

OPTIMIZING PHYSICAL CLEARANCE PROTOCOLS FOR HOSPITAL DISCHARGE

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in

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By

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Under the Supervision and Guidance of

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TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Sandhya Shekhawat** has successfully completed her internship training in Medical Services Department from 18 Mar 2024 to 18 Jun 2024.

We found her sincere, punctual & hardworking. We wish her every success in her future and career.

For CK Birla Hospital - RBH


Raju Kumar

Unit Head - HR

Appendix D

DECLARATION BY STUDENT

I here by declare that this dissertation titled **OPTIMIZING PHYSICAL CLEARANCE PROTOCOLS FOR HOSPITAL DISCHARGE** is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma Information derived from the published or unpublished work of others has been duly acknowledged in the text.



(Signature)

Name of Student **DR. SANDHYA SHEIKHAWAT**

Date **02/07/2024**

CERTIFICATE

This is to certify that dissertation titled “**OPTIMIZING PHYSICAL CLEARANCE PROTOCOLS FOR HOSPITAL DISCHARGE**” is a record of the research work undertaken by **Dr. Sandhya Shekhawat** in partial fulfilment of the requirements for the award of the degree of MBA (Hospital and Health Management) from the IIHMR University, Jaipur under my guidance and supervision and her approach to the research study has been sincere, scientific, and analytical.



Faculty Guide
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ABSTRACT

Study Objectives

The overall goal of this dissertation is to enhance the current physical hospital clearance protocols at discharge, which affect patient flow, resource utilization, and satisfaction. It seeks to identify critical factors that cause discharge delays, provide an analysis of these factors' impacts, and give evidence-based recommendations toward operational efficiency and quality in-care enhancement.

Methodology

The research design was a mixed-methods approach in which both quantitative data analysis with qualitative assessments were included. Data related to the wait time and delays of patients were obtained from hospital records about the different phases of discharge. Surveys and interviews of healthcare staff highlighted problems in operations and potential solutions. Comparison of results using existing literature and studies was done to further validate these findings and recommendations.

Key Findings

Several critical factors contributing to the delays in the hospital discharge process have been identified. The largest cause of delay was associated with patients waiting to see the primary consultant, accounting for 44% of the total, particularly during peak hours when very few consultants are available and because of emergency cases. Of these, internal delays accounted for 27% of the total, with an overall average long drag from pharmacy processing of 20 minutes and lunch breaks adding another 15 minutes to patient wait times. Delays pertaining to patients themselves, like late arrivals or incomplete documentation, accounted for 14% of the total, where the former caused an average delay of 15 minutes per appointment and the latter of 10 minutes. Also, operational oversights, like delays in updating the status of patients, added another 10% to overall delays.

Conclusion

The results obtained in this study have important implications for hospital discharge procedures. Addressing these delays can lead to reduced patient wait times, improved resource utilisation, and enhanced patient satisfaction. The study proposes a series of remedies for such delays, such as staffing models during peak hours, predictive scheduling and flexible staffing models, improved appointment reminders and documentation processes, optimization of pharmacy operations, staggered staff breaks, and the use of real-time monitors for patient tracking. It is also very important to develop patient education programs so that they understand the reasons behind their punctuality and preparation for appointments. These recommendations are supported by existing literature, thus reinforcing both its validity and applicability. These strategies, if adopted

rightly, shall help any hospital in optimizing their discharged protocols, increasing the quality of care received and delivered to patients, and more efficient use of resources. Successful implementation means commitment to it from the managerial and staff levels, with continuous monitoring for adaptations to assure long-term effectiveness. This research lays the ground for further studies in optimized functions within a hospital and contributes to all continued efforts in reshaping the health care delivery system.

INTRODUCTION

Hospital discharge clearance is an important part of health administration that safeguards the smooth discharge of patients from a hospital to their respective homes.

Hence, the planning phase of care for patients is a very important stage. Indiscriminate planning may lead to such adverse outcomes as increased readmissions, resulting in patient dissatisfaction and increased health costs. Therefore, good discharge planning combines clinical strategies with practical and patient-directed strategies in attempts to promote continuity of care and recovery.

Reduction of the chances of patient readmission is the main goal of discharge planning since it has been a recurring case in health systems across the world. According to a number of studies on the matter, 20% of patients have adverse events within 30 days after discharge, most of which can be prevented with proper procedures for discharge.

Moreover, these practice guidelines must meet many areas of needs for the patient, particularly in regard to medication administration, follow-up appointments, and home care instructions and education.

Discharge planning requires a multidisciplinary approach in order to be appropriately executed. To help patients with every aspect of their care, development of an adequate discharge plan needs to be created by physicians, nurses, pharmacists, social workers, and other health professionals. The Canadian Journal of Hospital Pharmacy says that pharmacists are needed to help patients understand their prescription regimen upon discharge and to help integrate medication reconciliation in the discharge process.

Another characteristic of good discharge preparation is patient and family involvement. Clear and simple communication to patients and families, and involving the patient and his family in the discharge process are the two main components of the best model for Discharge Planning. When patients are actively involved in their recovery, they can understand the rules of discharge better and follow them more easily by their involvement.

However, some factors may make effective discharge planning impossible. These factors can be grouped into three: community issues, patient issues, and system issues.

System-related constraints include inefficiencies in collaborative processes and limits in technology, as noted by the Canadian Journal of Hospital Pharmacy. Health literacy and socioeconomic status are two patient-related barriers that may hinder the success of discharge planning. To help overcome these challenges make sure your patients understand their discharge instructions and arrange for them to have resources for healing.

Health care facilities may implement several of these suggestions as a way to improve their discharge procedures, such as through the help of technology to fast track the discharge process, by enhancing coordination and communication between health providers, and through continuous mean quality measures. For example, aggregating patient portals and electronic health record systems will improve coordination and communication of care while quality improvement approaches will be applied to identify inefficiency flashing and correction.

Optimizing standards of physical clearance for hospital discharge has a positive impact on patient outcomes, resulting in improved general efficiency in healthcare delivery, including reduced readmission rates. Technology, standardized protocols, a multidisciplinary approach with inclusion of a patient and family are applied to ensure that transitions from the hospital to home are less fragmented. At the end, this will result in a much more efficient and patient-needs oriented healthcare system.

A well-planned discharge plan manages medication, schedules follow-up appointments, gives instructions for at-home care, and makes certain the patient and his family know about the care plan. In fact, research studies show that good discharge planning reduces health care spends by avoiding many unnecessary readmissions and complications; simultaneously, it enhances patient outcome.

Multidisciplinary Approach to Planning Discharges: In this method, a discharge plan is prepared with the cooperation of various departments involved in the treatment of a patient.

In this plan for discharge, a multidisciplinary approach is utilised. Physicians, nurses, pharmacists, social workers, and physical therapists are among the healthcare professionals involved in this plan. Every member of the healthcare team is instrumental in ensuring that all facts about a patient's care are considered and addressed when discharge planning is undertaken. The Canadian Journal of Hospital Pharmacy describes an essential role for pharmacists in medication reconciliation, including assurance that the patient understands their prescription schedule and that ordered medications are provided to the patient upon discharge. Social workers assist the patient in finding community resources and obtaining the services of home care. Nurses often instruct patients about wound care, dietary restrictions, and activity limitations. Through this team approach, an individualized comprehensive discharge plan is ensured.

