



Midocean University
College of Management
Department of Healthcare Administration

**Perceived Quality of the Patient Registration Process and Its Association with
Perceived Operational Efficiency and Patient Satisfaction in the Registration
Department of a Private Hospital in Riyadh**

**Prepared by:
Darin Aldayekh**

253002944

Supervised by:

Dr. Al-Faisal Abdulhamid

Dr. Fayez Jrad

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I Darin Aldayekh, I declared that the copyright of this research belongs to Midocean University.

المستخلص

هدفت هذه الدراسة إلى استقصاء العلاقة بين الجودة المدركة لعملية تسجيل المرضى وكل من الكفاءة التشغيلية المدركة ورضا المرضى في قسم التسجيل بأحد المستشفيات الخاصة بمدينة الرياض، المملكة العربية السعودية. اعتمدت الدراسة المنهج الكمي الوصفي الارتباطي المقطعي، وتم جمع البيانات باستخدام استبانة مكونة من محور للبيانات الديموغرافية وثلاثة محاور لقياس متغيرات الدراسة، ووزعت على عينة مكونة من (50) مريضاً ممن أكملوا إجراءات التسجيل. تم تحليل البيانات باستخدام برنامج IBM SPSS Statistics Version 32.0 من خلال الإحصاءات الوصفية، ومعامل كرو نباخ ألفا لقياس الثبات، وتحليل ارتباط بيرسون لاختبار فرضيات الدراسة.

أظهرت النتائج ارتفاع مستويات الجودة المدركة لعملية تسجيل المرضى، والكفاءة التشغيلية المدركة، ورضا المرضى. كما أظهرت نتائج تحليل ارتباط بيرسون وجود علاقة ارتباط إيجابية قوية بين الجودة المدركة لعملية تسجيل المرضى ورضا المرضى ($r = 0.849$) ، ($p < 0.001$) وعلاقة ارتباط إيجابية ذات دلالة إحصائية بين الجودة المدركة لعملية تسجيل المرضى والكفاءة التشغيلية المدركة ($r = 0.809$) ، ($p < 0.001$). وتشير النتائج إلى أن المرضى الذين يدركون جودة أعلى في عملية التسجيل يميلون أيضاً إلى الإبلاغ عن مستويات أعلى من الرضا والإدراك الإيجابي للكفاءة التشغيلية، دون أن تثبت الدراسة وجود علاقة سببية.

وتوصي الدراسة بإجراء تقييمات دورية لتصورات المرضى حول جودة عملية التسجيل، والاستفادة من نتائجها في دعم التحسين المستمر للخدمات الإدارية، وإجراء دراسات مستقبلية تشمل عينات أكبر ومؤسسات صحية متعددة لتعزيز إمكانية تعميم النتائج.

الكلمات المفتاحية: الجودة المدركة لعملية تسجيل المرضى، الكفاءة التشغيلية المدركة، رضا المرضى، قسم التسجيل، المستشفيات الخاصة.

Abstract

Patient registration represents the first administrative point of contact between patients and healthcare organizations and plays an important role in shaping patients' initial perceptions of healthcare services. This study aimed to examine the association between perceived patient registration process quality, perceived operational efficiency, and patient satisfaction in the Registration Department of a private hospital in Riyadh, Saudi Arabia. A quantitative descriptive cross-sectional correlational design was employed. Data were collected using a structured questionnaire consisting of demographic items and three study dimensions and were distributed to a convenience sample of 50 patients who had completed the registration process. The data were analyzed using IBM SPSS Statistics Version 32.0 through descriptive statistics, Cronbach's alpha reliability analysis, and Pearson correlation analysis.

The findings indicated high perceived levels of patient registration process quality, perceived operational efficiency, and patient satisfaction. Pearson correlation analysis demonstrated a strong positive association between perceived patient registration process quality and patient satisfaction ($r = 0.849$, $p < 0.001$) and a statistically significant positive association between perceived patient registration process quality and perceived operational efficiency ($r = 0.809$, $p < 0.001$). These findings suggest that patients who perceive higher registration process quality also report higher levels of satisfaction and more favorable perceptions of operational efficiency. However, the cross-sectional correlational design does not permit causal inference.

The study recommends periodically assessing patients' perceptions of registration process quality, using the findings to support continuous administrative quality improvement, and conducting future studies with larger and more diverse samples to enhance the generalizability of the findings.

Keywords: Perceived Patient Registration Process Quality; Perceived Operational Efficiency; Patient Satisfaction; Registration Department; Private Hospital.

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List of Terminology

English	العربية
Patient Registration Process	عملية تسجيل المرضى
Perceived Patient Registration Process Quality	الجودة المدركة لعملية تسجيل المرضى
Perceived Operational Efficiency	الكفاءة التشغيلية المدركة
Patient Satisfaction	رضا المرضى
Waiting Time	وقت الانتظار
Registration Department	قسم تسجيل المرضى
Electronic Health Record (EHR)	السجل الصحي الإلكتروني
Patient Experience	تجربة المريض
Data Collection	جمع البيانات
Questionnaire	الاستبانة
Statistical Analysis	التحليل الإحصائي
Private Hospital	مستشفى خاص
Research Sample	عينة الدراسة

List of abbreviations

Abbreviation	Full Meaning
PRP	Patient Registration Process
PS	Patient Satisfaction
OE	Operational Efficiency
SPSS	Statistical Package for the Social Science
EHR	Electronic Health Record
MOH	Ministry of Health
WHO	World Health Organization
n	Number of Participant(Sample Size
r	Pearson Correlation Coefficient
p	Probability Value (Level of Significance)

Chapter One

General Framework of Research

1.1 Introduction:

Healthcare quality has become a global priority as healthcare organizations strive to improve patient outcomes, enhance service efficiency, and deliver patient-centered care. Healthcare systems are increasingly expected to provide safe, timely, efficient, effective, equitable, and patient-centered services while responding to the growing demands of patients and rapidly evolving healthcare environments. Consequently, healthcare organizations continuously seek strategies to improve both clinical and administrative processes in order to enhance overall organizational performance and patient experiences.

Among healthcare administrative functions, the patient registration process represents the first point of contact between patients and healthcare organizations. It serves as the foundation for the delivery of healthcare services by ensuring accurate patient identification, complete demographic documentation, appointment verification, insurance processing, and communication between administrative and clinical departments. An efficient registration process contributes to reducing waiting times, minimizing administrative errors, improving workflow, and facilitating continuity of care. Conversely, inefficient registration procedures may lead to delays, communication problems, increased operational burdens, and lower levels of patient satisfaction.

Patients' perceptions of healthcare services have become an important indicator of healthcare quality. According to Donabedian's Quality of Care Model (1988), healthcare quality should be evaluated through the structure, process, and outcomes of healthcare services. Within this framework, administrative processes such as patient registration are considered an essential component of service quality because they are closely associated with patients' experiences before receiving clinical care. Likewise, the Institute of Medicine (2001) emphasized that high-quality healthcare should be patient-centered, timely, efficient, safe, effective, and equitable, highlighting the importance of improving administrative processes alongside clinical services.

Service quality has also been explained through the SERVQUAL model developed by Parasuraman, Zeithaml, and Berry (1988), which proposes that patients evaluate service quality based on reliability, responsiveness, assurance, empathy, and tangibles. These dimensions are highly relevant to patient registration services, where staff communication, efficiency, professionalism, and are closely associated with patients' perceptions and overall satisfaction.

In recent years, healthcare organizations have increasingly adopted digital transformation initiatives, including electronic health records, integrated information systems, online appointment scheduling, and automated registration systems. These technologies have substantially improved administrative efficiency, reduced registration errors, enhanced communication, and strengthened patient experiences. In Saudi Arabia, these developments support the objectives of Saudi Vision 2030, which emphasizes healthcare transformation, digital innovation, operational excellence, and patient-centered healthcare services. Recent evidence has shown that improvements in administrative processes and digital health technologies contribute to better healthcare efficiency and higher patient satisfaction (Alzghaibi & Hutchings, 2025).

Patient satisfaction is widely recognized as one of the most important indicators of healthcare quality and organizational performance. Satisfied patients are more likely to comply with

treatment recommendations, maintain trust in healthcare providers, and continue utilizing healthcare services. Similarly, operational efficiency has become an essential organizational objective because it reflects the ability of healthcare institutions to utilize available resources effectively while maintaining high-quality service delivery. Therefore, examining the relationship between perceived patient registration process quality, perceived operational efficiency, and patient satisfaction provides valuable evidence for healthcare administrators seeking continuous quality improvement.

Although previous studies have examined patient satisfaction and healthcare service quality, relatively limited research has specifically investigated the relationship between perceived patient registration process quality, perceived operational efficiency, and patient satisfaction, particularly within private hospitals in Saudi Arabia. Addressing this gap may provide healthcare leaders with practical evidence to improve administrative services and strengthen patient-centered care. Accordingly, the present study examines the associations among these three variables using a quantitative descriptive cross-sectional correlational design.

1.2 Problem Statement

The patient registration process is one of the most fundamental administrative functions within healthcare organizations because it represents the patient's first point of contact with the healthcare system. This process establishes the foundation for the patient's healthcare journey by ensuring accurate identification, complete demographic documentation, insurance verification, appointment confirmation, and effective communication between administrative and clinical departments. Consequently, the quality of the registration process contributes significantly to patients' initial perceptions of healthcare services and play an important role in shaping their overall healthcare experience (Donabedian, 1988; Institute of Medicine [IOM], 2001).

Healthcare organizations worldwide have increasingly recognized that administrative service quality is an essential component of healthcare quality. While considerable attention has traditionally been directed toward improving clinical outcomes, administrative processes such as patient registration have become equally important because they are associated with service accessibility, waiting times, workflow efficiency, communication, and patients' perceptions of healthcare quality. According to the Institute of Medicine (2001), high-quality healthcare should be safe, effective, patient-centered, timely, efficient, and equitable. Achieving these dimensions requires continuous evaluation and improvement of both clinical and administrative services.

The patient registration process is closely associated with healthcare operations including patient flow, administrative delays, accurate documentation, and coordination among healthcare departments. Efficient registration procedures contribute to minimizing waiting times, preventing documentation errors, and enhancing communication between patients and healthcare professionals. In contrast, inefficient registration procedures may result in prolonged waiting times, incomplete patient information, workflow interruptions, duplicated records, and negative patient experiences (Al-Harajin et al., 2019). Because registration represents the first interaction patients have with healthcare organizations, their perceptions of registration quality may be associated with their evaluation of the overall healthcare experience.

In recent years, healthcare organizations have invested substantially in digital transformation initiatives, including Electronic Health Records (EHRs), integrated hospital information systems, electronic registration platforms, and online appointment scheduling. These technological developments have improved administrative accuracy, enhanced information

accessibility, facilitated communication, and supported more efficient healthcare service delivery (Campanella et al., 2016; Kruse et al., 2016). Similarly, healthcare reforms implemented under Saudi Vision 2030 have emphasized digital transformation, healthcare quality, operational excellence, and patient-centered healthcare services, encouraging healthcare organizations to strengthen both clinical and administrative performance (Saudi Vision 2030, 2023; Alzghaibi & Hutchings, 2025).

Patient satisfaction is widely recognized as one of the most important indicators of healthcare quality because it reflects patients' perceptions of the services they receive throughout their healthcare journey. Likewise, perceived operational efficiency reflects patients' evaluation of how efficient healthcare services are organized and delivered. Previous studies have demonstrated that administrative efficiency, communication quality, accessibility, and waiting time are important factors associated with patients' satisfaction and perceptions of healthcare quality (Batbaatar et al., 2017; Alrasheedi et al., 2019; Radwan et al., 2024). Nevertheless, many of these studies have focused on healthcare quality, operational efficiency, or patient satisfaction as separate constructs rather than examining their relationships within a single conceptual framework.

Although previous research has investigated registration systems, electronic health records, waiting times, digital transformation, and patient satisfaction, limited evidence has specifically examined the associations among perceived patient registration process quality, perceived operational efficiency, and patient satisfaction, particularly in private hospitals in Riyadh, Saudi Arabia. Furthermore, most available studies have concentrated on evaluating healthcare systems or organizational performance rather than exploring patients' perceptions of registration process quality as an independent construct. This gap limits the availability of evidence that healthcare administrators can use when planning administrative quality improvement initiatives based on patients' experiences.

Accordingly, the present study addresses this gap by examining the associations among perceived patient registration process quality, perceived operational efficiency, and patient satisfaction in the Registration Department of a private hospital in Riyadh, Saudi Arabia. By focusing on patients' perceptions using a quantitative descriptive cross-sectional correlational design, the study aims to provide evidence that may assist healthcare administrators in understanding how registration process quality is associated with patients' evaluations of operational efficiency and satisfaction. The findings are expected to contribute to the existing body of knowledge in healthcare administration and provide evidence that may support healthcare administrators in improving registration services, strengthening patient-centered care, and informing future quality improvement initiatives.

