

Study on the Re-admissions Occurring within 14 days of the Discharge

By

Barkha Gupta

*Dissertation submitted for the partial fulfillment of the
MBA Hospital and Health Management*

Academic year, 2016-2018



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TO WHOMSOEVER MAY CONCERN

This is to certify that **Dr. Barkha Gupta** student of MBA Hospital and Health Management, The IIHMR University, Jaipur has undergone internship training at **Max Super Specialty Hospital, Saket** from **1st February 2018 to 30th April 2018**.

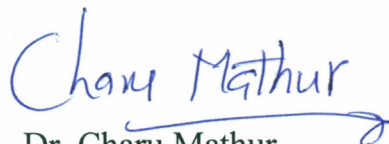
The Candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfilment of the course requirements.

I wish her all success in all his future endeavours.



Dr. Ashok Kaushik
Dean, Academics and Student Affairs
The IIHMR University, Jaipur



Dr. Charu Mathur
Professor
The IIHMR University, Jaipur

The certificate is awarded to

Dr. Barkha Gupta

in recognition of having successfully completed her

internship in the department of

Medical Administration

and has successfully completed her Project on

Study of Re-admissions occurring within 14 days

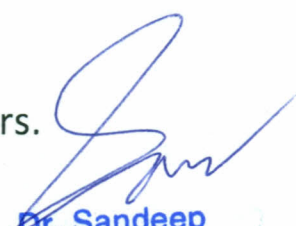
From 1st February to 30th April, 2018

at

Max Super Specialty Hospital, New Delhi

She comes across as a committed, sincere & diligent person who has a strong drive and zeal for learning

We wish her all the best for future endeavors.



Dr. Sandeep
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THE IIHMR UNIVERSITY, JAIPUR

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **Study of the Re-admissions occurring within 14 days of the discharge** and submitted by **Dr. Barkha Gupta** Enrolment No. **MBA-HM-0402** under the supervision of **Dr. Charu Mathur** for award of MBA in Hospital and Health of the University carried out during the period from **1st February 2018 to 30th April 2018** embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other institute or other similar institution of higher learning.



Signature

ACKNOWLEDGEMENT

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1. INTRODUCTION

A hospital Re-admission is when a patient who had been discharged from a hospital is admitted over again to same or another hospital at interval of fourteen days of the patient's discharge.

Hospital Re-admission, for any reason, is unquiet to patients and caregivers, expensive to the health care system, and puts patients at additional risk of hospital-acquired infections and complications. Readmissions area unit a big offer of patient and family stress and may contribute well to loss of helpful ability, notably in older patients. Some readmissions unit inevitable and result from inevitable progression of malady or worsening of chronic conditions. However, readmissions might in addition result from poor quality of care or inadequate transformation care. transformation care includes effective discharge coming up with, transfer of knowledge at the time of discharge, patient assessment and education, and coordination of care and observation among the post-discharge quantity. varied studies have found associate association between quality of inmate or transformation care and early (typically 30-day) admittance rates for a decent vary of conditions. Therefore, whereas admittance rates would never be expected to be zero, variation in admittance rates for a broad spectrum of conditions is alleged to quality of care. what's additional, irregular controlled trials have shown that improvement among the subsequent areas can directly reduce admittance rates: quality of care throughout the initial admission; improvement in communication with patients, their caregivers and their clinicians; patient education; pre-discharge assessment; and coordination of care once discharge. proof that hospitals area unit able to reduce admittance rates through these quality-of-care initiatives illustrates the degree to it hospital practices can have a bearing on admittance rates. productive irregular trials have reduced 30-day admittance rates by 20-40%. Widespread application of these trial interventions to general follow has in addition been encouraging. Since 2008, health care Quality Improvement Organizations area unit funded to specialize in care transitions, applying lessons learned from clinical trials. several area unit notably productive in reducing readmissions at intervals thirty days. but here throughout this hospital, re-admissions unit thought of at intervals fourteen days.