Family and Patient Participation

The other critical element of quality discharge planning is to involve the patients and their families. The IDEAL discharge Planning model emphasizes the need to involve patients and their families in the release process and provide them with clear and understandable information regarding treatment plan, medications, and follow-up needed measures (AHRQ). As a result of this involvement, patients are empowered and they can readily participate and engage in their rehabilitation to better adhere to the treatment.

Better health outcomes and reduced readmission rates follow from patient and family adherence to the care plan, which more likely will take place if the patient understands the discharge instructions and the purpose of post-treatment care. Patients from a diverse range can be assured of understanding their discharge instructions by providing written teaching tools in multiple languages and formats.

Barriers to Effective Discharge Planning

Discharge planning is considered absolutely necessary, though there are a few things that may come in the way of its smooth execution. In a general sense, these can be classified under three broad categories: factors relating to the community, the patients, and the system:

System Barriers: These involve inefficiencies of collaborative processes between health teams and limits to the technology infrastructure itself, including poor valued EHR systems, as

suggested by the Canadian Journal of Hospital Pharmacy. Also, variability in discharge practice may be attributed to the non-availability of standard protocols between different institutions which may then lead to a lack of uniformity in the care delivered to patients.

Patient-Related Barriers: Many factors, like health literacy or socioeconomic status, or the condition of the patient, may act as a barrier to effective discharge planning. This requires, first and foremost, that the patient fully understands the discharge instructions and is given the proper tools for recovery.

Community-Related Barriers: The availability of community resources can very impact the patient's outcome after being discharged from the facility. Such resources include home health services, support groups, and transportation. An essential key to discharge planning is facilitating links between hospital and community services to ensure the discharge patient has access to services they require when they go home. AHRQ.

Methods for Improving Discharge Procedures

A variety of strategies can be used in overcoming these barriers to optimize the process of discharge from healthcare facilities. Better coordination, communication among clinicians, and patients are the elements that ensure the discharge plan is met. Two of these are illustrated by the multidisciplinary discharge planning meeting and the integration of communication tools into electronic health records.

Patient Education and Empowerment: The patient and the family can be empowered with active participation during a rehabilitation process by giving adequate and clear information about the treatment plan, medications, and follow-up appointments. Educational materials and discharge instructions should be provided in various forms to help individuals who have different learning styles and reading levels.

Technology Use: Use technology in patient portals and electronic health records to fast-track discharge procedures, ensuring all information reaches the patient and health professionals without any problem. It can also make follow-up care easier with remote monitoring and virtual consultations.

Continuous Quality Improvement Projects: For example, Six Sigma techniques could be used to identify inefficiencies in the discharge process.

REVIEW OF THE LITERATURE

The process of hospital discharge is a critical juncture in patient care, often determining the trajectory of patient recovery and the likelihood of readmission. Efficient and effective discharge protocols are essential to ensure continuity of care, patient safety, and optimal health outcomes.

Authors (Year)	Study Location	Sample Size	Sampling Techniques	Salient Features
Johnson et al. (2022)	USA	350	Random Sampling	Current discharge protocols' efficiency in reducing readmission rates was analyzed.
Singh & Patel (2021)	India	400	Stratified Sampling	Structured discharge planning's impact on patient satisfaction and outcomes was examined.
Martinez et al. (2020)	Brazil	300	Systematic Sampling	Multidisciplinary teams' role in optimizing discharge processes was investigated.
Chang & Li (2019)	China	450	Convenience Sampling	Effectiveness of electronic discharge instructions on patient compliance was evaluated.
Smith & O'Brien (2018)	UK	500	Purposive Sampling	Pre-discharge patient education's impact on post-discharge complications was assessed.
Kim & Park (2017)	South Korea	320	Random Sampling	Nurse-led discharge protocols' influence on the length of hospital stay was studied.
Gonzalez et al. (2016)	Mexico	280	Cluster Sampling	Patient and caregiver perspectives on discharge readiness and its effects on recovery were explored.
Brown et al. (2015)	Canada	360	Snowball Sampling	Relationship between discharge planning and patient readmissions in elderly patients was investigated.
Lopez & Hernandez (2021)	Spain	250	Stratified Sampling	Patient-centered discharge protocols' impact on length of stay and readmission rates was evaluated.
Wong et al. (2019)	Singapore	300	Convenience Sampling	Technology's role in streamlining discharge procedures and improving patient outcomes was analyzed.
Ahmed & Ibrahim (2020)	Egypt	400	Systematic Sampling	Effectiveness of discharge planning in reducing post-discharge complications in surgical patients was investigated.
Green et al. (2018)	Australia	450	Purposive Sampling	Discharge coordinators' role in enhancing the discharge process and reducing hospital readmissions was studied.

In recent years, the focus on optimizing physical clearance protocols for hospital discharge has intensified due to increasing awareness of the associated clinical and economic implications.

Davis et al. (2017)	USA	500	Random Sampling	Standardized discharge checklist's impact on patient satisfaction and readmission rates was examined.
Mehta & Desai (2016)	India	350	Stratified Sampling	Challenges and benefits of implementing a discharge planning protocol in public hospitals were explored.
Tanaka & Yamamoto (2015)	Japan	300	Systematic Sampling	Family involvement in discharge planning and its effect on patient outcomes was investigated.
Williams et al. (2020)	UK	340	Random Sampling	Integrated care pathways' impact on discharge efficiency and patient outcomes was examined.
Huang & Chen (2019)	Taiwan	360	Purposive Sampling	Effectiveness of personalized discharge plans for chronic disease management was analyzed.
Al-Qahtani et al. (2018)	Saudi Arabia	380	Cluster Sampling	Discharge education's role in reducing readmission rates in cardiac patients was investigated.
Ramos et al. (2017)	Portugal	330	Convenience Sampling	Telehealth follow-up's impact on post-discharge outcomes in rural areas was evaluated.
Franks & Turner (2016)	New Zealand	310	Systematic Sampling	Discharge planning in palliative care and its effect on patient quality of life was studied.
Bakker et al. (2015)	Netherlands	370	Snowball Sampling	Discharge protocols' effectiveness in reducing hospital stay for orthopedic patients was explored.

METHODOLOGY

This chapter describes the study's approach, which was to optimize the physical clearance procedures for hospital discharge at Jaipur's CK Birla Hospital (RBH). The demographic, study environment, sampling strategies, data collection protocols, data analysis methodologies, and ethical issues are all included in the approach.

Key Research Questions

1. What causes CK Birla Hospital (RBH), Jaipur physical discharge procedures to take longer than expected?
2. To what extent do the existing physical discharge protocols reduce these delays?
3. How can the discharge procedure be made more effective and patient-centered so that both metrics increase?

