

MidOcean University
College of Administration
Department / Major: Master
of Healthcare Administration

Research Title:

- Improving the Patient Registration Process in Hospitals to Enhance Efficiency and Patient Satisfaction

- **Prepared by:**
Darin Al Dayekh

- **Supervised by:**

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Introduction

- Patient registration is the first step in healthcare service delivery.
- It directly impacts waiting time and workflow.
- Efficient systems improve service quality.
- Many hospitals face delays and overcrowding
- Improvement is necessary to enhance patient satisfaction

Problem Statement

- Long waiting times in registration area.
- Overcrowding at the reception.
- Inefficient or manual processes.
- Incomplete or inaccurate patient data.
- Negative impact on patient satisfaction and service quality.

Significance of the Study

1. Academic Significance:

- Contributes knowledge to healthcare management on registration efficiency.

2. Practical Significance:

- Helps hospital management optimize registration systems.
- Reduces patient waiting time.
- Improves healthcare service quality.

Research Objectives

- Examine current registration processes.
- Identify problems in patient registration.
- Assess impact of improved registration on efficiency.
- Examine relationship between registration speed and patient satisfaction.

Research Questions

- What are the main problems in patient registration?
- How does registration affect hospital efficiency?
- Does improving registration increase hospital efficiency?
- How does registration speed affect patient satisfaction?

Research Hypotheses

- There is a statistically significant relationship between improving patient registration processes and increasing operational efficiency in hospitals.
- There is a statistically significant relationship between faster patient registration and higher patient satisfaction.

Literature Review

- Study 1
- Reference (APA)
- Al-Surimi, K., Khalifa, M., & Househ, M. (2017). *The impact of electronic health records on patient registration efficiency in hospitals: A systematic review*. Journal of Medical Systems 41(12), 190. <https://doi.org/10.1007/s10916-017-0830-2>
- **Objective:** To assess how electronic health record systems affect the efficiency of patient registration.
- **Methodology:** Systematic review of 25 studies across hospitals using EHR systems
- **Findings:** Electronic registration reduces waiting time, minimizes errors, and improves workflow efficiency.
- **Relevance to our study:** Supports the idea that implementing electronic systems improves registration efficiency.

Study 2

Reference (APA)

- Ahmed, A., & Al-Dossary, R. (2020). *Patient satisfaction and waiting times in hospital registration departments in Saudi Arabia*. International Journal of Healthcare Management, <https://doi.org/10.1080/20479700.2019.1659254>
- **Objective:** To examine the relationship between registration speed and patient satisfaction.
- **Methodology:** Quantitative survey with 200 patients in public hospitals.
- **Findings:** Faster registration directly correlates with higher patient satisfaction.
- **Relevance:** Confirms that improving registration speed positively affects patient satisfaction.

- Study 3

- Reference:

Al-Harbi, F. (2019). *Improving hospital reception processes through staff training and digital registration systems*. Saudi Journal of Health Services, 6(1), 45–53

- **Objective:** To evaluate the effect of staff training and digital systems on registration errors and workflow efficiency.
- **Methodology:** Mixed-method study including staff interviews and operational data analysis.
- **Findings:** Staff training combined with digital tools reduced errors by 35% and decreased average registration time.
- **Relevance:** Demonstrates the importance of staff training and system upgrades in improving registration efficiency

- The reviewed studies generally agree that improving patient registration processes enhances both operational efficiency and patient satisfaction. For example, Al-Surimi and Khalifa (2017) and Al-Harbi (2019) emphasize the role of digital systems in improving registration speed and accuracy, while Al-Dosari (2020) highlights the importance of reducing waiting time to increase patient satisfaction.
- Despite these similarities, the studies differ in their focus and methodology. Al-Surimi and Khalifa (2017) focus on technological improvements (EHR systems), whereas Al-Harbi (2019) combines both human factors (staff training) and technology. In contrast, Al-Dosari (2020) focuses mainly on patient perceptions rather than internal processes.
- These differences in findings can be explained by variations in study samples, settings, and tools. For instance, studies conducted in technologically advanced hospitals are more likely to show higher efficiency improvements. Additionally, patient-based studies tend to produce different results compared to staff-based evaluations.
- Therefore, this study aims to bridge these perspectives by examining both efficiency and patient satisfaction in relation to improving patient registration processes.