1.3 Study Importance

1.3.1 Academic Significance

This study contributes to the field of healthcare administration by expanding the existing literature on the associations among perceived patient registration process quality, perceived operational efficiency, and patient satisfaction within private healthcare organizations. Although previous studies have examined healthcare quality, patient satisfaction, operational efficiency, and digital transformation, relatively limited research has investigated these variables within a single conceptual framework, particularly from patients' perspectives in private hospitals in Saudi Arabia. By examining these associations using quantitative descriptive cross-sectional correlational design, the study contributes to the growing body of evidence on administrative service quality and patient-centered healthcare. Furthermore, the

findings may serve as a valuable reference for researchers and postgraduate students interested in healthcare quality, healthcare administration, patient experience, and hospital management.

1.3.2-Practical Significance

From a practical perspective, the findings of this study are expected to provide valuable guidance for hospital administrators, registration managers, healthcare professionals, and decision-makers working within private healthcare organizations. By identifying the strengths and weaknesses of the current patient registration process, the study may assist healthcare organizations in implementing practical improvement strategies that enhance administrative performance and service quality.

The recommendations developed from this research may support hospitals in reducing patient waiting times, improving workflow efficiency, minimizing administrative and documentation errors, enhancing communication between patients and registration staff, and optimizing the utilization of available organizational resources. These strategies may support more efficient healthcare service delivery while contributing to a more positive patient experience during the first interaction with the hospital.

In addition, high-quality patient registration processes may be associated with greater patient confidence and satisfaction and may support continuous quality improvement initiatives within healthcare organizations. The study findings may also assist hospital management in making evidence-based decisions regarding process redesign, staff training, workflow standardization, and digital transformation initiatives. Moreover, the recommendations may contribute to achieving the objectives of Saudi Vision 2030 by supporting patient-centered healthcare services, operational excellence, and continuous improvement within the Saudi healthcare sector.

1.4 Study Objectives

1.4.1 Main Objective

To examine the associations among perceived patient registration process quality, perceived operational efficiency, and patient satisfaction in the Registration Department of a private hospital in Riyadh, Saudi Arabia.

1.4.2 Specific Objectives

1. To determine patients' perceptions of the quality of the registration process within the Registration Department of a private hospital in Riyadh.
2. To determine the level of patient satisfaction with the registration experience.
3. To determine patients' perceptions of operational efficiency within the Registration Department.
4. To examine the association between perceived patient registration process quality and patient satisfaction.
5. To examine the association between perceived patient registration process quality and perceived operational efficiency.

1.5 Research Question

To achieve the objectives of this study, the following research questions were formulated:

1. What is the level of perceived patient registration process quality among patients attending the Registration Department of a private hospital in Riyadh?
2. What is the level of patient satisfaction among patients attending the Registration Department?
3. What is the level of perceived operational efficiency in the Registration Department from the patients' perspective?
4. Is perceived patient registration process quality significantly associated with patient satisfaction?
5. Is perceived patient registration process quality significantly associated with perceived operational efficiency?

1.6 Research Hypotheses

1.6.1 Main Hypothesis

H₁: There are statistically significant associations between perceived patient registration process quality and the dependent variables (patient satisfaction and perceived operational efficiency) in the Registration Department of a private hospital in Riyadh, Saudi Arabia.

1.6.2 Sub-Hypothesis 1

H_{1a}: There is a statistically significant association between perceived patient registration process quality and patient satisfaction.

1.6.3 Sub-Hypothesis 2

H_{1b}: There is a statistically significant association between perceived patient registration process quality and perceived operational efficiency.

1.7 Theoretical Framework

1.7.1 Healthcare Quality

Healthcare quality has become one of the fundamental priorities of healthcare systems worldwide because it directly reflects the ability of healthcare organizations to provide safe, effective, timely, efficient, equitable, and patient-centered care. High-quality healthcare not only improves patients' clinical outcomes but also enhances healthcare experiences, organizational performance, and the efficient utilization of available resources. As healthcare organizations continue to face increasing patient expectations, technological advancements, and growing service demands, continuous quality improvement has become an essential component of healthcare management and organizational excellence.

The concept of healthcare quality has evolved considerably over the past decades. Early definitions focused primarily on clinical effectiveness and patient safety; however, contemporary perspectives recognize that healthcare quality extends beyond clinical outcomes to include administrative efficiency, communication, accessibility, patient experience, and organizational performance. Consequently, healthcare organizations increasingly evaluate both clinical and administrative services when assessing overall healthcare quality.

One of the most influential frameworks for evaluating healthcare quality was proposed by Donabedian (1988), who described healthcare quality through three interrelated components:

structure, process, and outcomes. According to this model, structure refers to the organizational environment in which healthcare services are delivered, including human resources, facilities, equipment, organizational policies, and technological infrastructure. Process refers to all activities performed during healthcare delivery, including both clinical and administrative procedures, communication, documentation, and patient interactions. Outcomes represent the results of healthcare services, including patient satisfaction, health status, safety, and organizational performance. Donabedian emphasized that improvements in healthcare structures support better healthcare processes, which subsequently contribute to improved healthcare outcomes. Within this framework, the patient registration process represents an important administrative process that contributes to patients' perceptions of healthcare quality before they receive clinical care.

The Institute of Medicine (2001) further expanded the concept of healthcare quality by identifying six essential dimensions that characterize high-quality healthcare systems. These dimensions include safety, effectiveness, patient-centeredness, timeliness, efficiency, and equity. Patient-centered care emphasizes respecting patients' values, preferences, and needs while ensuring that healthcare services are organized around patients rather than organizational routines. Timeliness seeks to reduce unnecessary delays throughout the patient's healthcare journey, whereas efficiency emphasizes the optimal utilization of available healthcare resources while minimizing waste and unnecessary administrative activities. These dimensions are particularly relevant to administrative departments such as patient registration because registration services are associated with waiting times, communication, accessibility, and patients' first impressions of healthcare organizations.

The World Health Organization (2021) similarly recognizes healthcare quality as an essential element of strong health systems and emphasizes that healthcare organizations should continuously monitor and improve both clinical and administrative services to ensure accessible, responsive, and patient-centered healthcare. Administrative processes, including patient registration, appointment scheduling, documentation, and communication, play an important role in supporting continuity of care and improving healthcare experiences. Consequently, healthcare quality should be evaluated not only through clinical outcomes but also through patients' perceptions of the administrative services they receive.

In Saudi Arabia, healthcare quality has become a national strategic priority through the Healthcare Sector Transformation Program under Saudi Vision 2030, which promotes digital transformation, operational excellence, patient-centered care, and continuous quality improvement. These national initiatives encourage healthcare organizations to adopt modern administrative systems, improve healthcare accessibility, strengthen operational efficiency, and enhance patients' experiences throughout the healthcare journey. Registration departments are therefore expected to contribute to these national objectives by providing accurate, timely, organized, and patient-centered administrative services that support efficient healthcare delivery.

Accordingly, healthcare quality provides the primary theoretical foundation for the present study. The current research examines perceived patient registration process quality as an important administrative component of healthcare quality and explores its associations with perceived operational efficiency and patient satisfaction. Consistent with Donabedian's Quality of Care Model and the Institute of Medicine's quality framework, the study focuses on patients' perceptions of administrative service quality and evaluates how these perceptions are associated with other important indicators of healthcare performance, without implying causal relationships.

1.7.2 Service Quality

Service quality has become one of the most important concepts in healthcare management because it reflects patients' evaluations of the services they receive throughout their healthcare journey. Unlike manufacturing industries, where quality can often be measured objectively, service quality is largely determined by customers' perceptions and expectations. In healthcare organizations, patients evaluate not only clinical care but also administrative services, communication, accessibility, responsiveness, and the overall healthcare experience. Consequently, understanding patients' perceptions of service quality has become essential for healthcare organizations seeking to improve organizational performance and patient-centered care.

One of the most widely recognized theoretical models for evaluating service quality is the SERVQUAL model, developed by Parasuraman, Zeithaml, and Berry (1988). This model proposes that customers assess service quality by comparing their expectations with their actual experiences. According to the SERVQUAL framework, service quality consists of five dimensions: reliability, responsiveness, assurance, empathy, and tangibles. These dimensions have been widely applied across various service industries, including healthcare, because they provide a comprehensive framework for evaluating patients' perceptions of service delivery.

The first dimension, reliability, refers to the ability of an organization to provide services accurately, consistently, and dependably. Within patient registration departments, reliability involves accurate patient identification, correct documentation, proper appointment scheduling, and consistent application of registration procedures. Errors during registration may lead to delays, duplicated records, incorrect patient information, and interruptions in healthcare delivery, highlighting the importance of reliable administrative services.

The second dimension, responsiveness, reflects the willingness of healthcare personnel to provide prompt assistance and timely services. In registration departments, responsiveness includes minimizing waiting times, responding efficiently to patients' inquiries, completing registration procedures without unnecessary delays, and ensuring that patients receive appropriate guidance throughout the registration process. Previous studies have consistently demonstrated that shorter waiting times and prompt administrative services contribute positively to patients' evaluations of healthcare quality (Al-Harajin et al., 2019; Batbaatar et al., 2017).

The third dimension, assurance, refers to the knowledge, professionalism, courtesy, and competence demonstrated by employees during service delivery. Registration staff who communicate effectively, provide clear information, demonstrate confidence, and maintain confidentiality help establish patients' trust in healthcare organizations. Because registration represents the first interaction between patients and healthcare providers, professional administrative behavior contributes significantly to patients' confidence in the healthcare system.

The fourth dimension, empathy, emphasizes individualized attention and understanding of patients' needs. Healthcare organizations that provide respectful communication, listen carefully to patients' concerns, and accommodate individual circumstances are more likely to create positive patient experiences. Empathy is particularly important during the registration process because patients may experience anxiety or uncertainty before receiving healthcare services, making supportive communication an essential component of administrative quality.

The fifth dimension, tangibles, refers to the physical environment in which services are delivered, including facilities, equipment, technology, and the appearance of personnel. Modern registration departments equipped with electronic registration systems, organized waiting areas, digital appointment systems, and clear informational materials contribute to more positive patient perceptions of service quality. Digital technologies such as Electronic Health Records (EHRs) have further strengthened this dimension by improving documentation accuracy, reducing paperwork, and facilitating communication among healthcare professionals (Campanella et al., 2016; Kruse et al., 2016).

The SERVQUAL model has been widely applied in healthcare research because it recognizes that patients evaluate healthcare quality through multiple dimensions rather than clinical outcomes alone. Administrative services, including patient registration, represent an important component of healthcare service quality because they are associated with patients' first impressions, accessibility to healthcare services, communication with staff, and overall healthcare experiences. Consequently, improving service quality within registration departments may contribute to more favorable patient perceptions of healthcare organizations.

The present study adopts the principles of the SERVQUAL model as part of its theoretical foundation by focusing on patients' perceptions of registration process quality rather than objective organizational performance measures. The concept of perceived patient registration process quality examined in this study reflects several SERVQUAL dimensions, particularly reliability, responsiveness, assurance, and empathy. Accordingly, the model provides an appropriate theoretical basis for examining the associations among perceived patient registration process quality, perceived operational efficiency, and patient satisfaction within the Registration Department of a private hospital in Riyadh, Saudi Arabia.

1.7.3 Perceived Patient Registration Process Quality

Perceived patient registration process quality refers to patients' overall evaluation of the quality of the registration services they receive before accessing healthcare services. The registration process represents the first administrative interaction between patients and healthcare organizations and includes activities such as patient identification, demographic data collection, appointment verification, insurance confirmation, documentation, and communication with registration staff. Because this process constitutes the patient's initial contact with the healthcare system, patients' perceptions of registration quality are considered an important component of their overall healthcare experience.

From a healthcare administration perspective, registration process quality is recognized as an important element of administrative service quality. A well-organized registration process is characterized by clear procedures, accurate documentation, timely service, effective communication, and respectful interactions with patients. These characteristics are consistent with internationally recognized healthcare quality frameworks that emphasize patient-centered administrative services and efficient healthcare delivery (Donabedian, 1988; Institute of Medicine, 2001).

Patients evaluate registration process quality according to their own experiences during service delivery. These evaluations are based on several aspects of the registration process, including the clarity of registration procedures, the organization of services, the professionalism of registration staff, communication, waiting time, and the perceived efficiency of administrative activities. Consequently, registration process quality is regarded as a perception-

based construct that reflects patients' experiences rather than objective organizational performance indicators.