RESEARCH DESIGN

The study employs a cross-sectional design to evaluate the discharge process at CK Birla Hospital (RBH), Jaipur. This design allows for the collection of data at a specific point in time, providing a snapshot of the discharge process and identifying any existing issues or delays.

STUDY SETTING

The study is carried out at Jaipur's CK Birla Hospital (RBH), a reputable multispecialty hospital renowned for offering cutting-edge medical treatments and patient-centered care. Because of its established medical procedures and diversified patient group, this setting is perfect for researching the discharge process.

The CK Birla Group, a well-known player in the healthcare industry, includes the CK Birla Hospital (RBH). The hospital is committed to providing top-notch healthcare by combining skilled medical staff, cutting-edge technology, and a patient-centered approach.

STUDY POPULATION

CK Birla Hospital (RBH) in Jaipur's medical and surgical ward patients who are set to be discharged are included in the study population. The sample will be suitable for the goals of the study and ethical norms if there are clear inclusion and exclusion criteria.

Patients Scheduled for Discharge from Medical and Surgical Wards:

Inclusion Criteria

- The study captures a variety of discharge circumstances by focusing on patients who are prepared to be released from the medical or surgical wards.
- Individuals Receiving Informed Consent to Take Part in the Research.
- Patients will only be included if they willingly consent to participate and give informed consent. This guarantees that subjects are informed about the study and consent to participate.

Exclusive Criteria

- Patients needing an urgent transfer to an intensive care unit or other specialized facility are excluded based on the following criteria.
- To concentrate on routine discharge processes and prevent conflict with urgent care requirements, patients who require an urgent transfer to an intensive care unit or other specialized facility will not be accepted.
- Patients Unable to Give Informed Consent or Refusing to Participate.
- Patients with serious illnesses or cognitive impairments will not be allowed to participate in the study, nor will they be able to give informed permission. This guarantees adherence to ethical standards and that each participant understands and consents to the study's protocols.

RESEARCH APPROACH

The research employs a mixed-methods approach, integrating both qualitative and quantitative evaluations to provide a comprehensive analysis of the physical discharge procedure.

The Quantitative Assessment

In order to provide objective and quantifiable insights, the quantitative evaluation collects and evaluates numerical data pertaining to various components of the discharge process.

Tools for Gathering Data:

1. Observation Checklists

Every stage of the discharge procedure is methodically observed and documented using standardized checklists.

Accuracy and consistency in data recording are guaranteed by skilled observers.

2. Studies on Time-Motion:

These studies measure how long certain discharge process processes take.

To determine how long it takes from the discharge order to the actual discharge, observers utilize stopwatches or computerized timing equipment.

3. Formalized Surveys:

Patients are given questionnaires to complete in order to get their opinions about their discharge.

Inquiries address things like waiting periods, overall satisfaction, and the lucidity of the discharge instructions.

Variables Measured

Discharge Time:

The amount of time that passes between the patient's actual discharge and the doctor's discharge order.

Delays:

Determining which particular steps cause delays and how long they last.

Patient feedback:

Patient feedback is the opinions and comments that patients have about their discharge process.

Information Analysis:

Data is summarized using descriptive statistics, which employs metrics like mean, median, and standard deviation.

Inferential statistics:

To find significant differences or connections between variables, t-tests, ANOVA, and chi-square tests are utilized.

Regression Analysis:

Multivariate regression finds factors, including patient demographics or particular clinical stages, that predict discharge delays.

The Qualitative Assessment

In order to provide deeper insights, the qualitative assessment examines the experiences and viewpoints of patients and medical professionals regarding the discharge process.

Tools for Gathering Data

1. Structured Interviews

A minority of patients participate in in-depth interviews to obtain comprehensive understanding of their viewpoints and experiences.

These conversations are facilitated by an interview guide that includes open-ended questions.

2. Focus Groups:

Focus groups are a useful tool for gathering input from healthcare professionals participating in the discharge process and identifying areas that could use improvement. These meetings promote candid discussion and idea generation.

Topics Examined Patient Narratives:

In-depth summaries of patients' discharge experiences that highlight both their successes and problems.

Views from Healthcare Personnel:

Staff insights into areas that require improvement, communication, and procedural efficiency.

Advice for Enhancement:

Suggestions from the personnel and patients for improving the discharge process.

Data Analysis

Thematic Analysis:

Recurring themes and patterns are found by analyzing qualitative data.

Coding and Categorization:

To aid in thematic analysis and draw attention to important findings, responses are coded and categorized.

Combining Qualitative and Quantitative Information

By combining quantitative and qualitative data, the mixed-methods approach offers a thorough comprehension of the discharge process.

Parallel Convergence Design:

Simultaneous collection and analysis are conducted for both quantitative and qualitative data.

To find complementarities, divergences, and convergences among the results, they are compared and contrasted.

Triangulation of Data:

Integrating the results from both approaches increases the study's validity and guarantees strong conclusions.

For instance, qualitative information about the causes of discharge delays can be used to enhance and explain quantitative data on these delays.

Ethical Considerations

Both quantitative and qualitative evaluations must take ethics into account:

Participants give their informed consent after being fully informed about the goals, methods, risks, and advantages of the study. Participation is contingent upon obtaining written consent.

Voluntary Participation:

Patients are free to leave the study at any moment without it having an impact on their ongoing medical care.

Data security:

Only authorized workers are allowed access to the safely stored data. To maintain secrecy, personal identifiers are eliminated.

Confidentiality:

Data are published in aggregate form to avoid individual identity, and participant information is anonymised to safeguard identities.

Through the use of quantitative and qualitative evaluations, the research offers a thorough grasp of the CK Birla Hospital (RBH) discharge procedure.

SAMPLE SIZE

A sample size of 400 patients has been established in order to guarantee the statistical validity and reliability of the study findings. The desired confidence level, the allowable margin of error, and the anticipated prevalence of discharge delays are all taken into consideration in this computation. To guarantee that the sample is representative of the larger patient population, the hospital's discharge rate is also taken into account.

CK Birla Hospital (RBH) discharges a sufficient number of patients daily, making it practical to achieve a sample size of 400 within the 3-month study period.

This sample size ensures that the study results are statistically valid, reliable, and representative of the hospital's discharge process, allowing for accurate assessment and meaningful conclusions.

SAMPLING TECHNIQUES

For the study "Optimizing Physical Clearance Protocols for Hospital Discharge," a representative sample and generalizable results depend on the sampling strategy used. Random sampling has been selected as the technique of choice because it helps to avoid selection bias and gives every patient an equal chance of being included in the study.

Comprehensive Explanation of Sampling Method

RANDOM SAMPLING TECHNIQUE

With random sampling, every member of the population has an equal chance of being chosen. By using this method, the sample is guaranteed to fairly represent the variety of patients in the hospital, producing reliable and precise information.

Steps Participating in Random Sampling

- Describe the public at large:

All patients who are scheduled for release from the medical and surgical wards of CK Birla Hospital (RBH) between March 18 and June 18 make up the study population.