Research Gap

- A review of previous studies, including Al-Surimi & Khalifa (2017), Al-Dosari (2020), and Al-Harbi (2019), reveals several important gaps in the literature.
- First, most studies have examined individual factors separately. For example, Al-Surimi & Khalifa (2017) focused on technological aspects such as electronic health records, while Al-Dosari (2020) examined patient satisfaction in relation to waiting time, and Al-Harbi (2019) emphasized staff training and digital systems. However, few studies have integrated these variables together to examine their combined impact on both operational efficiency and patient satisfaction.
- Second, there is a contextual gap, as many studies were conducted in different healthcare environments, and limited research has specifically addressed patient registration processes within the local hospital context. This limits the generalizability of previous findings.
- Third, some studies show variations in results, particularly regarding the relationship between registration efficiency and patient satisfaction. These inconsistencies may be due to differences in sample characteristics, hospital infrastructure, or level of technology used. Therefore, there is a need for further research to clarify these relationships.
- Additionally, most previous studies relied primarily on quantitative methods, such as surveys, and often used relatively small or specific samples (either patients or staff). This creates a methodological gap that can be addressed by using a broader sample or combining perspectives.
- Finally, with the increasing adoption of digital systems and healthcare technologies, there is a need to further explore how integrating process improvement, staff performance, and digital registration systems together can enhance both efficiency and patient satisfaction.
- Therefore, this study aims to fill these gaps by examining the combined effect of improving patient registration processes on both operational efficiency and patient satisfaction within a specific hospital setting.

Theoretical Framework

- This study is based on several theoretical perspectives related to healthcare management and process improvement.
- First, Quality Management Theory emphasizes the importance of improving healthcare processes to enhance service quality and patient satisfaction. This theory supports the idea that optimizing patient registration procedures can reduce waiting time and improve overall service efficiency.
- Second, Process Improvement Theory focuses on analyzing and redesigning administrative processes to eliminate inefficiencies and delays. In the context of this study, it highlights the importance of streamlining patient registration workflows to enhance operational performance.
- Third, Technology Acceptance Theory explains how the adoption of digital systems, such as electronic health records (EHR), can improve the efficiency and accuracy of hospital operations, including patient registration. These theories are applied in this study by examining how improving registration procedures, adopting digital systems, and enhancing staff performance contribute to better efficiency and higher patient satisfaction.

Methodology and Research Methods

- **Type of Research**

This study is considered a descriptive and applied research, as it aims to analyze the current patient registration process and provide practical solutions for improvement.

- **Research Approach**

The study adopts a mixed methods approach (quantitative and qualitative) to provide a comprehensive understanding of the research problem.

Research Plan and Implementation Steps

- **Qualitative Phase:**

Interviews will be conducted with hospital staff and administrators to explore the challenges faced in the patient registration process and identify possible improvement strategies.

- **Quantitative Phase:**

A structured questionnaire will be distributed to a sample of patients and registration staff to measure:

- Efficiency of the registration process
- Waiting time
- Level of patient satisfaction

Study Instruments

- **Data Collection Tools**

This study uses two main data collection tools:

1. **Interview Guide**

- A semi-structured interview guide will be developed and conducted with hospital administrators and registration staff.
- The interview will consist of 10–12 questions focusing on:
 - Challenges in the current patient registration process
 - Causes of delays and inefficiencies
 - Role of staff training in improving registration performance
 - Use of digital systems in registration
 - Suggested strategies for improving efficiency and patient satisfaction

2. Questionnaire

- A structured questionnaire will be designed and distributed to patients and registration staff.
- Part One: Demographic Data

This section will include basic information such as:

- Age
- Gender
- Education level
- Job role (for staff)

• **Part Two: Measurement Scale**

A five-point Likert scale will be used (Strongly Agree – Strongly Disagree) to measure the following variables:

- Efficiency of the patient registration process (10 items)
- Patient satisfaction level (8 items)
- Waiting time and service speed (6 items)

3. Validity and Reliability Tests

To ensure the accuracy of the research tools, the following tests will be conducted:

- Content Validity: The questionnaire will be reviewed by academic experts and healthcare professionals.
- Reliability Test: Cronbach's Alpha coefficient will be used to measure the internal consistency of the questionnaire items.

Study Boundaries

A. Human Boundaries

- Study Population:

The study population consists of patients and registration staff in hospitals.

- Study Sample:

A sample of approximately 50 participants will be selected, including patients and administrative/registration staff from hospitals.

- Sample Size and Sampling Method:

The sample will be selected using a random sampling method to ensure representation of the study population.

B. Spatial Boundaries

- Geographical Area:

The study will be conducted in hospitals located in the Kingdom of Saudi Arabia.

C. Temporal Boundaries

- Data Collection Period:

Data will be collected during the second quarter of 2024.

- Study Period:

The study will cover the period from 2023 to 2024.

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Thank you