Recent developments in healthcare administration have emphasized the importance of digital technologies in registration services. Electronic Health Records (EHRs), integrated hospital information systems, online appointment scheduling, and electronic registration platforms have become common components of modern registration departments. These technologies support standardized documentation, facilitate communication among healthcare professionals, and improve the organization of administrative processes. Previous studies have reported that digital registration systems are associated with more favorable patient evaluations of registration services and administrative quality (Campanella et al., 2016; Kruse et al., 2016; Alzghaibi & Hutchings, 2025).

Previous healthcare studies have also highlighted the importance of communication during administrative encounters. Clear explanations, respectful interactions, responsiveness to patients' inquiries, and organized registration procedures are frequently reported as important elements of high-quality registration services. Similarly, waiting time and accessibility are commonly discussed as administrative characteristics that patients consider when evaluating registration experiences (Batbaatar et al., 2017; Al-Harajin et al., 2019).

Within private hospitals, registration departments are expected to provide organized, accurate, and patient-centered administrative services that support the overall delivery of healthcare. Patients often evaluate registration services as part of their first impression of the healthcare organization. Consequently, understanding patients' perceptions of registration process quality provides valuable information regarding administrative service quality from the patients' perspective.

Conceptual Definition

Perceived patient registration process quality refers to patients' perceptions of the effectiveness, organization, clarity, timeliness, and overall quality of the registration services they receive during the registration process.

Operational Definition

In the present study, perceived patient registration process quality was operationally defined as the total score obtained on the perceived patient registration process quality dimension of the study questionnaire. Responses were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Higher total scores indicate more favorable perceptions of patient registration process quality.

1.7.4 Patient Satisfaction

Patient satisfaction is an important concept within healthcare quality because it reflects patients' evaluations of the services they receive and the extent to which those services correspond with their expectations and needs. In healthcare administration, satisfaction is not limited to clinical encounters. Patients also evaluate the accessibility, organization, timeliness, communication, courtesy, and clarity of administrative services that occur before and after clinical care. Registration therefore forms part of the broader patient experience because it is frequently the first organized interaction between the patient and the healthcare institution (Batbaatar et al., 2017; Al-Harajin et al., 2019).

From a patient-centered perspective, satisfaction is shaped by the way patients perceive the service process. Clear instructions, respectful communication, accurate documentation, reasonable waiting time, and staff responsiveness can contribute to favorable evaluations of registration services. Conversely, confusion regarding procedures, repeated requests for information, long waiting periods, or unclear communication may be reflected in less favorable evaluations. The present study therefore considers patient satisfaction as a perception-based outcome related specifically to the registration experience rather than as an objective measure of hospital performance.

The relationship between administrative service quality and patient satisfaction can also be interpreted through the SERVQUAL framework. Reliability is relevant when registration information is recorded accurately and procedures are performed consistently. Responsiveness is reflected in timely assistance and prompt responses to patient inquiries. Assurance relates to staff professionalism and patients' confidence in the service, while empathy concerns respectful and individualized communication. Tangibles include the physical and technological environment in which registration occurs. These dimensions provide a theoretical explanation for why patients' evaluations of registration process quality may be associated with their satisfaction (Parasuraman et al., 1988).

Waiting time is frequently discussed in the healthcare literature as an important component of patient experience. Although waiting time can be measured objectively, patients also form subjective evaluations of whether the time spent during registration is acceptable and whether the process appears organized. Al-Harajin et al. (2019) identified waiting time as an important factor associated with patient satisfaction in Saudi healthcare settings. Accordingly, the current study incorporates patients' perceptions of timely and organized registration within its broader assessment of registration process quality and satisfaction.

Communication is another central element of satisfaction. Patients may require explanations regarding registration requirements, appointments, insurance verification, or the next step in their healthcare journey. Effective communication can reduce uncertainty and help patients understand administrative procedures. The literature reviewed in this study consistently identifies communication and staff behavior among the factors associated with patient satisfaction (Batbaatar et al., 2017; Al-Harajin et al., 2019). For this reason, communication-related perceptions are theoretically relevant when examining the registration experience.

Conceptually, patient satisfaction in the present research is treated as a dependent variable. The study does not assume that perceived registration process quality causes satisfaction. Instead, it examines whether patients who report more favorable perceptions of registration process quality also tend to report higher satisfaction. This distinction is important because the cross-sectional correlational design can identify statistical associations but cannot establish temporal sequence or causal mechanisms.

Conceptual Definition

Patient satisfaction refers to patients' overall evaluation of their registration experience, including their perceptions of service organization, communication, timeliness, staff interaction, accessibility, and the extent to which the registration service meets their expectations.

Operational Definition

In the present study, patient satisfaction is operationally defined as the total score obtained on the Patient Satisfaction dimension of the study questionnaire. Responses are measured using

a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), with higher scores indicating more favorable levels of satisfaction with the registration experience.

1.7.5 Perceived Operational Efficiency

Operational efficiency is a major concern in healthcare administration because healthcare organizations are expected to provide timely and organized services while making appropriate use of available resources. At the organizational level, operational efficiency may involve workflow design, staffing, information systems, coordination, resource utilization, and reduction of unnecessary delays. In the present study, however, operational efficiency is examined from the patient's perspective. The construct therefore represents perceived operational efficiency rather than an objective measurement of productivity, cost, staffing ratios, or departmental throughput.

Patients encounter operational processes through observable aspects of service delivery. During registration, they can perceive whether procedures appear organized, whether information is available when needed, whether unnecessary repetition occurs, whether staff coordinate effectively, and whether the service progresses without avoidable delay. These perceptions provide a patient-centered view of administrative efficiency. They do not replace objective operational indicators, but they offer information about how administrative performance is experienced by service users.

Donabedian's Quality of Care Model provides a useful basis for interpreting perceived operational efficiency. Organizational resources, staffing, technology, and policies can be understood as structural elements, while registration activities, documentation, communication, and coordination represent process elements. Patients' evaluations of efficiency and satisfaction may be considered outcomes of their service experience. This structure–process–outcome logic supports the inclusion of perceived operational efficiency in the theoretical framework while avoiding an assumption that one study variable directly causes another (Donabedian, 1988).

The Institute of Medicine's emphasis on timeliness and efficiency is also relevant to registration services. Timeliness concerns reducing unnecessary delays, whereas efficiency concerns avoiding waste and using resources appropriately (Institute of Medicine, 2001). In a registration department, these principles may be reflected in clear procedures, coordinated information flow, appropriate use of electronic systems, and completion of administrative requirements without unnecessary repetition. From the patient's perspective, such characteristics may be interpreted as indicators of an organized and efficient service.

Digital technologies are particularly relevant to operational efficiency in contemporary healthcare administration. Electronic Health Records, integrated information systems, and electronic registration platforms can support access to information, standardize documentation, and facilitate communication among departments. Reviews by Campanella et al. (2016) and Kruse et al. (2016) describe associations between EHR implementation and improvements in documentation, information accessibility, communication, and organizational processes. In Saudi healthcare, Alzghaibi and Hutchings (2025) similarly emphasize organizational readiness, staff competency, infrastructure, and leadership as important factors in digital health implementation.

Perceived operational efficiency may also be associated with workflow organization. Patients may form impressions of efficiency based on the sequence of registration steps, the clarity of directions, waiting periods, and whether the same information must be provided repeatedly. These observations are especially relevant in registration departments because the

service is highly process oriented. The present study therefore examines perceived operational efficiency as a distinct but related construct alongside perceived registration process quality and patient satisfaction.

Importantly, perceived operational efficiency should not be interpreted as equivalent to objective operational performance. A patient may perceive a process as efficient even when internal resource utilization is not optimal, while a technically efficient process may still be perceived negatively if communication is poor or waiting is unexplained. The current study intentionally focuses on patients' perceptions because the questionnaire was designed to capture the service experience rather than internal hospital performance indicators.

Conceptual Definition

Perceived operational efficiency refers to patients' evaluations of how organized, timely, coordinated, and smoothly delivered the administrative registration processes appear during their interaction with the Registration Department.

Operational Definition

In this study, perceived operational efficiency is operationally defined as the total score obtained on the Perceived Operational Efficiency dimension of the questionnaire. Items are rated on a five-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree), with higher scores representing more favorable perceptions of operational efficiency.

1.7.6 Patient Registration as an Administrative Healthcare Process

Patient registration is a foundational administrative process that connects patients with the clinical and financial components of healthcare delivery. It commonly includes patient identification, demographic data collection, appointment confirmation, insurance verification, record creation or retrieval, and communication of relevant information. Accuracy at this stage is important because registration information is used by multiple departments throughout the patient journey. The registration encounter therefore represents more than a clerical activity; it is an organized healthcare administrative process that supports access, documentation, communication, and continuity of service.

Within Donabedian's framework, registration can be classified primarily as a process component because it consists of activities performed as part of healthcare service delivery. Nevertheless, the quality of that process depends on structural factors such as staffing, technology, policies, physical facilities, and information systems. Patients observe the resulting process through waiting time, staff interaction, clarity of procedures, documentation accuracy, and overall organization. Their evaluations provide a perception-based indicator of administrative service quality (Donabedian, 1988).

Registration is also closely connected with the SERVQUAL dimensions. Reliability is represented by accurate and consistent registration procedures; responsiveness by prompt assistance; assurance by professional and knowledgeable staff; empathy by respectful attention to individual needs; and tangibles by the physical and technological environment. These dimensions help explain why registration quality is multidimensional and why a single measure such as waiting time cannot fully represent patients' evaluation of the registration experience (Parasuraman et al., 1988).

The first-contact nature of registration gives the process particular importance in patient experience. Before patients receive clinical care, they may already have formed impressions regarding the organization, professionalism, accessibility, and responsiveness of the institution. These impressions are not necessarily permanent and should not be interpreted as determining

the entire healthcare experience; however, they represent an important administrative component of the patient journey and justify focused evaluation of registration services.

1.7.7 Waiting Time, Accessibility, and Administrative Responsiveness

Timeliness is a recognized dimension of healthcare quality and is particularly visible to patients during administrative encounters. Registration waiting time may be associated with patients' evaluations of the organization and responsiveness of services. The Institute of Medicine (2001) identifies timeliness as a central characteristic of high-quality healthcare, emphasizing the reduction of unnecessary delays. In registration departments, timeliness can be considered together with clarity, accessibility, and responsiveness rather than as an isolated operational indicator.

Accessibility refers to the ease with which patients can enter and navigate the administrative service. It may involve the availability of information, clarity of registration requirements, ease of locating the registration area, usability of digital systems, and availability of staff assistance. When administrative requirements are understandable and support is available, patients may perceive the service as more organized. Conversely, complex or unclear procedures may create additional effort even when the actual registration time is short.

Administrative responsiveness reflects the willingness and ability of staff and systems to address patients' needs during registration. It includes responding to questions, providing directions, clarifying requirements, and handling registration issues in a timely manner. Responsiveness is also a central SERVQUAL dimension, making it theoretically relevant to perceived registration process quality. The present study therefore treats timeliness, accessibility, and responsiveness as related aspects of the broader registration experience rather than as independent causal factors.

1.7.8 Communication, Professionalism, and Patient-Centered Administrative Care

Patient-centered care is commonly discussed in relation to clinical decision-making, but its principles also apply to administrative services. Patients expect to be treated respectfully, receive understandable information, and be guided through administrative procedures in a manner that recognizes their needs. Registration staff therefore contribute to patient-centered care through communication, courtesy, confidentiality, and professional conduct.

Communication quality is especially important because registration procedures may involve information that is unfamiliar to patients, including insurance requirements, appointment details, demographic verification, and directions to clinical services. Clear explanations can support understanding and reduce uncertainty. From a service-quality perspective, communication is related to responsiveness, assurance, and empathy. These dimensions help frame patients' evaluations of the interpersonal component of registration quality (Parasuraman et al., 1988).

Professionalism includes respectful behavior, competence, consistency, and appropriate handling of patient information. Because registration staff often manage personal and administrative information, patients may evaluate service quality partly through their confidence in staff behavior and communication. These perceptions are relevant to the present study because perceived registration process quality includes both procedural and interpersonal aspects of service delivery.

1.7.9 Digital Transformation and Registration Service Quality

Digital transformation has changed the organization of healthcare administrative services. Electronic Health Records, online appointment systems, integrated hospital information systems, and electronic registration platforms can support documentation, information exchange, and coordination across departments. These technologies are relevant to patient registration because registration frequently depends on accurate and timely access to demographic, appointment, and insurance information.