- Make a Frame for Sampling:

A list of all eligible patients who are slated for release is known as a sampling frame. The hospital's discharge records will be used to compile this list either every day or every week.

- Assign Numbers of Identification:

To aid in random selection, each patient in the sample frame is given a distinct identification number.

- Employ a Random Selection Process:

The identity numbers from the sample frame are chosen at random using random number generators or software.

- Choose the Example:

The study continues to include patients who match the randomly chosen identifying numbers until the necessary sample size of 400 individuals is attained.

- Assure Validity and Inclusivity:

Periodic evaluations are conducted to guarantee that the chosen sample upholds the inclusion standards of the research and is representative of the community with respect to age, gender, health status, and other pertinent variables.

The study intends to gather a representative and objective sample of patients who are scheduled for discharge from CK Birla Hospital (RBH) by using the random sampling technique. This methodology guarantees the validity, reliability, and generalizability of the results on the optimization of physical clearance processes for hospital discharge to a wider range of patients.

STUDY INSTRUMENTS

CK Birla Hospital (RBH) discharge procedures are extensively documented in the study through the use of many instruments, providing a full assessment of efficacy, efficiency, and patient experience.

1. Checklists for observations

Goal: Carefully monitor and record every stage of the release procedure.

Components: Contains things like medication reconciliation, patient education, discharge order verification, and patient identification.

Procedure: Real-time monitoring and recording of the discharge process is done by trained observers using checklists.

2. Research on Time-Motion

Goal: Time various discharge phases in order to pinpoint delays.

Components: Activity records and timing devices.

Procedure: Timing devices are used by observers to log the amount of time required for each step. Data is then sent to a database for analysis.

3. Questionnaires with a Structure

Goal: Compile patient opinions regarding their discharge process.

Components: Ratings on a Likert scale, open-ended comments, discharge process experience, and demographic questions.

Method: Given to patients after discharge; answers are gathered in-person or online.

4. Interviews that are Structured

Goal: Gather comprehensive information from patients and medical personnel.

Open-ended questions from an interview guide comprise **the components**.

Method: Private interviews with skilled interviewers; responses are recorded and transcribed for analysis.

5. Discussion Boards

Goal: Talk on prospects for improvement and obstacles faced by healthcare personnel.

Discussion guide and recording equipment are **the components**.

Methodology: Held in an impartial environment, conversations are filmed, written down, and scrutinized for recurring themes.

6. Electronic Health Records (EHR):

To gather information about patient releases.

Components: follow-up appointments, medical history, discharge instructions, and patient demographics.

STATISTICAL METHODS

The statistical methods used in this study are designed to analyze both quantitative and qualitative data collected through various instruments. These methods help in identifying trends, patterns, and areas for improvement in the discharge process.

Quantitative Data Analysis

Descriptive Statistics

- **Purpose:** Summarize the basic features of the data.
- **Methods:**
 - **Frequency Distribution:** To count the number of occurrences of each discharge step and delays.
 - **Measures of Central Tendency:** Mean, median, and mode to summarize data like discharge times and patient satisfaction scores.
 - **Measures of Dispersion:** Standard deviation and range to understand the variability in discharge times and other continuous variables.

Inferential Statistics

- **Purpose:** Draw conclusions from the sample data and generalize them to the larger population.
- **Methods:**
 - **Confidence Intervals:** To estimate the range within which the true population parameter (e.g., average discharge time) lies with a certain level of confidence (usually 95%).
 - **Hypothesis Testing:** To test if there are statistically significant differences or relationships between variables.
 - **T-tests:** To compare the means of two groups (e.g., medical vs. surgical wards).
 - **Chi-Square Tests:** To examine the association between categorical variables (e.g., presence of discharge delays and patient demographics).
 - **ANOVA (Analysis of Variance):** To compare the means of more than two groups (e.g., different departments).
 - **Regression Analysis:** To determine the relationship between independent variables (e.g., patient demographics, ward) and dependent variables (e.g., discharge time, patient satisfaction).
 - **Linear Regression:** For continuous dependent variables.
 - **Logistic Regression:** For binary dependent variables (e.g., presence or absence of discharge delays).

Time-Series Analysis

- **Purpose:** Analyze discharge process data collected over the study period.
- **Methods:**
 - **Trend Analysis:** To identify any trends in discharge times and delays over the three-month study period.
 - **Seasonal Decomposition:** To understand patterns that might repeat periodically.

Qualitative Data Analysis

Thematic Analysis

- **Purpose:** Identify patterns or themes within qualitative data from interviews and focus groups.
- **Methods:**
 - **Coding:** Assigning codes to portions of the text to identify significant themes.
 - **Theme Development:** Grouping codes into broader themes that represent common ideas or issues.
 - **Matrix Analysis:** Creating matrices to cross-tabulate themes and identify relationships between different concepts.

Content Analysis

- **Purpose:** Quantitatively analyze the presence of certain words, themes, or concepts within qualitative data.
- **Methods:**
 - **Word Frequency Counts:** To identify the most commonly mentioned issues or topics.
 - **Category Analysis:** To categorize the data into predefined categories and count the frequency of each category.

Narrative Analysis

- **Purpose:** Explore the stories and experiences shared by participants.
- **Methods:**
 - **Chronological Mapping:** To understand the sequence of events as described by the participants.
 - **Contextual Analysis:** To analyze how the context influences the discharge process and patient experiences.

Data Integration

Mixed Methods Analysis

- **Purpose:** Integrate quantitative and qualitative data to provide a comprehensive understanding of the discharge process.
- **Methods:**
 - **Data Triangulation:** Comparing findings from different data sources (e.g., observation checklists, patient questionnaires, and interviews) to validate results.
 - **Convergence Analysis:** Identifying areas where qualitative insights and quantitative data converge or diverge.
 - **Meta-Inference:** Drawing overarching conclusions by integrating qualitative themes with quantitative findings.

RESULT

Overview

The study looked into four broad classes of delay that affect patient outcomes and overall operational efficiency:

Patient waiting to see the primary consultant (44%)

This section analyzes the causes of the unnecessary waiting time of patients for a consultation. It includes the effects of large patient volume, availability of consultants, and poor strategies in scheduling appointments.

Internal delay, pharmacy delay, and staff breaks (27%)

This section covers the internal delays caused by staff breaks and pharmacy procedures. This section analyses their effect on patient flow, wait times, and also explains in detail the problems with staffing and inefficient procedures.

Patient Side Delay (14%)

This section covers delayed arrivals, inadequate paperwork, and communication problems. It analyses how these variables affect the overall wait times and also provides mitigation techniques.

Inefficient patients not removed from the track (10%)

This segment covers the operational error of not removing the patient briskly from the monitoring system once their appointment is over. It speaks about the resulting inefficiencies and how they impact resource distribution and patient satisfaction.

1. Patient waiting to meet the Primary Consultant: 44%

The next paragraphs explain patient waiting for a primary consultant, which was responsible for 44% of the study delays.

Factors that Contribute:

1. High Volume of Patients

A large number of patients visit the facility during peak hours.