Factors that may have a bearing on admittance — several factors that increase the chance of admittance might even be modifiable. Such factors include:

- Premature discharge/ Leave against medical recommendation
- Inadequate post-discharge support
- Insufficient follow-up
- Second opinion
- Insurance issues or denial
- Unfit for surgery (mentally/ physically)

Preventable versus unpreventable readmissions — many hospitalizations do not appear to be preventable. Readmissions may represent progression among the reason of the patient's underlying malady, a separate draw back that is unrelated to the initial admission, or the consequence of patient inability to follow through with many a discharge got wind of (e.g., the patient is unable to fill prescriptions). Some readmissions unit likely preventable, although the proportion of readmissions that unit preventable is unsure.

2. LITERATURE REVIEW

1. Decreasing the speed of hospital readmissions has been targeted as a high priority for United States of America health care reform. The U.S. passed legislation (under a budget Care Act's Hospital admittance and Reduction Program [HRRP]) applying financial penalties for excess readmissions of health care patients. admittance rates have declined. In 2003, nearly twenty of health care patients administrative body were discharged from a hospital were readmitted among thirty days. The admittance rates declined from twenty-one.5 at some point of 2007 to seventeen.8 % in 2015 for targeted conditions (i.e., a gaggle of specific diagnoses measured by Medicare), and from fifteen.3 to 13.1 % for non-targeted conditions. tho' there was some concern that hospitals would avoid readmissions and penalties by admitting patients to a singular standing (observation standing instead of inmate status), data from 2007 to 2015 show that whereas the quantity once the legislation was passed was associated with associate abrupt decline in admittance rates, there was no similar associated increase in observation standing utilization. However, some data counsel that, at intervals identical quantity that admittance rates declined for many populations, mortality rates rose. in a {very} very study of 100 and fifteen,245 failure patients from 2006 to 2014, whereas admittance rate determined to decrease, 30-day and annual mortality rates inflated significantly.

2. A 2011 systematic review of xliii studies, sixteen of that were irregular trials, found that only 5 of the sixteen irregular trials incontestable necessary decreases in admittance rates. Four of the five prosperous studies involved several coinciding interventions, likewise as patient-centred discharge directions and a post-discharge telephone. A 2012 systematic review found that plenty of sorts of interventions (including medication reconciliation, structured electronic discharge summaries, discharge developing with, and facilitated communication between hospital and community providers) compact favourably on outcomes likewise as admittance rates. However, as a result of similarity in interventions, patient populations, and outcomes, it fully was uphill to identify that specific interventions had direct impact on measured outcomes. prosperous interventions noted throughout this review irresistibly involved many-sided interventions. A 2014 systematic review and meta-analysis of 42 irregular trials found that tested interventions prevented early readmissions. The easier} interventions were complicated, many-sided, and supported patients' capability for self-care. prosperous interventions tend to be many-sided, suggesting that reducing adverse events once discharge wants a multipronged approach. many multidisciplinary initiatives, spoken as malady management programs, have targeted patients with specific chronic diseases to provide patient support, message, monitoring, and drugs oversight through the time of care, likewise as ambulatory, hospital, and hospital discharge settings. malady management programs involving patients with failure unit reviewed on an individual basis.

3. Hospital readmissions initial appeared at intervals the medical literature in 1953 in work by Moya Woodside examining outcomes in psychiatrically patients in London. Gradually, health services analysis a lot of and a lot of examined hospital readmissions, partly as a response to rising health care costs and a recognition that sure groups of patients were high shoppers of health care resources. These patients typically had multiple chronic conditions and were repeatedly hospitalized to manage them. Over time, hospital admittance rates became a regular outcome in health services analysis, with AN outsized body of literature describing them, likewise as their frequency, their causes, that patients which hospitals unit plenty of probably to possess high rates of readmissions, and varied methods to forestall them.

4. In 2007, the Centres for health care and health care Services (CMS) place forth a report back to Congress spoken as "Promoting larger efficiency in health care." In its section on readmissions, CMS created the case for nearer pursuit of hospital readmissions and ligature compensation to lowering them, citing a seventeen.6% 30-day admittance rate for health care enrolees in 2005, at a worth of \$15 billion. The section all over with several policy

recommendations, likewise as public coverage of hospital admittance rates what is more as many compensation structures that will incentivize a reduction in admittance rates. In 2009, CMS began publicly coverage admittance rates for infarction, failure, and respiratory disorder for all non-federal acute care hospitals. To use admittance as a live of hospital quality, CMS narrowed with the Yale-New Haven Services Corporation/Centre for Outcomes analysis and analysis (CORE) to develop a hospital-wide admittance (HWR) live, that it began publicly coverage on Hospital Compare in 2013.

