health education and follow-up. The first problem faced by patients during the reception process is that the waiting time is too long, especially during

peak hours, when patients may have to wait for hours to complete the preliminary procedures such as registration and payment. In the process of health assessment and execution of medical orders, it is often difficult for the individual needs of patients to be fully addressed and met due to the heavy workload of doctors and nursing staff. In addition, the inadequacy of health education and follow-up is also an important factor affecting patient satisfaction, and patients often lack adequate information and support to cope with their health problems after discharge.

3.2 Main Problems

Long waiting times are a common problem faced by patients, including not only waiting for preliminary procedures such as registration and payment, but also waiting for medical treatment and examination. The long waiting time not only increases the physical and mental burden of patients, but also reduces the overall service efficiency. Poor information delivery is a common problem in the outpatient care process. Due to the lack of an effective information management system, there are barriers to communication between medical staff, and patients' medical record information and examination results cannot be transmitted in a timely and accurate manner, which affects the quality and efficiency of services. In the rapid outpatient service process, it is often difficult for medical staff to provide personalized attention and service to each patient, resulting in the difficulty of meeting the individual needs of patients. Health education and follow-up are important links to improve patients' self-management ability and promote health recovery, but many medical institutions do not invest enough in this link, resulting in the lack of necessary guidance and support for patients after discharge.

3.3 Analysis of Factors Influencing Patient Satisfaction

Patient satisfaction is influenced by a variety of factors, including long waiting times being one of the main factors affecting patient satisfaction. Studies have shown that the longer the wait, the lower the patient satisfaction. The service attitude of medical staff has a significant impact on patient satisfaction. A friendly, patient attitude increases patient satisfaction, while an indifferent, impatient attitude decreases satisfaction. Effective communication is key to improving patient satisfaction. Patients want to have access to adequate and accurate health information,

including disease diagnosis, treatment options, prognosis, etc., as well as various guidance and recommendations related to treatment. Meeting the individual needs of patients is essential to increase satisfaction. This includes paying attention to the patient's specific needs, such as cultural, linguistic, religious considerations, etc., as well as providing individualized treatment and care options. The adequacy of health education and follow-up is also an important factor affecting patient satisfaction. Patients expect ongoing attention and support after discharge to help them better manage their health. With an in-depth analysis of these factors, healthcare organizations can take targeted measures to optimize the outpatient care process and improve patient satisfaction.

4. Outpatient Nursing Service Process Optimization Strategy

4.1 Theories and Methods of Process Optimization

Process optimization is a management method aimed at improving service efficiency and quality, through the analysis, design and implementation of existing processes, in order to optimize resource allocation, simplify operating procedures, improve work efficiency and service quality. In outpatient nursing services, process optimization can adopt a variety of theories and methods, such as Lean Management, Six Sigma, and Plan-Do-Check-Act (PDCA) cycles. These approaches focus on eliminating waste, reducing variability, and continuous improvement to improve patient satisfaction and service quality.

4.2 Strategies for Optimizing the Outpatient Care Service Process

Improving the professional skills and service awareness of nursing staff is the key to improving the quality of outpatient nursing services. This includes regularly organizing nursing staff to participate in professional training and skill improvement courses to enhance their clinical nursing capabilities, communication and coordination skills, and ability to respond to emergencies. At the same time, through the incentive mechanism and career development planning, the job satisfaction and service enthusiasm of nursing staff are improved, so as to improve patient satisfaction. Rational design and optimization of outpatient nursing service process is an effective means to improve service efficiency. This can be achieved through process reengineering and standardized operations, such

as simplifying the registration and payment process, optimizing the patient triage system, and reducing patient waiting times. At the same time, by optimizing the treatment process and examination process, we ensure that patients can receive efficient and orderly guidance and services in every aspect of receiving services. The use of information technology to improve the efficiency and quality of outpatient care services is an indispensable part of the modern medical service system. This includes the establishment of an electronic medical record system to digitize, standardize and share patient information, the introduction of an appointment registration system to reduce on-site waiting times for patients, and the use of mobile and telehealth technologies to provide online consultation and follow-up services to enhance the patient experience.

4.3 Expected Effects and Implementation Difficulties

Expected results: The optimization of the outpatient care service process is expected to significantly improve service efficiency and patient satisfaction, reduce patient waiting time, improve the quality of care and service experience, and enhance patients' health education and self-management capabilities. **Implementation difficulties:** The implementation of process optimization can face challenges in many aspects, including an organizational culture that resists change, financial and technical resource constraints, and a lack of effective project management and leadership. In addition, how to balance humanized services and process standardization is also a key issue that needs to be solved in the implementation process. Therefore, the successful implementation of process optimization requires strong leadership support, adequate resource investment, and continuous improvement mechanisms.

5. Case Study of Outpatient Nursing Service Process Optimization

5.1 Case Selection and Background

This case study is an analysis of the outpatient care process optimization practice of a large general hospital. The hospital has a large number of outpatient clinics, long waiting times for patients, and low efficiency in information transmission, which affects the medical experience and satisfaction of patients. In order to improve the quality and efficiency of services, the hospital decided to comprehensively optimize the

outpatient care service process.