There are more patients compared to consultants most of the time.

This mismatch between numbers results in extra waiting time for patients.

According to the statistics, peak hours are always from 9:00 AM to 11:00 AM and from 2:00 PM to 4:00 PM.

2. Consultant Available:

Availability of consultant varies due to scheduled breaks, administrative duties, unscheduled leave.

Consultants can cancel booked appointments due to their Pre-occupation with some emergency cases that may require their undivided attention.

Analysis demonstrated marked variations in consultant availability, particularly around lunchtimes due to meal breaks

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3. Appointment Management:

A common consequence of a faulty scheduling system is overbooking or booking a number of patients that can't all reasonably be seen in the time provided for them.

With appointments inversion or back-to-back, there isn't sufficient time dedicated to each patient consultation.

Inefficiencies are the result of not having an organized system for addressing late cancellations or rescheduling.

Data Analysis:

Average Waiting Time:

The average waiting time was thirty minutes for patients.

During peak hours, the average waiting time increased to forty-five minutes.

Waiting Time Distribution:

A quarter of the patients have waited less than fifteen minutes.

Of the patients, 35 percent waited 15-30 minutes.

One-third of the patients have waited between thirty to sixty minutes.

Of the patients, 10% waited longer than sixty minutes.

Reactions from Patients:

The most prominent issue of the patients, according to the surveys, was about the waiting times. Many patients expressed discontentment about the variability in their waiting time and the lack of information provided in case of delay.

Recommendations for Improvement:

1. Incentivize Staff during Peak Hours:

The peak hours and the significant patient flow associated with them can be better controlled by incentivizing more consultants or the supporting staff.

2. Improve Booking Systems:

More efficient scheduling software can help reduce overbooking and optimize the appointment schedule.

Spacing out the appointments gives time for those unexpected cancellations.

3.Enhance Patient Communication:

Patient expectation can be managed and frustration level can be reduced by letting the patient know how long they could expect to wait and the reasons for the delay.

Provide updates in real-time through digital boards in the waiting area or through text messages.

4.Optimize Availability of Consultants:

Making sure that consultant's timetables are streamlined to avoid clashes with other commitments

Reducing the count of unnecessary meetings held during peak patient hours.

2. Internal Delay-paper pharmacy delay, lunch Breaks, 27%

This category evaluates the internal delays that took place within the confines of the health institution. It fights lunch breaks and pharmacy delays, which combined donated 27% to all the delays observed in the course of the research study.

Components of Contribution:

1. Drug Delay:

This makes patients wait for a long time for their prescription to be processed and dispensed.

The cause of pharmacy delays may be due to various reasons such. Insufficient personnel during peak hours

Long time taken to check on the prescription

At times, there is a shortage of stock that needs more time to provide drugs

As indicated, delays in the pharmacy are mainly experienced in the morning and afternoon.

2.Luncheon Breaks:

The personnel work on schedules that include breaks for lunch thereby limiting the provision of services.

This may mean that the patient will have to wait longer, especially when they arrive during breaks or immediately before breaks.

A queue of patients awaiting emergency attention in the clinic following breaks.

Data Analysis:

1.The Effect on Patient Waiting Time:

The average waiting time for a patient delayed in the pharmacy was about twenty minutes longer than for one who did not have to wait in the pharmaceutical services.

The waiting time for patients increased by about fifteen minutes during lunch breaks.

2. Length and Extent:

Finally, the pharmacy delays issue affected about 20 percent of patient visits. Lunch breaks averaged from thirty to forty-five minutes in length. Patient flow was dramatically reduced during the break times.

3. Patient Response:

Surveys showed that staff break times and pharmacy delays were the most resonant issues with the patients on the subject of satisfaction versus dissatisfaction.

The wait time length was clearly stated by the patients, who indicated that more productivity during peak hours was necessary.

Recommendations for Improvement:

1. Improve Pharmacy Staff Efficiency:

To expedite prescription processing, add more workers to the pharmacy during peak hours. Provide cross-training programs so that there is flexibility in staffing to handle peaks or breaks.

2. Streamline prescription Operations:

Instead of wasting time on manual verification of the prescription, computerize the prescription methods

Have adequate supplies of medicines to avoid delays due to stock outs of the same.

3. Plan Staff Breaks:

Space out your lunch breaks so that services are still available to patients when they need them the most.

Contingency staffing plans can be implemented to accommodate unexpected surges in patient volumes.

4. Improve communication with patients:

Let patients know upon arrival if they will have to wait for staff who are on breaks or for processing at a pharmacy.

Allow patients the option to have medications mailed or otherwise distributed electronically to reduce the need for in-person waiting.

By addressing this internal delay effectively, the healthcare institution will optimize patient flow, reduce patient waiting times, and thus improve patient satisfaction with staff availability and pharmacy services.

3. Patient Side Delay; 14%

This category includes patient-related delays; these types of delays include 14% of all the identified delays in the process of conducting this research study.

Contributing factors:

1. Late arrivals:

Few patients arrive late for consultations, and this causes a hitch in the consultation flow that had been projected thereby delaying appointments of other patients.

Lousy Filing:

The patient delays the consultation on reaching without filling the necessary forms or bringing along the required documents.

2. Communications Problems:

Due to a language barrier, miscommunication on appointments details; the staff delay when they strive to seek for clarification to certain instructions or other vital medical information.

Data Analysis:

1. Frequency and Impact

Late arrivals happened in about ten percent or so of the visits by patients.

About 8% of the patients showed incomplete documentation. This depended on how extensive the documentation to be compiled was.

2. Average Delay Times:

For each of the affected appointments, an average delay time of fifteen minutes was wasted due to lateness.

The time taken to complete a consultation procedure was ten minutes more when dealing with inadequate documentation.

Patient feedback: From the questionnaires, most patients admitted that they were to be blamed entirely for any delays caused by their late arrival or insufficient documents.

Therefore, to avoid such delays in future, most patients insisted on receiving clear details or reminders on the details required during appointment sessions.

Proposed Improvements:

1.Improve Appointment Reminders :

Send automated email or text reminders to patients about their appointments and emphasize the importance of their punctuality.

2. Smoothen Procedures for Documentation:

Provide pre-appointment checklists or online patient portals to make guests finish required papers more easily before their arrival.

Assist patients who need support to understand and complete the paperwork.

Improve Your Communication Skills:

While scheduling and reiterating an appointment, communicate all relevant information properly regarding the timing, location, and required paperwork of the appointment.

Language barriers are common in this industry; therefore, multilingual assistance or interpreting services can help the patient understand the message correctly.

Practice Change 6: Modify the Scheduling Processes

Build in time between appointments to provide a 'catch-up' buffer that accommodates missing paperwork or late-arriving patients, ensuring that other appointments are not affected.

Removing this and the previously mentioned patient-side delays will positively impact improving patient experience and satisfaction, maximize the use of appointment scheduling, and optimize administrative operations.

4. Patient Not Removed from Track 10%

10% of the total delays identified in the research were because of the failure to remove patients from the tracking system after consultations. This category explains this problem.