5. Section 3025 of the 2010 Patient Protection associate degreeed low-cost Care Act established the Hospital Readmissions Reduction Program (HRRP) as AN addition to section 1886(q) of the 1965 welfare Act. This was half a result of the 2007 "Promoting larger efficiency in Medicare" report that recognized the prevalence and value of readmissions nationwide. This program established a way for scheming a health system's expected admittance rate and created a system for financially penalizing hospital systems that exceeded their expected admittance rate. The HRRP formally began in 2013 and applied to any or all acute care hospitals except the following: medical specialty, rehabilitation, paediatric, cancer, and vital access hospitals. Maryland hospitals were excluded, as a results of the state's distinctive all-payer model for compensation. at intervals the initial two years, only readmissions for cardiopathy, failure, and respiratory disorder were counted; in 2015, chronic preventive internal organ malady (COPD) and elective hip replacement and knee replacement were further. CMS plans to feature blood vessel bypass graft (CABG) surgery to the list in 2017.

6. A hospital's admittance rate is calculated so risk adjusted. A quantitative relation of predicted or measured readmissions compared to expected readmissions (based on similar hospitals) is calculated, spoken because the surplus admittance quantitative relation. this will be calculated for each of the applicable conditions. This quantitative relation is then accustomed calculate the numerable payments created by CMS to the hospital for excess readmissions as a quantitative relation of the payments by CMS for all discharges. This creates a readmissions adjustment issue, that's then accustomed calculate a financial penalty to the hospital for excess readmissions. to reach these calculations, up to three previous years of a hospital's data and a minimum of twenty-five cases for each applicable condition unit used.

3. OBJECTIVE

To study the Re-admissions occurring within 14 days of the discharge in a 540 bedded Super-Specialty hospital from 1st February to 30th April'18

4. METHODOLOGY

Study Design

Descriptive study

Sample Population

All patients admitted to the 540 bedded Super-Speciality hospital in New Delhi from 1st February to 30th April 2018

Sample Size

Sample size for the study was 102 which was obtained from the Hospital Information System software used in the hospital in which all the patients who were re-admitted to the hospital within 14 days.

Sample Selection

Patients re-admitted to the hospital from 1st Feb to 30 April 2018

Data Collection

Secondary Data was gathered through HIS (Hospital Information System) and CPRS (Computerized Patient Record System) software used in the Hospital.