Campanella et al. (2016) reported that EHR implementation was associated with documentation quality, information accessibility, communication, and organizational performance. Kruse et al. (2016) likewise identified benefits related to information availability and administrative processes while emphasizing implementation challenges and the need for organizational support. These findings suggest that technology can support administrative processes, although the presence of technology alone does not guarantee a favorable patient experience.

In Saudi Arabia, digital health development is closely aligned with broader healthcare transformation. Alzghaibi and Hutchings (2025) identify factors such as leadership, staff competency, infrastructure, organizational readiness, and training as important in EHR implementation. This perspective is relevant to the current study because patients experience the visible results of these systems during registration, even though they may not observe the underlying organizational processes.

The present study does not directly evaluate a specific electronic system or measure technical system performance. Instead, digital transformation is included in the theoretical framework because technology forms part of the structural and process context in which registration services are delivered. Patients' perceptions of organization, speed, clarity, and efficiency may therefore occur within an increasingly digital administrative environment.

1.7.10 Theoretical Relationships Among the Study Variables

The theoretical framework of the present study brings together perceived patient registration process quality, perceived operational efficiency, and patient satisfaction. Perceived registration process quality represents the independent variable, while perceived operational efficiency and patient satisfaction are treated as dependent variables for the purpose of statistical analysis. These designations organize the analysis but do not imply that the study establishes causal direction.

Donabedian's model supports the study by explaining healthcare quality through the interaction of structure, process, and outcomes. Registration is conceptualized as an administrative process that operates within organizational structures such as staffing, policies, facilities, and information systems. Patients evaluate the quality of this process through their experiences, while satisfaction and perceptions of efficiency represent important evaluations associated with that experience. The model therefore provides a healthcare-quality foundation for the relationships examined in the study (Donabedian, 1988).

SERVQUAL complements Donabedian's model by emphasizing the patient's evaluation of service delivery. Reliability, responsiveness, assurance, empathy, and tangibles are relevant to registration because patients encounter these dimensions through documentation accuracy, timely assistance, staff professionalism, respectful communication, and the service environment. The model is particularly appropriate for a study based on patient perceptions

because it recognizes that service quality is evaluated through the service user's experience (Parasuraman et al., 1988).

Together, the two frameworks provide complementary perspectives. Donabedian offers a healthcare-specific structure for understanding administrative processes within the broader quality system, while SERVQUAL provides a service-quality perspective centered on patients' evaluations. Their combined use supports examination of registration process quality as a multidimensional administrative service and provides a theoretical basis for studying its statistical associations with perceived operational efficiency and patient satisfaction.

The expected associations are also consistent with the empirical literature reviewed in this research. Studies addressing waiting time, communication, digital systems, administrative organization, and patient experience have reported relationships among aspects of service quality, efficiency, and satisfaction (Batbaatar et al., 2017; Al-Harajin et al., 2019; Campanella et al., 2016; Kruse et al., 2016). However, the present study focuses specifically on the coexistence of these perceptions within the registration setting and does not claim that favorable registration perceptions produce changes in either satisfaction or operational efficiency.

Accordingly, the theoretical framework guides the study toward an association-based interpretation. A positive correlation would indicate that higher scores on perceived registration process quality tend to occur together with higher scores on patient satisfaction or perceived operational efficiency. Such a result would support the proposed theoretical relationships but would not demonstrate that changes in registration process quality caused changes in the dependent variables. This interpretation is consistent with the quantitative descriptive cross-sectional correlational design used in the study.

1.7.11 Summary of the Theoretical Framework

The theoretical framework establishes patient registration as an important administrative component of healthcare quality and patient experience. Donabedian's Quality of Care Model explains how organizational structures and administrative processes are connected with service outcomes, while SERVQUAL explains how patients evaluate service quality through reliability, responsiveness, assurance, empathy, and tangibles. These perspectives support a multidimensional understanding of registration services.

Within this framework, perceived patient registration process quality includes patients' evaluations of organization, clarity, timeliness, accuracy, communication, staff interaction, and the overall registration experience. Perceived operational efficiency reflects patients' evaluations of how smoothly and efficiently administrative services appear to be organized, while patient satisfaction reflects their overall evaluation of the registration experience. All three constructs are therefore examined from the patient's perspective.

The framework also recognizes the relevance of waiting time, accessibility, communication, professionalism, digital technologies, and administrative responsiveness. These elements provide theoretical context for the questionnaire dimensions and help explain why patients may form related evaluations of registration quality, efficiency, and satisfaction. The framework is intentionally non-causal and is aligned with the study's cross-sectional correlational design.

Based on this theoretical foundation, the present study examines whether perceived patient registration process quality is statistically associated with patient satisfaction and perceived operational efficiency among patients attending the Registration Department of a private hospital in Riyadh, Saudi Arabia. The theoretical discussion therefore provides the conceptual

basis for the research questions, hypotheses, measurement approach, and interpretation of the study findings.

Chapter Two

Literature Review

2.1 Introduction

A literature review provides the theoretical and empirical foundation for understanding the variables examined in a research study and identifying existing knowledge gaps. It enables researchers to critically examine previous evidence, compare research findings, and establish the theoretical basis that supports the study objectives. Reviewing the literature also facilitates the identification of areas that require further investigation and demonstrates how the current study contributes to the existing body of knowledge.

The present study examines the associations among perceived patient registration process quality, perceived operational efficiency, and patient satisfaction within the Registration Department of a private hospital in Riyadh, Saudi Arabia. Accordingly, this chapter reviews previous studies and theoretical concepts related to these three variables. The reviewed literature includes international and regional studies addressing healthcare quality, administrative service quality, registration services, operational efficiency, and patient satisfaction in healthcare settings.

The chapter is organized into several sections. It begins by reviewing studies related to perceived patient registration process quality, followed by studies addressing perceived operational efficiency and patient satisfaction. The chapter then presents a summary of the reviewed literature, highlights the existing research gap, and demonstrates how the current study extends previous research by examining the associations among the study variables within a single conceptual framework from the patients' perspective.

2.2 Previous Studies Related to Perceived Patient Registration Process Quality

Several previous studies have examined patients' perceptions of patient registration process quality and the role of administrative service quality in healthcare organization. These studies have primarily focused on patients' evaluations of registration services, including administrative organization, communication, documentation accuracy, timeliness, accessibility, and the use of digital health technologies. The literature has also explored how electronic registration systems and Electronic Health Records (EHRs) are associated with patients' perceptions of healthcare administrative services and overall service quality. Collectively, these studies provide an important foundation for understanding perceived patient registration process quality within healthcare settings.

Campanella et al. (2016) conducted a systematic review to examine the use of Electronic Health Records (EHRs) on healthcare quality and organizational performance. The review analyzed numerous studies conducted in hospitals and healthcare institutions implementing EHR systems. The findings indicated that EHR implementation was associated with better documentation quality, facilitated rapid access to patient information, strengthened communication among healthcare professionals, reduced duplication of records, and was associated with more organized administrative workflow. The researchers concluded that integrated electronic systems are associated with healthcare quality, patient safety, and organizational efficiency. These findings suggest that digital health technologies are commonly associated with organized administrative services and favorable evaluations of registration processes in healthcare settings.

Similarly, Kruse et al. (2016) conducted a systematic review examining the implantation of Electronic Health Records in healthcare organizations. The review reported that EHR implementation was associated with administrative efficiency, effective communication among healthcare providers, better information accessibility, and fewer documentation errors. However, the researchers emphasized that successful implementation requires continuous staff training, organizational support, and effective change management to maximize the benefits of digital healthcare systems.

More recently, Alzghaibi and Hutchings (2025) explored the barriers and facilitators related to the Electronic Health Record implementation within Saudi healthcare organizations. The study identified leadership commitment, staff competency, technological infrastructure, organizational readiness, and continuous training as key factors associated with successful implementation. The researchers reported that digital transformation was associated with administrative efficiency, organized patient registration procedures, effective communication, and healthcare service delivery within Saudi hospitals.

Supporting these findings, Alharbi (2025) conducted a comprehensive systematic review investigating the association between Electronic Health Record implementation, hospital efficiency, and patient outcomes. The review reported that EHR systems were associated with organized administrative workflows, effective interprofessional communication, documentation quality, healthcare efficiency, and favorable patient outcomes. The review also reported that healthcare organizations adopting digital technologies frequently demonstrated favorable indicators of operational efficiency when supported by organizational leadership and continuous staff education.

Amin et al. (2026) conducted a prospective observational study at a tertiary care hospital in India to design and implement a web-based patient registration system aimed at improving outpatient registration services. The study evaluated registration time, patient satisfaction, and service efficiency before and after implementing the digital registration platform. The findings demonstrated that the web-based registration system significantly reduced patient waiting times, improved service efficiency, and increased patient satisfaction. The researchers concluded that implementing digital registration systems enhances administrative workflow and supports more efficient healthcare service delivery. These findings further reinforce the importance of digital transformation in improving patient registration processes and healthcare performance.

Collectively, the reviewed studies indicate that digital transformation, Electronic Health Records, and modern registration systems are commonly associated with patients' perceptions of registration service quality, administrative organization, communication, documentation quality, and operational efficiency. The literature also highlights the increasing importance of digital healthcare technologies in registration departments. However, limited studies have specifically examined the associations among perceived patient registration process quality, perceived operational efficiency, and patient satisfaction within private hospitals in Saudi Arabia. This gap provides the rationale for the present study.

Operational Efficiency

Overview of Operational Efficiency

Operational efficiency is one of the fundamental indicators used to evaluate the performance of healthcare organizations. It refers to the ability of healthcare institutions to maximize the utilization of available resources while maintaining high-quality healthcare services and minimizing unnecessary costs, delays, and operational waste. In healthcare settings, Operational efficiency is commonly described in relation to effective workflow management, optimal allocation of human and financial resources, standardized administrative procedures, and timely healthcare services (AlShammari et al., 2025).

Healthcare organizations place considerable emphasis on operational efficiency because increasing patient demand, limited healthcare resources, and rising expectations regarding healthcare quality require effective utilization of available resources. Efficient healthcare operations are commonly characterized by shorter waiting times, effective coordination among departments, higher staff productivity, fewer administrative errors, and better utilization of available resources. Accordingly, operational efficiency is recognized as one of the primary objectives of healthcare quality initiatives.

Healthcare operational efficiency is commonly associated with several organizational and technological factors, including leadership, workforce competency, standardized procedures, communication among departments, digital transformation, and integrated health information systems. The adoption of Electronic Health Records has been widely described in literature as an important component of modern healthcare administration and operational management. (Campanella et al., 2016; Kruse et al., 2016).

Within the context of the present study, perceived operational efficiency refers to patients' perceptions of the efficiency of administrative processes within the Registration Department of a private hospital in Riyadh. This construct reflects patients' evaluations of registration workflow, waiting time, organization of administrative procedures, communication, and the overall utilization of administrative resources. Higher scores indicate more favorable perceptions of operational efficiency during the registration process.

Perceived Operational Efficiency

Overview of Perceived Operational Efficiency

Perceived operational efficiency refers to patients' evaluations of how efficiently healthcare administrative processes are organized and delivered during their interactions with healthcare services. In healthcare organizations, operational efficiency is commonly described in relation to effective workflow management, appropriate utilization of available resources, standardized administrative procedures, timely delivery, and coordinated communication among healthcare professionals (AlShammari et al., 2025). These elements are considered important indicators of the quality of administrative services and organizational performance.

Healthcare organizations continuously seek to maintain efficient administrative operations in response to increasing patient demand, limited healthcare resources, and growing expectations regarding service quality. From the patients' perspective, operational efficiency is reflected in registration waiting time, the organization of administrative procedures, communication with staff, and the smooth delivery of registration services. Therefore, perceived operational efficiency represents an important dimension of patients' overall healthcare experience.

Previous Studies Related to Perceived Operational Efficiency

Several previous studies have examined operational efficiency in healthcare organizations, particularly in relation to administrative workflow, Electronic Health Records (EHRs), digital transformation, workflow optimization, and healthcare information systems. Collectively, these studies provide valuable evidence regarding organizational performance and administrative service quality within healthcare settings.

AlShammari et al. (2025) examined the relationship between healthcare administrative processes and operational efficiency in Saudi healthcare organizations. The study reported that standardized administrative procedures, organized workflows, digital technologies, and

effective utilization of health information systems were associated with favorable indicators of operational efficiency. The authors also emphasized the importance of leadership, workforce competency, and coordinated administrative practices in supporting healthcare operations.

Similarly, Almusavi et al. (2023) examined the association between workflow optimization, waiting time, and healthcare performance. The findings indicated that organized administrative workflows and shorter waiting times were associated with favorable patient flow, staff productivity, resource utilization, and healthcare service delivery. The study also highlighted the value of continuously monitoring workflow indicators to support administrative decision-making and operational performance.