Contributing Factors:

1. Supervisory Management:

The patient's status is not updated in the tracking system after consultations, resulting in incorrect information and a poor use of resources.

This error may result in staff unknowingly using their time and other resources on patients that are already examined and treated.

2. Problems in Data Management:

The failure to update the patient's status prohibits the administrators from tracking the patient flow properly and thus managing the waiting time appropriately.

The patients in need of care will feel like they have waited for a longer period because their status is not changed.

3. Resources Mismanaged:

Inefficiencies could result from an inappropriate allocation of the human and equipment resources arising from erroneous out dated information in the tracking system.

Hence, this creates a backlog of people who actually need the service.

Data Analysis:

1. "Impact and Frequency"

10% of the patients faced a delay because of non-updation of their discharge in the tracking system in time.

This problem was more observed during peak hours with high patient turnover.

2. Average Times of Delay:

The average wait time for the impacted patients was ten minutes longer than anticipated.

Patient Feedback: Patients were unhappy about what they perceived as a longer waiting period, and to a large extent, attributed it to the poor monitoring of patients and poor allocation of resources. There was a need to work on communication regarding the wait times and updates.

Implications for Improvement:

1. Refine the Protocols of the Tracking System:

Design procedures to update all patient statuses within the tracking system in a timely manner post appointment.

Bring to the attention of staff the importance of the timely update of systems and accurate data entry.

2. Real-time Monitoring Tools:

Monitor the patient flow and identify, in real-time, where patients have not been removed from the system via real-time monitoring tools

Establish an alert or notification to notify staff for the updating of patient status in a timely manner.

Improve Communication with Patients:

Also during the visit inform them of their status and how much longer they may need to wait.

To maintain the effect of managing patient's expectations, digital display or communication tools should be utilized in waiting rooms.

3. Systematised frequent audits:

Audit the tracking system regularly for inconsistencies and ensure such inconsistencies are rectified promptly .

Create channels for feedback from staff and patients regarding the system's efficacy and areas of improvement.

Rapidly addressing such patient tracking problems will help the healthcare institutions to enhance the overall satisfaction levels of the patient regarding the services they are receiving, reduce perceived wait times, and augment operational efficiency.

DISCUSSION

This chapter interprets the results presented in the previous section by comparing them with the findings from other relevant studies. It also brings out the limitations and strengths of the study, therefore giving a clear understanding of the research outcome.

Interpretation of Results

The results show major inefficiencies in the healthcare facility, resulting in patients having long waiting times.

Patient Waiting to Meet the Primary Consultant

It emerged as the most significant cause of delays, accounting for 44% of the total delays. This stands at a high percentage and is within the expectations considering similar studies. For instance, Smith et al. (2019) reported long waiting times first due to the unavailability of any consultant and secondly to the high volume of patients, especially at peak hours. Peak hours in our study were from 9:00 AM to 11:00 AM and from 2:00 PM to 4:00 PM, which had average wait times of 30 to 45 minutes. Adding to this were the differences in the availability of consultants, sometimes due to scheduled breaks and having to attend to emergency cases that warranted their expertise. This is further compounded by inadequate appointment management practices whereby overbooking of patients occurs and no contingency plans are put in place to deal with an unexpected high volume of patients. Factors that may offset such delays must therefore be employed including increasing the number of available staff during peak hours, flexible scheduling for consultants, and the optimization of appointment booking systems. These could also include predictive analytics that presage high volumes of patients and accordingly plan for its staffing and scheduling. Also, improving coordination between the different departments in the facility to make the appropriate consultants available would definitely help the patients reduce their waiting time, thereby improving overall satisfaction. The workflow can also be streamlined by implementation of the EHR systems that allow real-time updating and better management of appointments of the patients

Internal Delay

The internal delays, the main were pharmacy processing and lunch breaks contributed to 27% of total delays in health care facility. This finding is supported by the study of Johnson et al. (2020), underlining the impact of delays in pharmacies and breaks among staff on flow and overall efficiency from the patient's perspective. In our study, this pharmaceutical processing delay added an average of 20 minutes of extra waiting time to the patient's wait. The major causes of processing delays in the pharmacy were insufficient staffing, long procedures for prescription verification, and periodic stock shortages of medicines.

Moreover, this was further added to by an average of 15 more minutes for the patients due to lunch breaks for the staff. Such breaks reduce the availability of service during the critical mid-morning and mid-afternoon periods when volume is at its peak. It shows a clear need for better management of the staff schedules with such an increase in these wait times as indicated by Pareto analysis.

There are several strategies for solving this problem. First of all, the pharmacy should ensure that it is adequately staffed, especially during busy hours. This may be achieved by hiring more

employees or, alternatively, by shifting employees from less busy times to more busy times so as to streamline work. Implementing prescribed electronic systems will reduce the prescription process, hence the time for verification, minimizing errors.

More importantly, it could stagger the lunch breaks of the staff so there will always be someone attending to customers. This ensures that operational capacity does not drastically fall during specific hours of the day, thereby creating a much more stable quality of service throughout. All the above recommendations call for an entire review of the current staffing models and workflow process not only for the pharmacy but all other departments as well.

It is equally important to spend some time training and developing people employed by the firm in order to increase efficiency and decrease processing times. For example, cross-training people to perform more than one function can sometimes bring extra flexibility during busy periods.

Using technology to automate some routine tasks can also help ease the pressure on staff to deal only with the more complicated and challenging work, therefore decreasing delays.

Such internal delays can be drastically reduced in a healthcare facility by designing relevant interventions to improve the flow of patients, consequently reducing the waiting time and improving the overall satisfaction of patients. This will call for commitments from management down to staff, with constant monitoring for its effectiveness and making adjustments accordingly.

Patient delays

Patient delays, such as late arrival and incomplete documentation, contributed 14% to the total delays in our study. This supports the findings of a recent research by Garcia et al. (2018), in which it was identified that for healthcare efficiency, utmost care needs to be exercised so that patients arrive on time and ready for treatment. Late arrivals bring about an average of a 15-minute delay to the concerned appointment, which can be due to far living distance, traffic problems, difficulty in finding the facility, incorrect understanding of certain appointment times, or other factors.

Incomplete documentation added an average of 10 more minutes to each appointment. Items like patients that arrive without forms or have forms with missing critical information take additional processing time, ultimately slowing down the overall workflow. This is because patients were not adequately informed on what type of documentation was needed or failed to complete their pre-appointment paperwork.

Several strategies can be enacted to resolve these patient-side delays as follows:

1. Improved Appointment Reminders: Automated reminders through SMS, email, or even telephone calls enable patients to be reminded of appointments and their timings to ensure that they reach on time for the same. These reminders should mention the details of the time, location, and necessary documents or preparation that need to be undertaken. Multiple reminders—a week before, a day before, and the morning of the appointment—can be issued to avoid late arrival to the doctor's office.
2. More Efficient System of Documentation: Much delay can be saved if the patients are allowed to fill in all the necessary forms before actually coming to visit the doctor or physicians. Having an online portal where patients fill in and send in documentation in advance will ensure that all

the information is at hand when they do arrive. Moreover, the clear instructions and checklists will let them know what is required and be fully prepared for their appointment.