Data Analysis

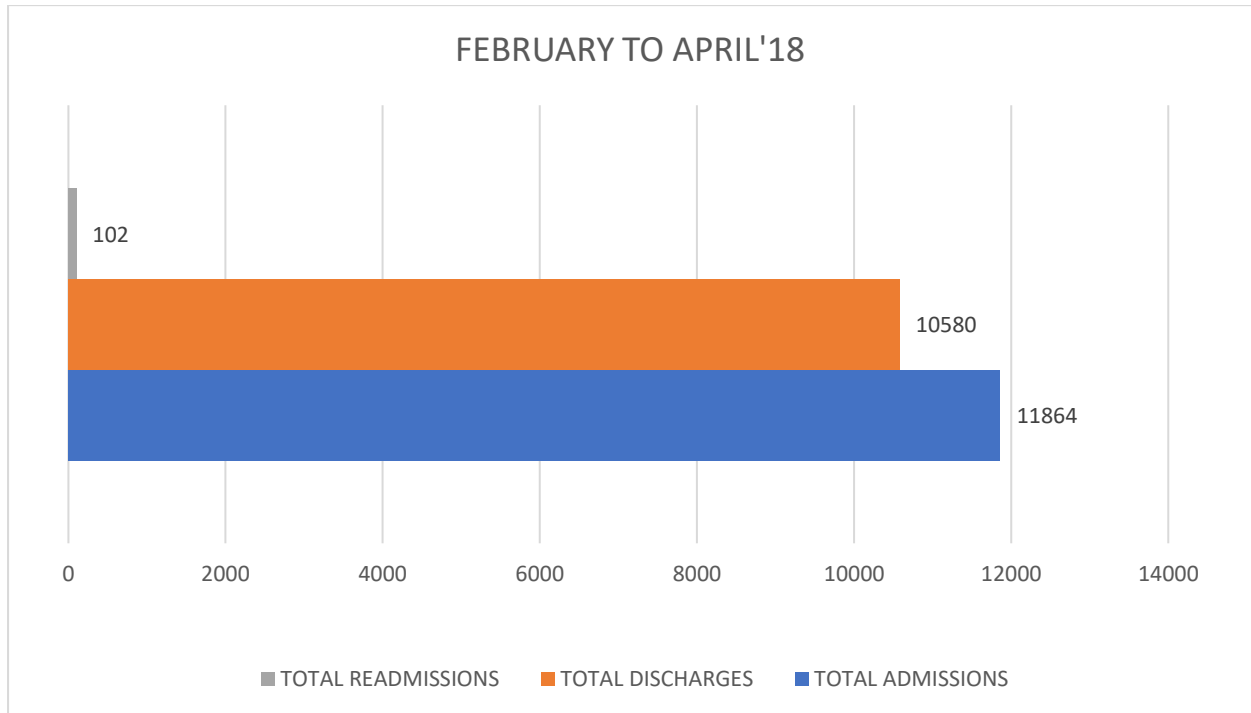
Descriptive Statistics

Study Duration

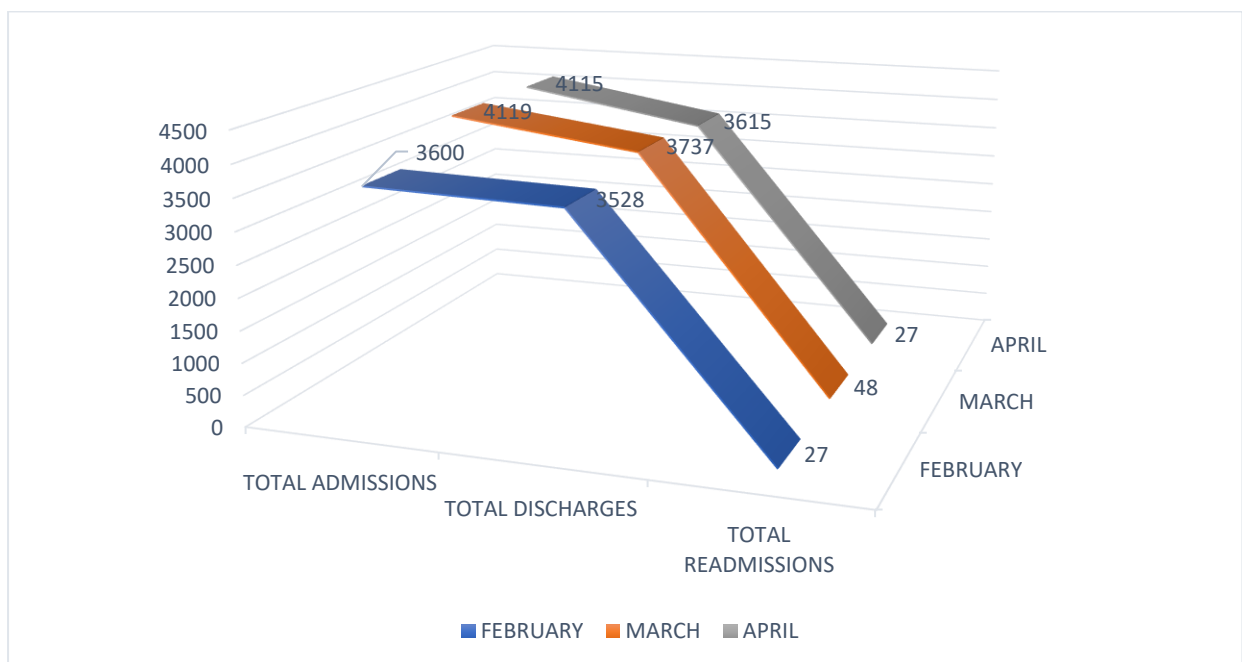
3 months i.e. 1st February to 30th April 2018