Campanella et al. (2016) conducted a systematic review examining the implementation of Electronic Health Records in healthcare organizations. The review reported that healthcare institutions implementing EHR systems commonly described organized communication, improved documentation quality, better information accessibility, and favorable operational performance. Likewise, Kruse et al. (2016) reviewed Electronic Health Record implementation across healthcare settings and reported similar observations regarding administrative workflow, communication among healthcare professionals, documentation practices, and healthcare operations.

Tyagi et al. (2023) conducted an observational and interventional study evaluating workflow optimization strategies within patient registration services. The study described changes in patient arrival patterns, registration waiting time, workflow organization, and resource utilization following the implementation of queuing strategies. The findings highlighted more organized registration services and efficient utilization of available resources.

Al Harbi et al. (2024) conducted a quality improvement study at Al Hada Armed Forces Hospital in Saudi Arabia to examine patient flow and operational processes. The study described organized patient flow, reduced boarding time, improved bed turnover, and efficient utilization of healthcare resources following structured quality improvement initiatives. The authors emphasized the importance of organized administrative processes in supporting healthcare operational performance.

Collectively, the reviewed studies indicate that operational efficiency in healthcare organizations has frequently been examined in relation to administrative workflow, digital transformation, Electronic Health Records, workflow organization, and quality improvement initiatives. However, limited studies have specifically examined the association between perceived operational efficiency, perceived patient registration process quality, and patient satisfaction from patients' perspectives within private hospitals in Saudi Arabia. This gap provides additional justification for the present study.

Patient Satisfaction

Overview of Patient Satisfaction

Patient satisfaction is widely recognized as one of the most important indicators of healthcare quality and organizational performance. It reflects patients' perceptions and evaluations of the healthcare services they receive based on their experiences and expectations. Patient satisfaction encompasses multiple aspects of healthcare delivery, including accessibility of services, communication with healthcare providers, waiting time,

staff professionalism, administrative procedures, and the overall quality of care (Al-Harajin et al., 2019).

Healthcare organizations routinely assess patient satisfaction to evaluate **quality service**, identify opportunities for improvement, and support continuous quality initiatives. In administrative departments, particularly patient registration services, patients' experiences during registration represent an important component of their overall perception of healthcare quality. Registration accuracy, timely service, effective communication, and organized administrative procedures are commonly recognized as factors associated with favorable patient experiences.

Within the context of the present study, patient satisfaction refers to patients' perceptions of the registration services provided by the Registration Department of a private hospital in Riyadh. It reflects patients' evaluations of waiting time, communication with registration staff, registration accuracy, accessibility of services, and their overall registration experience. Higher scores indicate more favorable levels of patient satisfaction with the registration process.

Previous Studies Related to Patient Satisfaction

Several previous studies have examined patient satisfaction in relation to administrative service quality, communication, waiting time, healthcare accessibility, and registration services. Collectively, these studies provide empirical evidence regarding factors commonly associated with patients' evaluations of healthcare services.

Al-Harajin et al. (2019) examined patients' satisfaction with healthcare services in Saudi Arabia. The study reported that waiting time, effective communication, professional staff behavior, and organized administrative procedures were commonly associated with favorable levels of patient satisfaction. The authors emphasized the importance of administrative service quality in supporting positive patient experiences.

Similarly, Radwan et al. (2024) conducted a systematic review and meta-analysis examining patient satisfaction with web-based medical appointment and registration systems in Saudi Arabia. The review reported that patients commonly described digital appointment and registration services as convenient and accessible. The authors also highlighted the importance of usability, accessibility, and technical support in shaping patients' experiences with digital healthcare services.

Albaqami (2025) investigated patient satisfaction within Saudi healthcare organizations. The findings indicated that communication quality, administrative efficiency, timely service delivery, and healthcare accessibility were commonly associated with favorable patient satisfaction. The study also highlighted the role of continuous quality initiatives in supporting patients' perceptions of healthcare service quality.

Batbaatar et al. (2017) conducted a systematic review examining determinants of patient satisfaction across healthcare organizations. The review identified communication, waiting time, staff competency, accessibility, and administrative efficiency as the most frequently reported factors associated with patient satisfaction. The authors concluded that these dimensions consistently appeared across different healthcare settings and populations.

Collectively, the reviewed studies indicate that patient satisfaction has frequently been examined in relation to administrative service quality, communication, waiting time, accessibility, and healthcare organization. However, relatively limited studies have specifically examined the association between perceived patient registration process quality, perceived operational efficiency, and patient satisfaction from patients' perspectives within private hospitals in Saudi Arabia. This gap provides additional justification for the present study.

2.3 Critical Commentary on Previous Studies

The reviewed studies provide valuable evidence regarding patient registration services, operational efficiency, and patient satisfaction within healthcare organizations. Although these studies were conducted in different healthcare settings and employed diverse research methodologies, they consistently emphasized the importance of administrative organization, effective communication, workflow management, digital transformation, and Electronic Health Records (EHRs) in healthcare service delivery. These findings provide a useful theoretical and empirical foundation for understanding the study variables.

Despite these similarities, several differences were identified among the reviewed studies. The studies varied in their objectives, research designs, target populations, and healthcare settings. Some investigations focused primarily on digital transformation and Electronic Health Record implementation, whereas others examined workflow optimization, quality improvement initiatives, operational efficiency, or patient satisfaction independently. In addition, the reviewed studies employed systematic reviews, cross-sectional surveys, observational studies, and quality improvement projects, which may explain variations in their reported findings.

Another important observation is that most previous studies examined patient registration services, operational efficiency, and patient satisfaction as separate constructs or within different conceptual frameworks. Only a limited number of studies explored the associations among these variables simultaneously from the patients' perspective. Furthermore, relatively few studies were conducted in private hospitals in Saudi Arabia, particularly within patient registration departments.

Accordingly, the present study extends the existing literature by examining the associations among perceived patient registration process quality, perceived operational efficiency, and patient satisfaction within a single conceptual framework. By focusing on patients attending the Registration Department of a private hospital in Riyadh, Saudi Arabia, the study provides additional evidence that may contribute to a better understanding of patients' perceptions of healthcare administrative services.

2.4 Research Gap

Although previous studies have provided valuable evidence regarding patient registration services, operational efficiency, and patient satisfaction, several research gaps remain. First, most previous studies have examined these variables independently or within different conceptual frameworks. While some studies focused on Electronic Health Records, digital transformation, or workflow optimization, others primarily investigated operational efficiency or patient satisfaction separately.

Second, relatively few studies have specifically examined perceived patient registration process quality as a distinct construct from the patients' perspective. Most available studies have emphasized healthcare administrative processes, digital technologies, or organizational performance rather than patients' perceptions of registration service quality.

Third, despite the growing interest in healthcare quality and administrative performance, limited evidence is available regarding the associations among perceived patient registration process quality, perceived operational efficiency, and patient satisfaction within a single conceptual framework. Furthermore, studies conducted in private hospitals in Saudi Arabia, particularly within Registration Departments, remain limited.

Accordingly, the present study addresses these gaps by examining the associations among perceived patient registration process quality, perceived operational efficiency, and patient satisfaction among patients attending the Registration Department of a private hospital in Riyadh, Saudi Arabia. By focusing on patients' perceptions within a single healthcare setting, the study contributes additional empirical evidence to the existing literature on healthcare administrative services and patient experience.

What distinguishes the current study from previous studies is its specific focus on the patient registration process as a distinct administrative service and its simultaneous examination of perceived patient registration process quality, perceived operational efficiency, and patient satisfaction from the patients' perspective. In addition, the study is conducted specifically within the Registration Department of a private hospital in Riyadh, Saudi Arabia, a context that remains relatively underrepresented in the reviewed literature. Therefore, the current study provides context-specific evidence by integrating these three perception-based variables within a single correlational framework.

2.5 Theoretical Framework of the Study

The present study is grounded in two well-established theoretical models that provide the conceptual foundation for understanding healthcare administrative service quality and patients' evaluations of healthcare services. These models are Donabedian's Quality of Care Model and the SERVQUAL Model developed by Parasuraman, Zeithaml, and Berry. Together, these frameworks provide a theoretical basis for examining the associations among perceived patient registration process quality, perceived operational efficiency, and patient satisfaction.

2.5.1 Donabedian's Quality of Care Model

One of the most influential frameworks for evaluating healthcare quality was developed by Donabedian (1988). The model describes healthcare quality through three interrelated components: structure, process, and outcomes. According to Donabedian, structure refers to the organizational environment in which healthcare services are delivered, including healthcare facilities, equipment, human resources, organizational policies, and technological

infrastructure. Process represents the activities performed during healthcare delivery, including clinical care, administrative procedures, documentation, communication, and patient interactions. Outcomes refer to the results of healthcare services, including patients' evaluations of care, health status, and organizational performance.

Within the context of healthcare administration, patient registration is considered an important administrative process because it represents the first interaction between patients and healthcare organizations. Registration activities, including patient identification, documentation, appointment verification, and communication with registration staff, are integral components of healthcare service delivery. Patients' evaluations of these administrative services provide valuable information regarding the quality of registration processes and the overall healthcare experience. Accordingly, Donabedian's model provides an appropriate theoretical basis for examining patients' perceptions of registration process quality and their relationship with perceived operational efficiency and patient satisfaction.

2.5.2 SERVQUAL Model

The SERVQUAL model, developed by Parasuraman, Zeithaml, and Berry (1988), is one of the most widely used frameworks for evaluating service quality. The model proposes that service quality is evaluated through five dimensions: reliability, responsiveness, assurance, empathy, and tangibles. These dimensions have been extensively applied in healthcare research because they reflect patients' evaluations of service delivery rather than objective organizational performance.

Within registration departments, reliability refers to accurate documentation and consistent administrative procedures, while responsiveness reflects timely registration services and prompt responses to patients' requests. Assurance relates to the professionalism, competence, and courtesy of registration staff, whereas empathy reflects individualized attention and respectful communication. Tangibles include the physical registration environment, available technologies, and the organization of registration facilities.

These dimensions are highly relevant to the present study because they correspond closely to patients' evaluations of registration process quality. The SERVQUAL model therefore provides a suitable framework for understanding patients' perceptions of administrative services within healthcare organizations.

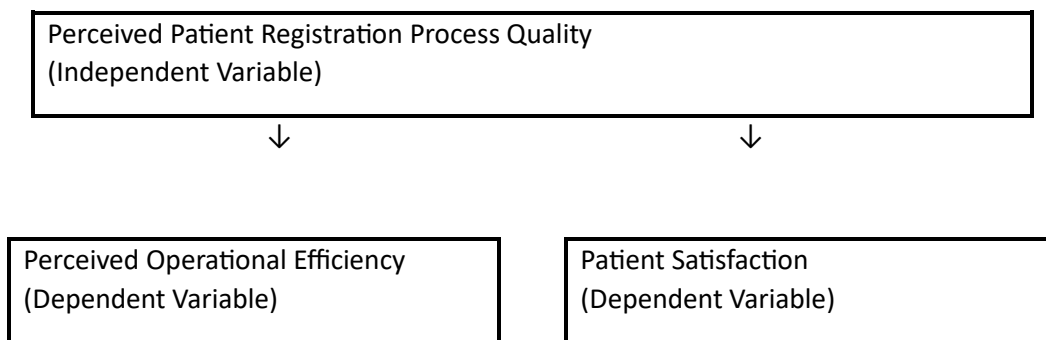
2.5.3 Application of the Theoretical Framework to the Present Study

The present study integrates Donabedian's Quality of Care Model and the SERVQUAL Model to provide a theoretical foundation for examining patients' perceptions of registration services. Donabedian's model provides a healthcare quality perspective for understanding registration as an administrative process within the broader healthcare service system, while SERVQUAL provides a service-quality perspective that emphasizes patients' evaluations of reliability, responsiveness, assurance, empathy, and tangibles.

Within the present study, these theoretical perspectives are applied to the three study variables: perceived patient registration process quality, perceived operational efficiency, and patient satisfaction. Perceived patient registration process quality represents patients' evaluations of the organization, accuracy, responsiveness, communication, and overall quality of registration services. Perceived operational efficiency reflects patients' perceptions of workflow organization, waiting time, coordination, and efficiency during registration, while patient satisfaction reflects their overall evaluation of the registration experience.

Accordingly, the integration of Donabedian's model and SERVQUAL provides a theoretical basis for examining the associations among the three variables from the patients' perspective. The framework is consistent with the correlational design of the present study and supports the examination of associations rather than causal relationships among the study variables.