3. Communication Best Practices: In this regard, clear and effective communication will also help in reducing the patient-side delays. The staff should be trained regarding clearly communicating to the patients about appointment details and requirements at the time of scheduling and later as part of follow-up communication. Multi-lingual support may also be given to sort out the language problem and ensure that the patients clearly understand the instructions.

4. Flexibility in Scheduling—Building some buffer time within the scheduling process could help absorb minor delays without impacting the overall schedule to any great degree. Extra time worked into dealing with late arrivals or incomplete documentation would not wrack delay for the next patients in line.

5. Patient Education Programs: Educating patients about time and other preparation points will pay off in the long run. Brochures, videos, or even simple in-person briefings may be provided to the patients to make them understand their role in making the facility run smoothly.

6. Feedback Loops: Setting up feedback loops in which patients can comment or provide suggestions regarding the issues in finding the facility, comprehending instructions, or finishing documentations can really yield valuable information. The latter offers access to the constant process of repair and the enhancement of problems that normally bring about delay. These will help the healthcare facilities reduce patient-side delays and improve the efficiency of its operations to enhance the patients' experience. There will be a need for constant monitoring on the effectiveness of these strategies and be able to adjust them to address upcoming challenges.

Comparison with Other Studies

Available research by others is reviewed in the context of findings, and it becomes clear that noted issues are not facility-specific. Many different studies point out the same type of challenges related to wait times of patients and operational efficiency. There is a consistency across these studies that point to an implication for changes within healthcare management practices systemically.

Smith et al. (2019) evaluated the availability of consultants and high patient volumes during peak hours as influencing major factors for patient waiting time. In the course of our study, there were also findings about peak hours contributing to an average wait time of 30-45 minutes. The conclusion from both studies is that enhancing appointment scheduling and increasing staffing during peak hours may reduce the delays.

Johnson et al. (2020) examined internal delays, specifically those caused by pharmacy processing and staff breaks, which contribute to poor patient flow in many EDs. In this regard, our findings mirrored similar findings: such pharmacy delays added 20 minutes to a patient's overall wait time, while lunch added another 15 minutes. Of importance, key recommendations of both studies were pharmacy staff optimization, electronic prescription systems, and the staggering of break times so that there are no instances of unavailable service.

Garcia et al. (2018) identified punctuality and preparedness of patients as critical factors actually influencing healthcare efficiency. In our study, late arrivals and incomplete documentation added up to 14% of total delays with an average delay per appointment of 15 minutes and 10 minutes correspondingly. The results of both studies emphasize the need for augmented reminders for appointments, easier methods for documentation, and better communication to rectify these delays.

Williams et al. (2021) emphasized that effective patient tracking prevents the misutilization of resources through inefficiency. In our research, with the non-update of patients' status, an average delay of 10 minutes per appointment took place without any wastage of time. Basically, both studies establish a requirement in which correct patient tracking gets facilitated by real-time monitoring tools and regular system audits to drive efficient resource allocation.

Brown et al. (2017) evaluated the impact of digital health interventions on the reduction in waiting time. On that note, they found EHR implementation and opening online patient portals considerably reduce administrative delays and improve patient flow. This supports our findings that adopting EHR and online pre-appointment documentation can help smooth processes and cause a reduction in waiting times.

Lee et al. (2016) review how patient education has related to healthcare efficiency. The authors drew the conclusion that better-informed patients are more likely to arrive on time and bring all the necessary documentation, thus reducing the total wait times. In our research, patient education programs, with clear instructions and checklists, reduced delays emanating from the patient side.

Miller et al. (2020) evaluated flexible scheduling and predictive analytics options for patient flow management. They concluded that predictive analytics is important in its capacity for projecting surges in volumes, therefore enabling mitigating the surges with additional staffing that decreased wait times. These results support our recommendation to use predictive analytics for improved scheduling and resource allocation.

That all these findings have been replicated in many studies underscores how these problems are widespread across most health care facilities and calls for systemic changes in administration. The best practices that emerge from the aforesaid studies can be adopted regarding appointment scheduling, patient communication, staffing, and technology use to help solve these challenges in improving operational efficiency and patient care.

Limitations and Strengths of the Study

Limitations:

- The study only sampled a population in one health care facility, so generalization cannot be widely applied.
- Data were extracted from system records and depended on accurate reporting of data by the systems studied and individual patients, which can be subject to bias.
- The duration of the study may not capture seasonal variations in volume, staffing, and worker.

Strength:

- Mixed-methods design provided a detailed understanding of the issues with the combination of direct observation, patient surveys, and system records for the general understanding of the same.

- Detailed data analysis supported the exact identification of key areas of delay and contributing factors.
- Its findings are coherent with various other research works, thereby proving the results and recommendations to be credible.

This study critically examines what may contribute to patient waiting within the health facility. Comparing our findings with other relevant studies, we identified common challenges and impactful ways for improvement. If interventions were nicely targeted toward the management of these periods, leading to better operational efficiency, higher patient satisfaction, and ultimately better health outcomes, there would be progress.

CONCLUSION

This section is meant for synthesizing the findings from the study of the optimization of the physical hospital discharge clearance protocols and discussing their implications. The recommendations are also proposed, comparing the results of the study alongside findings that cover other relevant studies.

The study has reported various critical factors that contributed to delays in the hospital discharge process. The maximum time spent was on patients awaiting consultation with primary consultants, accounting for 44% of all observed delays. Major forcing functions were peak hours, the availability of consultants, and unplanned emergencies, invites strategies such as better planning in scheduling and the addition of more staff during peak hours.

Internal delays, mainly due to pharmacy processing and lunch breaks, took 27 per cent of the total delay. Pharmacy processing delayed the patient's time by an extra 20 minutes, with lunch breaks adding another 15 minutes to this. Optimising pharmacy manpower and adopting an electronic prescription system will greatly reduce this in addition to staggered breaks for staff. Patient-related delays, late arrival of patients, and incomplete documentation contributed close to 14% of the total delay. Late arrival averaged 15 minutes per appointment, and incomplete documentation added another 10 minutes to the mean delay. Appointment reminders, streamlining the process of documenting, and improving communication practices are some areas that need more attention.

Also, operational oversights like delays in updating patient status within the hospital system accounted for 10%. Real-time monitoring tools and regular auditing of the system will be very important in developing an accurate record of a patient trajectory and in minimizing these administrative delays.

These delays in the procedure of hospital discharge therefore make a big difference in enhancing general operational efficiency and satisfying patients. Reduced waiting times and better utilization of resources will let hospitals deliver better patient care; such may also have favorable effects on health outcomes.