5. FINDINGS

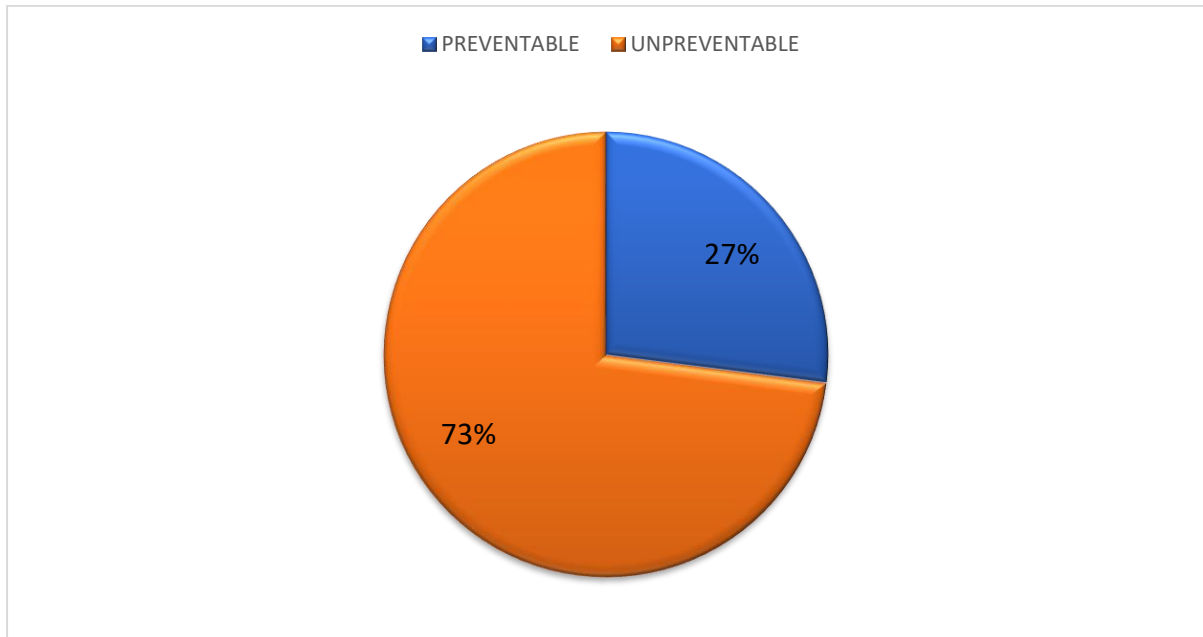
Total number of Re-admissions in respect to Admissions and Discharges from February to April'18