Figure 2.1. Conceptual Framework of the Study



Chapter Three

Research Methodology

3.1 Introduction

This chapter presents the research methodology adopted to achieve the objectives of the present study and answer its research questions. It describes the methodological approach used to examine the associations among perceived patient registration process quality, perceived operational efficiency, and patient satisfaction within the Registration Department of a private hospital in Riyadh, Saudi Arabia.

The chapter outlines the research design, research community and sample, data collection instrument and procedures, study scope and limitations, and statistical methods used for data analysis. It also describes the procedures undertaken to ensure the validity and reliability of the study instrument and the ethical considerations followed during data collection. A quantitative descriptive cross-sectional correlational approach was adopted to examine the study variables from the patients' perspective without manipulating the variables or assuming causal relationships.

3.2 Research Methodology and Research Design

The present study adopted a quantitative research methodology using a descriptive cross-sectional correlational design. This methodological approach was selected because the study aimed to describe patients' perceptions of the registration process and examine the statistical associations among perceived patient registration process quality, perceived operational efficiency, and patient satisfaction within the Registration Department of a private hospital in Riyadh, Saudi Arabia.

The quantitative approach was appropriate because the study variables were measured using numerical data obtained through a structured questionnaire. This approach enabled the systematic measurement and statistical analysis of participants' responses and provided a standardized method for examining patterns and associations among the study variables.

A descriptive design was employed to describe the characteristics of the study participants and summarize their perceptions regarding the three study dimensions. The study did not involve any intervention or manipulation of the variables; rather, it examined the variables as perceived by patients within the existing registration setting.

The cross-sectional design was used because data were collected from participants during a defined study period without longitudinal follow-up. This design provided a representation of patients' perceptions of registration process quality, operational efficiency, and satisfaction during the period in which the study was conducted.

In addition, the study incorporated a correlational component to examine the direction and strength of the statistical associations between perceived patient registration process quality and the two dependent variables: perceived operational efficiency and patient satisfaction. The correlational design was consistent with the study objectives, research questions, and hypotheses because the study focused on identifying statistical relationships among the variables rather than establishing causal relationships.

The study relied primarily on primary quantitative data collected directly from eligible patients through a structured bilingual questionnaire. Secondary academic sources, including peer-reviewed journal articles and previous studies, were used to support the theoretical and empirical background of the research. Overall, the selected methodology and research design provided an appropriate framework for addressing the study objectives and examining the proposed relationships among the study variables from the patients' perspective.

3.3 Research Community

The research community consisted of patients attending the Registration Department of a private hospital in Riyadh, Saudi Arabia. These patients represented the target population of the study because they had direct experience with the hospital registration process and were therefore able to provide relevant perceptions regarding registration process quality, operational efficiency, and satisfaction with the registration experience.

A convenience sampling technique was used to recruit eligible participants who attended the Registration Department during the data collection period from May to June 2026. A total of 50 patients participated in the study and completed the questionnaire. Participation was voluntary, and only patients who had experienced the registration process and agreed to participate were included in the study.

The sample was considered appropriate for the descriptive cross-sectional correlational design of the study and enabled the researcher to examine patients' perceptions and the statistical associations among the study variables within the selected healthcare setting.

3.4 Study Scope and Limitations

The scope of the present study was defined to ensure consistency between the research problem, objectives, study variables, target population, and methodological approach. The study was limited to examining patients' perceptions of registration services within a specific healthcare setting and during a defined period. The scope was classified into human, spatial, temporal, and subject boundaries as follows.

3.4.1 Human Boundaries

The human boundaries of the study consisted of adult patients who attended the Registration Department of the selected private hospital and personally completed the registration process during the data collection period. Eligible participants were aged 18 years or older, able to understand Arabic or English, and voluntarily agreed to participate. Hospital employees and individuals who had not personally completed the registration process were excluded to ensure that the collected responses represented direct patient experiences with registration services.

3.4.2 Spatial Boundaries

The study was conducted within the Registration Department of a private tertiary hospital in Riyadh, Saudi Arabia. The hospital has an approximate capacity of 200 beds and provides a range of healthcare services. The Registration Department was selected because it represents an important administrative point of contact between patients and the healthcare organization and was directly relevant to the variables examined in the present study.

3.4.3 Temporal Boundaries

The temporal boundaries of the study covered the data collection period from May to June 2026. All questionnaire responses included in the final analysis were obtained from eligible participants during this defined period.

3.4.4 Subject Boundaries

The subject boundaries of the study were limited to examining the associations among three variables: perceived patient registration process quality, perceived operational efficiency, and patient satisfaction. Perceived patient registration process quality represented the independent variable, while perceived operational efficiency and patient satisfaction represented the dependent variables. The study focused on patients' perceptions of registration services and did not evaluate objective operational indicators or establish causal relationships among the variables.

3.5 Study Limitations

The findings of the present study should be interpreted in consideration of several limitations. First, the study was conducted in the Registration Department of a single private hospital in Riyadh, which limits the generalizability of the findings to other private hospitals, public healthcare institutions, or healthcare settings in other geographical areas.

Second, the study included a relatively small sample of 50 patients selected using a convenience sampling technique. Although the sample provided data relevant to the objectives of the study, the non-probability sampling approach and limited sample size may restrict the representativeness of the findings.

Third, the study used a cross-sectional correlational design, with data collected during a single defined period. Therefore, the findings describe statistical associations among the study variables and should not be interpreted as evidence of causal relationships.

Fourth, the study relied on a self-administered questionnaire and patients' self-reported perceptions. Responses may therefore be subject to individual differences in expectations, interpretation, and personal experiences. The study measured perceived operational efficiency from the patients' perspective rather than objective organizational indicators such as actual registration time, staffing productivity, or resource utilization.

In addition, the study instrument was reviewed and pilot-tested before data collection; however, a formal expert content-validity panel was not conducted. The conceptual similarity among some questionnaire items and the high overall internal consistency may also indicate some degree of overlap or redundancy among items. These considerations should be taken into account when interpreting the findings.

Despite these limitations, the study provides empirical evidence regarding patients' perceptions of registration process quality and its associations with perceived operational efficiency and patient satisfaction within the selected healthcare setting.

3.6 Statistical Analysis Method

Data collected through the structured questionnaire were reviewed, coded, and prepared for statistical analysis. The data were initially organized and transferred for analysis using IBM SPSS Statistics for Windows, Version 32.0. Statistical analyses were selected according to the study objectives, research questions, hypotheses, and level of measurement of the study variables.

Descriptive statistics were used to summarize participants' demographic characteristics and questionnaire responses. Frequencies and percentages were calculated for categorical demographic variables, including gender, age group, educational level, and frequency of hospital visits. Means and standard deviations were calculated for the questionnaire items and study dimensions to describe participants' perceptions of perceived patient registration process quality, patient satisfaction, and perceived operational efficiency.

The questionnaire consisted of 24 items distributed across three dimensions: perceived patient registration process quality (PR1–PR10), patient satisfaction (PS1–PS8), and perceived operational efficiency (E1–E6). Responses were measured using a five-point Likert scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree. Dimension scores were calculated from the corresponding questionnaire items, with higher scores representing more favorable perceptions of the measured construct.

The internal consistency reliability of the questionnaire was evaluated using Cronbach's alpha coefficient. The overall questionnaire demonstrated a high level of internal consistency, with a Cronbach's alpha of 0.972. Reliability was also examined for the individual study dimensions.

Prior to inferential analysis, the data were reviewed for completeness and suitability for statistical testing. Missing data were assessed before analysis, and only complete valid responses were included in the statistical analyses. The assumptions relevant to Pearson correlation, including the distribution of the study variables, linearity of relationships, and the absence of influential extreme observations, were considered before interpreting the correlation results.

Pearson's correlation coefficient (r) was used to examine the direction and strength of the associations between the independent variable, perceived patient registration process quality, and each dependent variable: perceived operational efficiency and patient satisfaction. Statistical significance was evaluated using a significance level of $\alpha = 0.05$, with $p < 0.05$ considered statistically significant. Correlation coefficients and corresponding p-values were used to evaluate the study hypotheses. The analysis was correlational; therefore, statistically significant relationships were interpreted as associations rather than causal relationships.

Chapter Four

Data Analysis, Research Findings and Recommendations

4.1 Introduction

This chapter presents the analysis and interpretation of the data collected from patients attending the Registration Department of a private hospital in Riyadh, Saudi Arabia. The findings are presented in accordance with the study objectives, research questions, and hypotheses. The analysis focuses on the three study variables: perceived patient registration process quality, perceived operational efficiency, and patient satisfaction.

Descriptive statistical methods were used to summarize the demographic characteristics of the participants and their responses to the questionnaire items and study dimensions. In addition, inferential statistical analysis was conducted to examine the associations between perceived patient registration process quality and each of the two dependent variables: perceived operational efficiency and patient satisfaction. The results are presented through tables accompanied by interpretations to provide a clear and systematic presentation of the study findings.

4.2 Data Analysis

The collected data were coded, organized, and analyzed using IBM SPSS Statistics for Windows, Version 32.0. A total of 50 complete and valid questionnaires were included in the final statistical analysis. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize participants' demographic characteristics and responses across the study dimensions.

The internal consistency of the study instrument was assessed using Cronbach's alpha coefficient, with an overall reliability coefficient of 0.972. The study dimensions consisted of perceived patient registration process quality (PR1–PR10), patient satisfaction (PS1–PS8), and perceived operational efficiency (E1–E6).

Pearson's correlation coefficient (r) was used to examine the associations between perceived patient registration process quality and patient satisfaction, and between perceived patient registration process quality and perceived operational efficiency. Statistical significance was evaluated at $\alpha = 0.05$. The correlation analysis was interpreted in terms of the strength and direction of the associations without implying causal relationships.

Demographic Characteristics of the Participants

This section presents the demographic characteristics of the 50 participants included in the study. Frequencies and percentages were calculated for gender, age group, educational level, and frequency of hospital visits. These characteristics provide a descriptive profile of the study sample and are presented in the following tables.

Table 4.1 Gender Distribution

Gender	Frequency	Percentage
Female	32	64.0%
Male	18	36.0%
Total	50	100%

Interpretation

Table 4.1 shows the distribution of the study participants according to gender. The results indicate that 32 participants (64.0%) were female, while 18 participants (36.0%) were male. Therefore, female participants represented the majority of the study sample.

Table 4.2

Distribution of Participants by Age

Age Group	Frequency (n)	Percentage (%)
18-30 years	11	22.0
31-40 years	23	46.0
41-50 years	9	18.0
51 years and above	7	14.0
Total	50	100.0

Interpretation

Table 4.2 presents the age distribution of the participants. Nearly half of the participants (46.0%) were between 31 and 40 years, followed by 22.0% aged 18–30 years. Participants aged 41–50 years represented 18.0%, while 14.0% were 51 years or older.

Table 4.3

Distribution of Participants by Educational Level

Educational level	Frequency (n)	Percentage (%)
Secondary school or less	4	8.0
Diploma	11	22.0
Bachelor's degree	28	56.0
Postgraduate degree	7	14.0
Total	50	100.0

Interpretation

Table 4.3 indicates that the majority of the participants (56.0%) held a Bachelor's degree, followed by 22.0% holding a Diploma. Participants with Postgraduate degrees represented 14.0%, while 8.0% had completed Secondary school or less.

Table 4.4 Distribution of Participants by Frequency of Hospital Visits

Frequency of Hospital Visits	Frequency (n)	Percentage (%)
First visit	14	28.0
Occasionally	20	40.0
Frequently	10	20.0
Monthly	6	12.0
Total	50	100.0

Interpretation

Table 4.4 shows that 40.0% of the participants visited the hospital occasionally, while 28.0% visited for the first time. Participants who visited the hospital frequently accounted for 20.0%, whereas 12.0% reported monthly visits.

4.3 Reliability Analysis

Before conducting the main statistical analyses, the internal consistency reliability of the study instrument was assessed using Cronbach's alpha coefficient. Reliability was examined for each of the three study dimensions as well as for the overall questionnaire. The questionnaire consisted of 24 items distributed across perceived patient registration process quality (10 items), patient satisfaction (8 items), and perceived operational efficiency (6 items). The reliability results are presented in Table 4.5.

Table 4.5 Reliability Analysis of the Study Variables

Study Variable	Number of items	Cronbach's Alpha	Reliability Level
Perceived Patient Registration Process quality	10	0.952	Excellent
Patient Satisfaction	8	0.939	Excellent
Perceived Operational Efficiency	6	0.903	Excellent
Overall Questionnaire	24	0.972	Excellent

Interpretation

Table 4.5 shows that all three study dimensions demonstrated excellent internal consistency. Cronbach's alpha coefficient was 0.952 for perceived patient registration process quality, 0.939 for patient satisfaction, and 0.903 for perceived operational efficiency. The overall questionnaire, consisting of 24 items, achieved Cronbach's alpha coefficient of 0.972, indicating excellent overall internal consistency. These results demonstrate that the study instrument had a high level of reliability and was suitable for measuring the study variables.