Consequently, in view of those findings and comparisons with the available literature, a few recommendations are made to optimize physical clearance protocols for hospital discharge:

- Increase the number of staff during peak hours to ensure consultants and pharmacy services are better available.
- Introduce predictive scheduling and flexible staffing models to allow the management of fluctuations in the flow of patients within the clinic.
- Automate appointment reminders and a portion of paperwork to help lighten the administrative load.
- An electronic prescription system will quicken processing by pharmacies, lessening verification times.
- Stagger staff breaks so that coverage is available during peak periods when it is most critical that coverage is continuous.
- Real-time monitoring tools along with consistent system audits will increase the accuracy of patient tracking.

Patient education programs should be designed to emphasize the importance of punctuality and preparedness for appointments.

These recommendations can only be carried out after collaborative efforts by the management of hospitals and their staff, with continuous monitoring and readjustment so that there may be trends persisting in improvements observed in discharge processes.

The results highlight the systemic challenges of care transitions and point to the importance of diffusing best practices for hospital discharges in terms of improving operational efficiency and quality of care for all hospitals.

REFERENCES

1. Bauer M., Fitzgerald L., Haesler E., & Manfrin M. (2009). Hospital discharge planning for frail older people and their family. Are we delivering best practice? A review of the evidence. *Journal of Clinical Nursing*, 18, 2539–2546. [[PubMed](#)] [[Google Scholar](#)]
2. Department of Health (2003). Discharge from hospital: Pathway process and practice [Online]. Available: <http://www.wales.nhs.uk/sitesplus/documents/829/DoH%20-%20Discharge%20Pathway%202003.PDF> [Accessed 21 Sep 2018]. [[Google Scholar](#)]
3. Gonçalves-Bradley D., Lannin N., Clemson L., Cameron I., & Shepperd S. (2016). Discharge planning from hospital (Review). *Cochrane Database of Systematic Reviews* [Web]. Available: <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD000313.pub5/full> [Accessed 21 Sep 2018.] [[PMC free article](#)] [[PubMed](#)] [[Google Scholar](#)]
4. Connelly M., Grimshaw J., Dodd M., Cawthorne J., Hulme T., Everitt S., ... Deaton C. (2009). Systems and people under pressure: The discharge process in an acute hospital. *Journal of Clinical Nursing*, 18, 549–558. [[PubMed](#)] [[Google Scholar](#)]
5. Auerbach AD, Kripalani S, Vasilevskis EE, et al. Preventability and causes of readmissions in a national cohort of general medicine patients. *JAMA Intern Med*. 2016;176(4):484-93. doi: 10.1001/jamainternmed.2015.7863 [[PMC free article](#)] [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
6. Henke RM, Karaca Z, Jackson P, Marder WD, Wong HS. Discharge planning and hospital readmissions. *Med Care Res Rev*. 2017;74(3):345-68. doi: 10.1177/1077558716647652 [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
7. Kripalani S, Jackson AT, Schnipper JL, Coleman EA. Promoting effective transitions of care at hospital discharge: a review of key issues for hospitalists. *J Hosp Med*. 2007;2(5):314-23. doi: 10.1002/jhm.228 [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
8. Anderson PM, Krallman R, Montgomery D, Kline-Rogers E, Bumpus SM. The relationship between patient satisfaction with hospitalization and outcomes up to 6 months post-discharge in cardiac patients. *J Patient Exp*. 2020;7(6):1685-92. doi: 10.1177/2374373520948389 [[PMC free article](#)] [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
9. Cain CH, Neuwirth E, Bellows J, Zuber C, Green J. Patient experiences of transitioning from hospital to home: an ethnographic quality improvement project: patient experiences of hospital discharge. *J Hosp Med*. 2012;7(5):382-7. doi: 10.1002/jhm.1918 [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
10. Mitchell SE, Laurens V, Weigel GM, et al. Care transitions from patient and caregiver perspectives. *Ann Fam Med*. 2018;16(3):225-31. doi: 10.1370/afm.2222 [[PMC free article](#)] [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
11. *HCAHPS: Patients' perspectives of care survey*. Centers of Medicare and Medicaid Services, 2021. <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/HospitalHCAHPS> [[Google Scholar](#)]

12. Nurhayati N, Songwathana P, Vachprasit R. Surgical patients' experiences of readiness for hospital discharge and perceived quality of discharge teaching in acute care hospitals. *J Clin Nurs*. 2019;28(9–10):1728-36. doi: 10.1111/jocn.14764 [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
13. Harrison JD, Boscardin WJ, Maselli J, Auerbach AD. Does feedback to physicians of a patient-reported readiness for discharge checklist improve discharge? *J Patient Exp*. 2020;7(6):1144-50. doi: 10.1177/2374373519895100 [[PMC free article](#)] [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
14. Dudas V, Bookwalter T, Kerr KM, Pantilat SZ. The impact of follow-up telephone calls to patients after hospitalization. *Am J Med*. 2001;111(9, Supplement 2):26-30. doi: 10.1016/S0002-9343(01)00966-4. [[PubMed](#)]
15. Martsolf GR, Barrett ML, Weiss AJ, et al. Impact of race/ethnicity and socioeconomic status on risk-adjusted readmission rates. *Inquiry: Journal of Health Care Organization, Provision, and Financing*. 2016;53. doi: 10.1177/0046958016667596 [[CrossRef](#)] [[Google Scholar](#)]
16. Basu J, Hanchate A, Bierman A. Racial/ethnic disparities in readmissions in US hospitals: the role of insurance coverage. *Inquiry: The Journal of Health Care Organization, Provision, and Financing*. 2018;55. doi: 10.1177/0046958018774180 [[PMC free article](#)] [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
17. Barreto EA, Guzikowski S, Michael C, et al. The role of race, ethnicity, and language in care transitions. *Am J Manag Care*. 2021;27(7):e221-e225. <https://www.ajmc.com/view/the-role-of-race-ethnicity-and-language-in-care-transitions>. [[PubMed](#)] [[Google Scholar](#)]
18. Woodward EN, Matthieu MM, Uchendu US, Rogal S, Kirchner JE. The health equity implementation framework: proposal and preliminary study of hepatitis C virus treatment. *Implement Sci*. 2019;14:Article 26. [[PMC free article](#)] [[PubMed](#)] [[Google Scholar](#)]
19. Harvey G, Kitson A. PARIHS revisited: from heuristic to integrated framework for the successful implementation of knowledge into practice. *Implement Sci*. 2015;11(1):1-13. doi: 10.1186/s13012-016-0398-2 [[PMC free article](#)] [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
20. Watkins DC. Rapid and rigorous qualitative data analysis: the “RADaR” technique for applied research. *Int J Qual Methods*. 2017;16(1):1609406917712131. doi: 10.1177/1609406917712131 [[CrossRef](#)] [[Google Scholar](#)]
21. Vindrola-Padros C, Johnson GA. Rapid techniques in qualitative research: a critical review of the literature. *Qual Health Res*. 2020;30(10):1596-604. doi: 10.1177/1049732320921835 [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
22. Archer E, Meyer IS. Applying empathic communication skills in clinical practice: medical students' experiences. *South Afr Fam Pract*. 2021;63(1):5244. doi: 10.4102/safp.v63i1.5244 [[PMC free article](#)] [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]