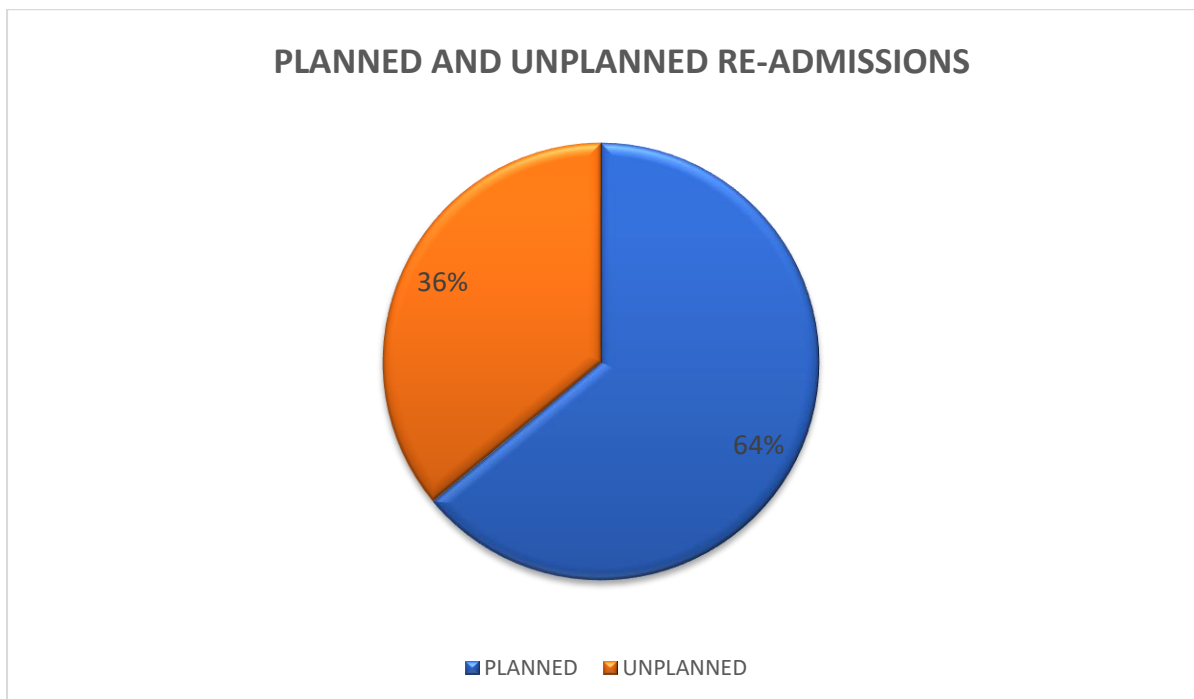
MONTHLY RE-ADMISSIONS



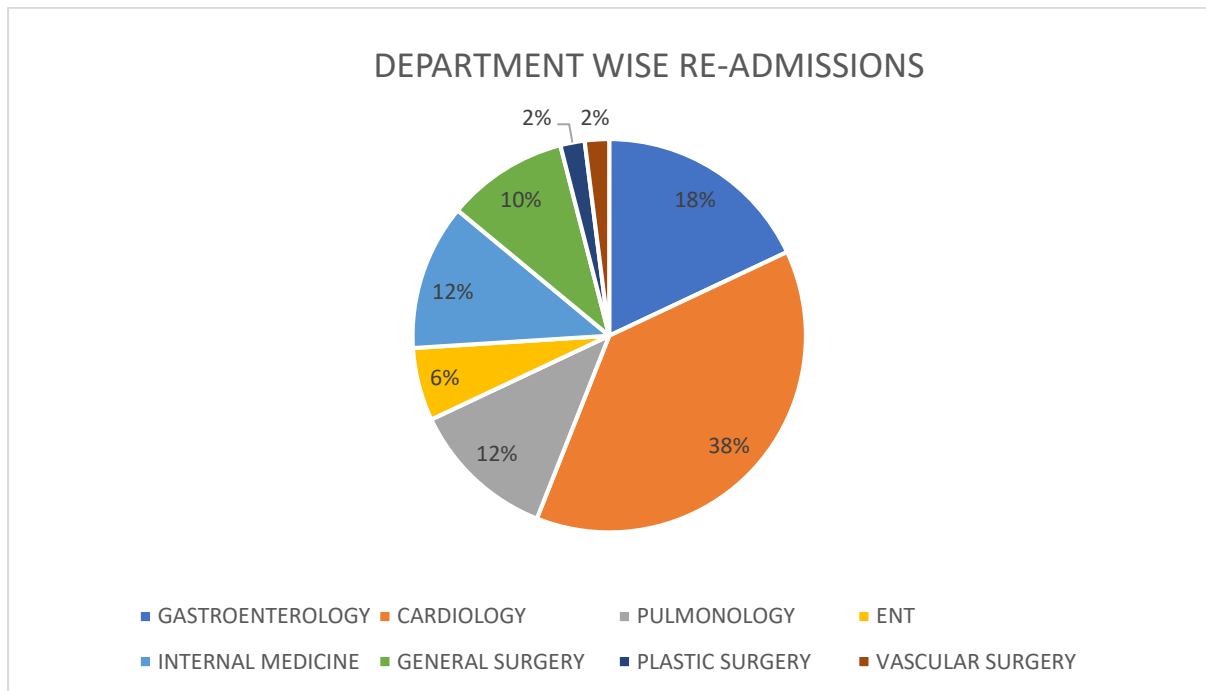
PREVENTABLE AND UNPREVENTABLE RE-ADMISSIONS



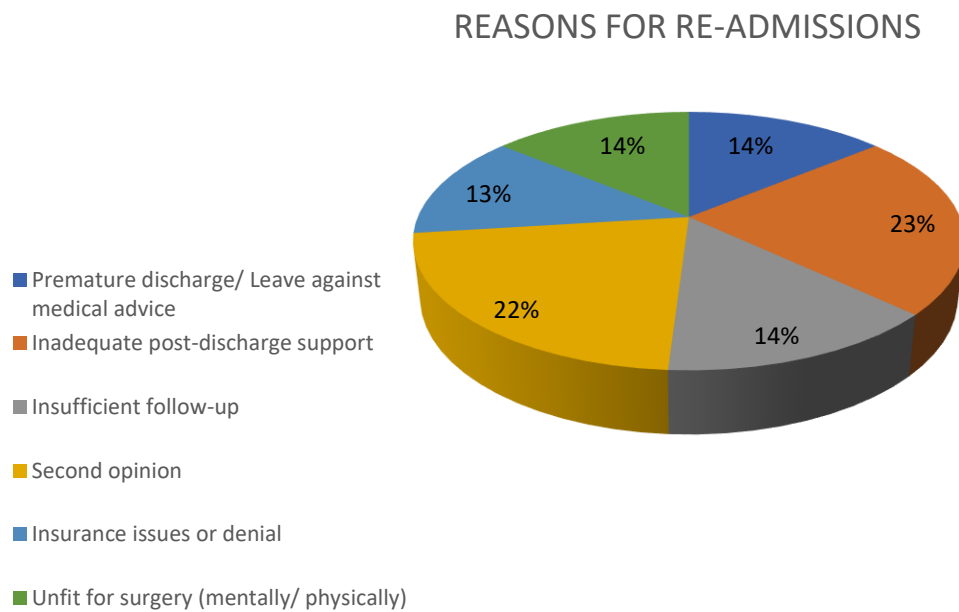
PLANNED AND UNPLANNED RE-ADMISSIONS



DEPARTMENT WISE ADMISSIONS



REASONS FOR RE-ADMISSIONS



6. FINDINGS

- Out of total 11864 admissions, 10580 patients are discharged from 1st February to 30th April.
- Number of re-admissions is 102 in three months. 27, 48 and 27 in the month of February, March and in April respectively.
- 73% of the re-admissions were unpreventable, whereas 27% were preventable.
- 64% of the re-admissions were planned and 36% were unplanned.
- Department wise re-admissions

DEPARTMENT	PERCENTAGE
GASTROENTEROLOGY	18%
CARDIOLOGY	38%
PULMONOLOGY	12%
ENT	6%
INTERNAL MEDICINE	12%
GENERAL SURGERY	10%
PLASTIC SURGERY	2%
VASCULAR SURGERY	2%

- Reasons for Re-admissions

PREMATURE DISCHARGE/ LEAVE AGAINST MEDICAL ADVICE	14%
INADEQUATE POST-DISCHARGE SUPPORT	23%
INSUFFICIENT FOLLOW-UP	14%
SECOND OPINION	22%
INSURANCE ISSUES OR DENIAL	13%
UNFIT FOR SURGERY (MENTALLY/ PHYSICALLY)	14%

7. DISCUSSION

In a 540 bedded super-specialty Hospital, there were 11864 admissions from the months of February to April'2018. Total 10580 patients were discharged within this time and 102 patients were re-admitted to the hospital within 14 days of discharge. After analysing all the re-admission cases, it was found that 27 of them were in the month of February 48 in the month of March and 27 in the month of April. 64% of the 102 cases were planned re-admissions due to TPA or patient not fit for surgery, rest 36% were unplanned because of the critical condition or end of the life care of the patient. Preventable re-admissions are those which could be prevented, as the patient was not so critical such cases are 27% out of 102. Unpreventable re-admissions are those which cannot be prevented due to critical condition of the patient and such cases are 73%. Among all the departments, Cardiology has the highest with 38% of re-admissions with the lowest in Plastic surgery and Vascular surgery with 2%. Re-admissions can be prevented if proper information is conveyed at the time of discharge for those 27% cases. Study showed that maximum number of Re-admissions were because of Inadequate Post- Discharge Support with 23% of all the reasons.

8. RECOMMENDATIONS

Efforts to re-engineer the discharge methodology to assure a secure transition involve such issues as improved professional person communication, patient education, information technology systems, involvement of community-based suppliers, and arrangements for prompt follow-up. Such interventions have the potential to well improve patient care and trim health care expenditures. Many types of interventions along with medication reconciliation, structured electronic discharge summaries, discharge turning out with, and facilitated communication between hospital and community suppliers' impacts favourably on outcomes along with admission rates.