4.4 Descriptive Statistics

To examine participants' perceptions of the study variables, descriptive statistical analysis was conducted using the mean and standard deviation for each questionnaire item. The mean was used to determine the level of participants' agreement with each statement, while the standard deviation measured the variability of responses. The results for the Perceived Patient Registration Process Quality variable are presented in Table 4.6.

Table 4.6 Descriptive Statistics for perceived Patient Registration Process Quality (n=50)

Item	Statement	Mean	Std. Deviation	Level	Rank
PR1	The registration procedures are completed efficiently.	4.20	0.495	High	5
PR2	The registration process is simple and easy to understand.	4.20	0.535	High	5
PR3	Registration staff provide clear instructions during registration.	4.20	0.606	High	5
PR4	Electronic registration systems facilitate the registration process.	4.32	0.587	High	1
PR5	Registration staff respond promptly to patients' requests.	4.16	0.548	High	10
PR6	Patient information is recorded accurately during registration	4.18	0.56	High	9
PR7	The registration process minimizes unnecessary paperwork.	4.32	0.587	High	1
PR8	The registration process is well organized.	4.20	0.535	High	5
PR9	Technology supports the registration process effectively.	4.28	0.607	High	3

PR10	Overall, I believe the patient registration process is effective.	4.24	0.517	High	4
Overall	Perceived Patient Registration Process Quality	4.230	0.466	High	

Interpretation

Table 4.6 presents the descriptive statistics for Perceived Patient Registration Process Quality. The overall mean score was 4.230 (SD = 0.466), indicating a high level of perceived quality of the patient registration process among the study participants. The highest-rated items were PR4 (Electronic registration systems facilitate the registration process) and PR7 (The registration process minimizes unnecessary paperwork), both with a mean score of 4.32. PR9 (Technology supports the registration process effectively) ranked next with a mean score of 4.28, followed by PR10 with a mean score of 4.24. The lowest-rated item was PR5 (Registration staff respond promptly to patients' requests), with a mean score of 4.16. Nevertheless, all items were rated at a high level, indicating consistently positive perceptions of the quality of the patient registration process among the participants.

Patient Satisfaction

Participants' perceptions of patient satisfaction were analyzed using descriptive statistics. The mean and standard deviation were calculated for each questionnaire item to determine the level of agreement regarding patient satisfaction with the registration process. The results are presented in Table 4.7

Table 4.7 Descriptive Statistics for Patient Satisfaction (n=50)

Item	Statement	Mean	Std. Deviator	Level	Rank
PS1	I am satisfied with the registration services provided	4.22	0.465	High	7
PS2	Registration staff treat patients respectfully	4.26	0.565	High	6
PS3	The registration process meets my expectations	4.30	0.505	High	3
PS4	I receive sufficient information	4.30	0.544	High	3

	during registration				
PS5	The registration environment is comfortable and organized	4.32	0.551	High	1
PS6	I trust the accuracy of the registration process	4.22	0.582	High	7
PS7	I would recommend this hospital based on my registration experience	4.32	0.513	High	1
PS8	Overall, I am satisfied with the patient registration process	4.28	0.497	High	5
Overall	Patient Satisfaction	4.2775	0.44269	High	

Interpretation

Table 4.7 presents the descriptive statistics for Patient Satisfaction. The overall mean score was 4.2775 (SD = 0.44269), indicating a high level of patient satisfaction among the study participants. The highest-rated items were PS5 (The registration environment is comfortable and organized) and PS7 (I would recommend this hospital based on my registration experience), both with a mean score of 4.32. These were followed by PS3 (The registration process meets my expectations) and PS4 (I receive sufficient information during registration), both with a mean score of 4.30. The lowest-rated items were PS1 (I am satisfied with the registration services provided) and PS6 (I trust the accuracy of the registration process), both with a mean score of 4.22. Nevertheless, all eight items were rated at a high level, indicating consistently positive patient perceptions and a high overall level of satisfaction with the registration experience.

Perceived Operational Efficiency

Participants' perceptions of operational efficiency were analyzed using descriptive statistics. The mean and standard deviation were calculated for each questionnaire item to assess participants' views regarding the efficiency of the registration department. The results are presented in Table 4.8.

Table 4.8 Descriptive Statistics for Perceived Operational Efficiency (n=50)

Item	Statement	Mean	Std. Deviator	Level	Rank
OE1	Waiting time before registration is reasonable	4.16	0.468	High	2
OE2	Registration procedures are completed within an appropriate time	4.10	0.505	High	6
OE3	Electronic systems reduce waiting time	4.16	0.548	High	2
OE4	The registration process helps reduce crowding	4.20	0.452	High	1
OE5	The registration department provides services efficiently	4.14	0.572	High	4
OE6	Overall, the registration department operates efficiently	4.14	0.495	High	4
Overall	Perceived Operational Efficiency	4.15	0.4168	High	

Interpretation

Table 4.8 presents the descriptive statistics for Perceived Operational Efficiency. The overall mean score was 4.15 (SD = 0.4168), indicating a high level of perceived operational efficiency among the study participants. The highest-rated item was OE4 (The registration process helps reduce crowding), with a mean score of 4.20. This was followed by OE1 (Waiting time before registration is reasonable) and OE3 (Electronic systems reduce waiting time), both with a mean score of 4.16. OE5 and OE6 both recorded a mean score of 4.14, while the lowest-rated item was OE2 (Registration procedures are completed within an appropriate time), with a mean score of 4.10. Nevertheless, all six items were rated at a high level, indicating consistently positive participants' perceptions regarding the operational efficiency of the registration process.

4.5 Hypothesis Testing

This section presents the results of hypothesis testing using Pearson's correlation analysis. The analysis was conducted to examine the relationships between Perceived Patient Registration Process Quality and the two dependent variables, Patient Satisfaction and Perceived Operational Efficiency. Statistical significance was evaluated at the 0.05 level (two-tailed).

Testing the Main Hypothesis

Main Hypothesis

There is a statistically significant relationship between Perceived Patient Registration Process Quality and the dependent variables, namely Patient Satisfaction and Perceived Operational Efficiency.

Table 4.9 Pearson Correlation Matrix of Study Variables (n = 50)

Variables	Perceived Patient Registration Process Quality	Patient Satisfaction	Perceived Operational Efficiency
Perceived Patient Registration Process Quality	1.000	0.849*** (95% CI:0.747-0.912)	0.809*** (95% CI:0.685-0.887)
Patient Satisfaction	0.849*** (95% CI:0.747-0.912)	1.000	0.784*** (95% CI:0.647-0.872)
Perceived Operational Efficiency	0.809*** (95% CI:0.685-0.887)	0.784*** (95% CI:0.647-0.872)	1.000

*** Correlation is significant at the 0.001 level(2-tailed)

Table 4.9 presents the Pearson correlation matrix among the study variables. The results revealed a strong positive and statistically significant relationship between Perceived Patient Registration Process Quality and Patient Satisfaction ($r = 0.849$, 95% CI [0.747, 0.912], $p < 0.001$). A strong positive and statistically significant relationship was also found between Perceived Patient Registration Process Quality and Perceived Operational Efficiency ($r = 0.809$, 95% CI [0.685, 0.887], $p < 0.001$). In addition, Patient Satisfaction was strongly and positively correlated with Perceived Operational Efficiency ($r = 0.784$, 95% CI [0.647, 0.872], $p < 0.001$). These findings support the study hypotheses and indicate that higher perceived quality of the patient registration process is associated with higher patient satisfaction and higher perceived operational efficiency.

Accordingly, Sub-Hypothesis 1, concerning the relationship between Perceived Patient Registration Process Quality and Patient Satisfaction, and Sub-Hypothesis 2, concerning the relationship between Perceived Patient Registration Process Quality and Perceived Operational Efficiency, were both supported. Therefore, the main hypothesis of the study was supported.

4.6 Results

The findings of the present study demonstrated generally favorable perceptions across the three study variables: Perceived Patient Registration Process Quality, Patient Satisfaction, and Perceived Operational Efficiency. The descriptive analysis showed a high overall level of Perceived Patient Registration Process Quality, with a mean score of 4.230 (SD = 0.455). Patient Satisfaction also demonstrated a high overall level, with a mean score of 4.2775 (SD =

0.44269). Similarly, participants reported a high level of Perceived Operational Efficiency, indicating favorable perceptions of the organization and efficiency of registration services.

The reliability analysis demonstrated excellent internal consistency of the study instrument. Cronbach's alpha coefficients were 0.952 for Perceived Patient Registration Process Quality, 0.939 for Patient Satisfaction, and 0.903 for Perceived Operational Efficiency. The overall questionnaire, consisting of 24 items, achieved a Cronbach's alpha coefficient of 0.972.

Pearson correlation analysis revealed strong, positive, and statistically significant relationships among the study variables. Perceived Patient Registration Process Quality was strongly and positively associated with Patient Satisfaction ($r = 0.849$, 95% CI [0.747, 0.912], $p < 0.001$). A strong positive relationship was also identified between Perceived Patient Registration Process Quality and Perceived Operational Efficiency ($r = 0.809$, 95% CI [0.685, 0.887], $p < 0.001$). Furthermore, Patient Satisfaction was strongly and positively associated with Perceived Operational Efficiency ($r = 0.784$, 95% CI [0.647, 0.872], $p < 0.001$).

Accordingly, both study sub-hypotheses were supported. The findings also supported the main hypothesis concerning the statistically significant relationships between Perceived Patient Registration Process Quality and the two dependent variables, Patient Satisfaction and Perceived Operational Efficiency. Given the cross-sectional correlational design of the study, these findings represent statistical associations and do not establish causal relationships.

4.7 Discussion

The findings of the present study provide important insights into patients' perceptions of registration services within a private hospital in Riyadh, Saudi Arabia. Overall, participants reported high levels of Perceived Patient Registration Process Quality, Patient Satisfaction, and Perceived Operational Efficiency. These findings suggest that the registration experience was generally evaluated positively by the participants across the different dimensions measured in the study.

The high level of Perceived Patient Registration Process Quality indicates that participants generally held favourable perceptions of the registration procedures. Participants positively evaluated aspects related to the organization and clarity of registration procedures, accuracy of patient information, electronic registration systems, reduction of unnecessary paperwork, staff responsiveness, and technological support. The overall mean of 4.230 (SD = 0.455) indicates consistency in these favorable perceptions across the study sample.

The findings regarding registration process quality are consistent with the broader literature emphasizing the relevance of organized administrative workflows, digital systems, standardized procedures, and effective communication within healthcare administrative services. Previous studies reviewed in Chapter Two reported that well-organized administrative processes and digital healthcare systems were commonly associated with favorable evaluations of healthcare operations and service delivery. The present findings extend this literature by examining registration process quality specifically from the patients' perspective.

Patient Satisfaction recorded the highest overall mean among the three study dimensions, with an overall mean of 4.2775 (SD = 0.44269). Participants generally expressed satisfaction

with registration services, staff interactions, information provided during registration, the registration environment, accuracy of registration procedures, and their overall registration experience. These findings are consistent with previous research identifying communication, waiting time, accessibility, administrative organization, and staff interactions as important components of patients' evaluations of healthcare services. Al-Harajin et al. (2019), for example, identified waiting time as an important component associated with patient satisfaction in Saudi healthcare settings.

The findings related to Perceived Operational Efficiency also demonstrated favorable patient perceptions. Participants generally evaluated waiting time, timely completion of registration procedures, electronic systems, crowding, and overall registration operations positively. These findings are consistent with previous studies reviewed in Chapter Two that discussed operational efficiency in relation to organized administrative workflows, digital transformation, Electronic Health Records, information accessibility, and healthcare resource utilization. The findings therefore provide additional patient-centered evidence regarding perceived operational efficiency within the registration setting.

One of the most important findings of the present study was the strong positive relationship between Perceived Patient Registration Process Quality and Patient Satisfaction ($r = 0.849$, 95% CI [0.747, 0.912], $p < 0.001$). This finding indicates that participants who reported more favorable perceptions of registration process quality also tended to report higher levels of satisfaction. Consequently, Sub-Hypothesis 1 was supported. This relationship is consistent with the theoretical and empirical literature reviewed in Chapter Two, which highlights the close relationship between patients' evaluations of service quality and their overall satisfaction with healthcare services.