5.2 Implementation Process of Optimization Measures

Through an in-depth analysis of the existing outpatient process, bottlenecks and wasteful links in the process were identified, such as duplicate registration links, inaccurate triage, etc. Then, design a new flowchart to simplify and standardize the operating procedures, ensuring that each step contributes to improving efficiency and service quality. Organize nursing staff to participate in professional training to improve their professional skills and service awareness. At the same time, an incentive mechanism was introduced to encourage nursing staff to improve their work efficiency and service quality. Invest in the construction of electronic medical record system and appointment registration system to realize the electronic management of patient information and online appointment services, and reduce the waiting time of patients on site. Improve the physical environment of the outpatient department, such as adding signage and optimizing the layout of the waiting area, to enhance the patient experience.

5.3 Optimization Effect Evaluation

Through questionnaires and follow-up visits, patients expressed a high degree of satisfaction with the optimized outpatient service process. In particular, they gave positive comments on the reduced waiting time, improved service attitude and improved medical environment. After the implementation of the optimization measures, the overall service efficiency of the outpatient clinic has been significantly improved. Average wait times have been reduced by 30 percent, patient turnaround times have been reduced by 25 percent, and caregiver productivity has increased. During the optimization process, the hospital encountered several challenges, including the low acceptance of electronic services by some elderly patients and the adaptation of nursing staff to the new process. To this end, the hospital has adopted a series of coping strategies, such as setting up a dedicated help desk to assist patients who are not familiar with e-services, providing continuous training and psychological support to nursing staff, and ensuring the smooth implementation and continuous improvement of process optimization measures. In conclusion, through comprehensive process optimization measures, the hospital has successfully improved the quality and efficiency of outpatient care services, provided patients with more efficient and

convenient medical services, and also provided valuable practical experience for other medical institutions.

6. Analysis of the Impact of Outpatient Nursing Service Process Optimization on Patient Satisfaction

6.1 Key Factors Influencing Patient Satisfaction

Patient satisfaction is an important indicator of the quality of medical services, and it is influenced by a variety of factors. In outpatient care services, the key factors that affect patient satisfaction include the patient's waiting time in the outpatient clinic is an important factor affecting satisfaction. Excessive waiting times can lead to patient dissatisfaction and anxiety. The service attitude of the nursing staff directly affects the patient's mood and satisfaction. Friendly and patient service can enhance the patient's medical experience. The efficiency of the service process determines the convenience of the patient's medical treatment. Efficient service processes can reduce patient waiting and medical treatment times. Effective communication can help patients better understand their condition and treatment options, which can lead to greater satisfaction. A comfortable and clean environment can provide a better medical experience and increase patient satisfaction.

6.2 Influencing Mechanism of Outpatient Care Service Process Optimization

Outpatient care service process optimization reduces patient waiting time in outpatient clinics by optimizing the registration, triage, and consultation processes, and directly improves patient satisfaction. Improve the service quality and communication skills of nursing staff through training, and serve patients in a more professional and friendly manner. Optimize the information management system, improve the transparency of the service process, and make patients have more understanding and control of the medical treatment process. By optimizing the physical environment and adding signage, it provides a more comfortable and convenient medical experience.

6.3 Analysis of Changes in Patient Satisfaction after Optimization

Patient satisfaction is often significantly improved by optimizing the outpatient care process. Through process optimization, the average waiting time of patients has been

significantly reduced, which directly improves patient satisfaction. After the nursing staff are trained, the service attitude is more friendly and professional, which increases the trust and satisfaction of patients. The optimized service process is more efficient, reducing the time and energy consumption of patients and improving the medical experience. Improved information management systems and communication mechanisms have made it easier for patients to obtain information about their conditions and treatments, increasing patient satisfaction. The improved physical environment and instruction system provide a better medical experience, further increasing patient satisfaction. Through comprehensive process optimization measures, it not only improves the efficiency and quality of outpatient services, but also significantly improves patient satisfaction and medical experience, thereby promoting the improvement of the overall service level of the hospital.

7. Conclusions and Recommendations

This study significantly improved patient satisfaction by optimizing the outpatient care service process, which was manifested in the shortening of waiting time, the improvement of service attitude, the improvement of service efficiency, the enhancement of information communication, and the improvement of medical environment. These results demonstrate the importance and effectiveness of process optimization in improving the quality and efficiency of healthcare services. This study adopts a comprehensive process optimization approach, which not only focuses on a single service link, but comprehensively considers all aspects of outpatient services to achieve overall optimization and improvement. In the process optimization, special emphasis is placed on the principle of humanized design, and the medical experience of patients is enhanced by improving the medical environment and improving the service attitude. This study made full use of information management tools, such as electronic medical record system and online appointment system, to improve service efficiency and transparency, and reduce patient waiting time and uncertainty. The results of this study have important practical significance for improving the quality of hospital outpatient services. By implementing the optimization measures proposed in this study, hospitals can effectively improve service efficiency and increase patient satisfaction, thereby enhancing the overall competitiveness and social reputation of hospitals.

In addition, the methods and results of this study can also provide reference and reference for other medical institutions, and have a wide range of application value.

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