Re-engineering of the Discharge Process planned to prevent re-admissions

1. Educate the patient about her or his diagnosis, health condition and treatment throughout the hospital stay.
2. Appointments should be made with input from the patient regarding the best time and date for clinician follow-up and post-discharge testing, with

the help of discharge secretaries and coordinators of the doctors and, discuss reason for and importance of physician appointments with the patient.

3. Discuss with the patient any tests or studies that have been completed in the hospital and who will be responsible for following up on the results.
4. Organize post-discharge services.
 - Be sure the patient understands the importance of such services.
 - Make appointments that the patient can keep.
 - Discuss the details of how to receive each service.
 - Confirm the medication plan.
 - Reconcile the discharge medication regimen with that followed before the hospitalization.
 - Explain what medications to take, emphasizing any changes in the regimen.
 - Review each medication's purpose, how to take each medication correctly, and important adverse effects to watch out for.
 - Be sure the patient has a realistic plan for how to get the medications.
6. Reconcile the discharge plan with national guidelines and critical pathways.
7. Review the appropriate steps for what to do if a problem arises.
 - Inform the patient about a specific plan for how to contact the primary care provider (or coverage) and provide contact numbers for evenings and weekends.
 - Inform the patient about what constitutes an emergency and what to do in cases of emergency.
8. Expedite transmission of the discharge résumé (summary) to the physicians (and other services, such as the visiting nurses), accepting responsibility for the patient's care after discharge. The discharge résumé includes
 - The reason for hospitalization, with the specific principal diagnosis.
 - Significant findings. (When creating this document, the original source documents, such as laboratory, radiology, and operative reports, and medication administration records, should be in the transcriber's possession and visible when transcribing information from one document to another).
 - The procedures performed and the care, treatment, and services provided to the patient.

- The patient's condition at discharge.
- A comprehensive and reconciled medication list (including allergy treatment).
- A list of acute medical issues, tests, and studies for which confirmed results are pending at the time of discharge and require follow-up."
- Information regarding input from consultative services, including rehabilitation therapy.
- Assess the patient's degree of understanding by asking for an explanation of the details of the plan in her or his own words; this may require removal of language and literacy barriers by utilizing professional interpreters.
- Contacting family members who will share in the care giving responsibilities.

10. Give the patient a written discharge plan at the time of discharge that contains.

- The reason for the hospitalization.
- The discharge medications, including what medications to take, how to take them, and how to obtain them.
- Instructions on what to do if the condition changes.
- Coordination and planning for follow-up appointments that the patient can keep.
- Coordination and planning for following up on tests and studies for which confirmed results are not available at the time of discharge.

11. Provide telephone reinforcement of the discharge plan and for problem solving two to three days after discharge.

Re- engineering of Discharges Interventions and Departments liable for their Implementation

Intervention	Responsible Departments
• Educate the patient on diagnoses throughout the hospital stay. • Discuss completed tests or studies. • Review appropriate steps for what to do if a problem arises.	Nursing and case management
• Organize postdischarge services. • Provide customized, real-time critical information to the next care provider(s).	Case management
• Confirm the medication plan.	Nursing, pharmacy, and case management
• Reconcile medications for discharge. • Give the patient a written discharge plan.	Nursing

PATIENT DISCHARGE SURVEY TOOL

This survey tool must be filled by the patient before leaving the hospital. This will help us to collect the information regarding the compliance of some factors at the time of discharge. It will also help the patient to ensure that he/she has been provided with the sufficient information.

The Nine Survey Questions (Yes or No answers)

I was taught about my diagnosis during my hospital stay.

I have received a written discharge plan that is easy to read and understand.

I have follow-up appointments with my physicians.

I have received a written discharge plan that has the information I need to take care of myself at home.

I have been told about test results or studies that have not been completed before I go home.

I have a written list of my discharge medications and know which medications are new or changed.

If I need home health care, medical equipment, or other help or services after I go home, it has been arranged.

When the nurses were teaching me, they asked me to explain what I had learned in my own words.

I understand what to do and who to call if a problem arises after I am home.

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