A strong positive relationship was also identified between Perceived Patient Registration Process Quality and Perceived Operational Efficiency ($r = 0.809$, 95% CI [0.685, 0.887], $p < 0.001$), supporting Sub-Hypothesis 2. This finding indicates that more favorable perceptions of registration process quality were associated with more favorable perceptions of operational efficiency. The result is consistent with literature emphasizing the relationship between organized administrative processes, technology-supported workflows, timely service delivery, and operational performance within healthcare organizations.

In addition, Patient Satisfaction was strongly and positively associated with Perceived Operational Efficiency ($r = 0.784$, 95% CI [0.647, 0.872], $p < 0.001$). Although this relationship was not the primary focus of the two sub-hypotheses, it provides additional evidence regarding the interconnected nature of patients' experiences with administrative healthcare services. Participants who perceived registration operations as more efficient also tended to report greater satisfaction with their registration experience.

From a theoretical perspective, the findings are consistent with the principles underlying Donabedian's Quality of Care Model and the SERVQUAL framework discussed in Chapter Two. Donabedian's framework emphasizes the importance of healthcare processes and outcomes, while SERVQUAL emphasizes patients' evaluations of dimensions such as reliability, responsiveness, assurance, empathy, and tangibles. In the context of the present study, patients' favorable evaluations of registration process quality were closely associated with favorable evaluations of operational efficiency and satisfaction.

Overall, the results support the study's conceptual framework and hypotheses. The findings demonstrate that Perceived Patient Registration Process Quality is strongly associated with both Patient Satisfaction and Perceived Operational Efficiency within the investigated healthcare

setting. However, these relationships should be interpreted within the methodological boundaries of the study. Because the research employed a cross-sectional correlational design, the observed relationships indicate associations among the variables and should not be interpreted as evidence that one variable causes changes in another.

4.8 Conclusion

This study examined the relationships between Perceived Patient Registration Process Quality, Patient Satisfaction, and Perceived Operational Efficiency among 50 patients attending the Registration Department of a private hospital in Riyadh, Saudi Arabia. Using a quantitative, descriptive analytical, cross-sectional correlational design, the study provided evidence regarding patients' perceptions of registration services and the relationships among the three study variables.

The descriptive findings demonstrated high levels of Perceived Patient Registration Process Quality, Patient Satisfaction, and Perceived Operational Efficiency. Participants generally expressed favourable perceptions of the organization, clarity, accuracy, responsiveness, technological support, and efficiency of the registration process. They also reported a high level of satisfaction with their registration experience.

The correlation findings demonstrated strong and statistically significant positive relationships between Perceived Patient Registration Process Quality and Patient Satisfaction ($r = 0.849$, $p < 0.001$), and between Perceived Patient Registration Process Quality and Perceived Operational Efficiency ($r = 0.809$, $p < 0.001$). Patient Satisfaction was also strongly associated with Perceived Operational Efficiency ($r = 0.784$, $p < 0.001$). Consequently, both sub-hypotheses and the main hypothesis were supported.

The findings suggest that patients who perceive the registration process as higher in quality also tend to report greater satisfaction and more favorable perceptions of operational efficiency. These results emphasize the importance of maintaining clear, accurate, organized, responsive, and technology-supported registration services as part of a positive patient experience. Nevertheless, the findings should not be interpreted as demonstrating causation because of the cross-sectional and correlational nature of the study.

The conclusions should also be considered within the limitations of the study, including the relatively small sample size of 50 participants, data collection from a single private hospital, and reliance on patients' self-reported perceptions. These factors may limit the generalizability of the findings to other hospitals or healthcare settings. Despite these limitations, the study provides useful evidence regarding the relationships among registration process quality, patient satisfaction, and perceived operational efficiency within the investigated setting.

4.9 Recommendation

Based on the findings of the study, healthcare organizations are encouraged to maintain and further strengthen the quality of patient registration services, particularly in areas related to clarity of procedures, accuracy of patient information, responsiveness of registration staff, organization of the registration process, and effective use of electronic registration systems.

Regular monitoring of patient feedback may help identify areas requiring improvement and support the maintenance of high levels of patient satisfaction.

Healthcare administrators should also continue to evaluate registration workflows and identify opportunities to reduce unnecessary steps, waiting time, paperwork, and potential crowding. Appropriate use of digital registration technologies may support more organized and efficient registration processes; however, their effectiveness should be continuously evaluated based on operational indicators and patient feedback.

Continuous training and development of registration staff are recommended, particularly in communication skills, accuracy of data entry, responsiveness, respectful interaction, and effective use of registration technologies. Maintaining standardized registration procedures may also contribute to consistency in the patient experience.

Future studies should include larger and more diverse samples and involve multiple healthcare organizations, including both private and public hospitals, to improve the generalizability of the findings. Longitudinal or prospective research designs may also be considered to examine changes over time and provide stronger evidence regarding the direction of relationships among registration process quality, patient satisfaction, and operational efficiency. Future research may additionally incorporate objective operational indicators, such as actual registration waiting time and processing time, alongside patient-reported measures to provide a more comprehensive assessment of registration performance.

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Appendix

Questioner

Perceived Patient Registration Process Quality, perceived Operational efficiency , and Patient Satisfaction Survey استبيان جودة عملية تسجيل المرضى المدركة، والكفاءة التشغيلية المدركة، ورضا المرضى

Dear Participant,

I am a master's student in Healthcare Administration at Midocean University. This questionnaire is part of a research study examining perceived patient registration process quality, perceived operational efficiency, and patient satisfaction in the Registration Department of a private hospital in Riyadh, Saudi Arabia. The questionnaire takes approximately 3–5 minutes to complete. Your participation is voluntary, and all responses will be kept confidential and used solely for research purposes. Thank you for your participation.

عزيزي/عزيزتي المشارك(ة)،

أنا طالب/طالبة ماجستير في إدارة الرعاية الصحية بجامعة ميد أوشن. يهدف هذا الاستبيان إلى جمع البيانات اللازمة لإجراء دراسة بعنوان
جودة عملية تسجيل المرضى المدركة، والكفاءة التشغيلية المدركة، ورضا المرضى في قسم التسجيل بأحد المستشفيات الخاصة “
بمدينة الرياض، المملكة العربية السعودية
تستغرق الإجابة على هذا الاستبيان حوالي 3–5 دقائق. مشاركتكم طوعية بالكامل، وجميع المعلومات التي تقدمونها ستعامل
بسرية تامة، ولن تستخدم إلا لأغراض البحث العلمي. لا يتطلب الاستبيان كتابة الاسم أو أي معلومات شخصية يمكن أن تحدد هوية
المشارك.
شاكرين لكم وقتكم وتعاونكم

When you submit this form, it will not automatically collect your details like name and email address unless you provide it yourself.

Required

القسم الأول: البيانات الديموغرافية Characteristics Demographic A: Section

Please answer the following demographic questions. يرجى الإجابة عن الأسئلة الديموغرافية التالية.

1. Gender / الجنس

- ☐ Male / ذكر
☐ Female / أنثى

2. Age / العمر

- ☐ 18–30 years / سنة 18–30
☐ 31–40 years / سنة 31–40
☐ 41–50 years / سنة 41–50
☐ 51 years and above / سنة فأكثر 51

3. Educational Level / المستوى التعليمي

- ☐ Secondary school or less / ثانوي أو أقل
☐ Diploma / دبلوم
☐ Bachelor's degree / بكالوريوس

☐ Postgraduate degree / دراسات عليا

4.Frequency of Hospital Visits / عدد مرات زيارة المستشفى

- ☐ First visit / الزيارة الأولى
☐ Occasionally / زيارات متفرقة
☐ Monthly / زيارة شهرية
☐ Frequently / زيارات متكررة

Required

Section B: Perceived Patient Registration Process Quality

القسم الثاني: جودة عملية تسجيل المرضى المدركة

5.Please indicate your level of agreement with each of the following statements.

يرجى تحديد درجة موافقتك على كل عبارة من العبارات التالية

The registration procedures are completed efficiently.

تتم إجراءات تسجيل المرضى بكفاءة عالية

- ☐ Strongly Disagree / غير موافق بشدة
☐ Disagree / غير موافق
☐ Neutral / محايد
☐ Agree / موافق
☐ Strongly Agree / موافق بشدة

The registration process is simple and easy to understand.

إجراءات التسجيل بسيطة وسهلة الفهم

- ☐ Strongly Disagree / غير موافق بشدة
☐ Disagree / غير موافق
☐ Neutral / محايد
☐ Agree / موافق
☐ Strongly Agree / موافق بشدة

Registration staff provide clear instructions during registration.

يقدم موظفو التسجيل تعليمات واضحة أثناء عملية التسجيل

- ☐ Strongly Disagree / غير موافق بشدة
☐ Disagree / غير موافق
☐ Neutral / محايد
☐ Agree / موافق
☐ Strongly Agree / موافق بشدة

Electronic registration systems facilitate the registration process.

تسهّل الأنظمة الإلكترونية عملية تسجيل المرضى

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

Registration staff respond promptly to patients' requests.

يستجيب موظفو التسجيل بسرعة لطلبات المرضى.

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

Patient information is recorded accurately during registration.

يتم تسجيل بيانات المرضى بدقة أثناء عملية التسجيل.

- ☐ Strongly Disagree / غير موافق بشدة
- ☒ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

The registration process minimizes unnecessary paperwork.

تقلل إجراءات التسجيل من الأعمال الورقية غير الضرورية.

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

The registration process is well organized.

تتميز عملية التسجيل بالتنظيم الجيد.

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

Technology supports the registration process effectively.

تدعم التكنولوجيا عملية التسجيل بشكل فعال.

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

Overall, I believe the patient registration process is effective.

بشكل عام، أرى أن عملية تسجيل المرضى فعالة.

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

Required

Section C: Patient Satisfaction

القسم الثالث: رضا المرضى

6. Please indicate your level of agreement with each of the following statements.

يرجى تحديد درجة موافقتك على كل عبارة من العبارات التالية

I am satisfied with the registration services provided.

أنا راضٍ عن خدمات التسجيل المقدمة.

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

Registration staff treat patients respectfully.

يعامل موظفو التسجيل المرضى باحترام

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

The registration process meets my expectations.

تُلبي إجراءات التسجيل توقعاتي.

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

I receive sufficient information during registration.

أحصل على معلومات كافية أثناء التسجيل.

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

The registration environment is comfortable and organized.

بيئة التسجيل مريحة ومنظمة.

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

I trust the accuracy of the registration process.

أثق بدقة إجراءات التسجيل.

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

I would recommend this hospital based on my registration experience.

أنصح الآخرين بهذه المستشفى بناءً على تجربتي في التسجيل.

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

Overall, I am satisfied with the patient registration process.

بشكل عام، أنا راضٍ عن عملية تسجيل المرضى.

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

Required

Section D: Perceived Operational Efficiency

القسم الرابع: الكفاءة التشغيلية المدركة

7. Please indicate your level of agreement with each of the following statements.

يرجى تحديد درجة موافقتك على كل عبارة من العبارات التالية

Waiting time before registration is reasonable.

مدة الانتظار قبل التسجيل معقولة

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

Registration procedures are completed within an appropriate time.

تُنجز إجراءات التسجيل خلال وقت مناسب

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

Electronic systems reduce waiting time.

تساهم الأنظمة الإلكترونية في تقليل وقت الانتظار

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

The registration process helps reduce crowding.

تساعد إجراءات التسجيل على تقليل الازدحام في منطقة التسجيل

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

The registration department provides services efficiently.

يقدم قسم التسجيل خدماته بكفاءة

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

Overall, the registration department operates efficiently.

بشكل عام، يعمل قسم التسجيل بكفاءة تشغيلية عالية

- ☐ Strongly Disagree / غير موافق بشدة
- ☐ Disagree / غير موافق
- ☐ Neutral / محايد
- ☐ Agree / موافق
- ☐ Strongly Agree / موافق بشدة

Section E: Open-Ended Questions

القسم الخامس: أسئلة مفتوحة

8.What suggestions do you have to enhance the quality of the patient registration process?

ما هي اقتراحاتك لتحسين جودة عملية تسجيل المرضى

9.Do you have any additional comments regarding your registration experience?

هل لديك أي ملاحظات إضافية حول تجربتك أثناء عملية التسجيل؟

Scientific Research

العلاقة بين الجودة المدركة لعملية تسجيل المرضى والكفاءة التشغيلية المدركة ورضا المرضى في قسم التسجيل
بمستشفى خاص في الرياض

إعداد الطالب
دارين عصام الداخ
253002944

إشراف

د. فايز جراد

د. الفيصل عبد الحميد

العام الدراسي:
2026