Improving The Hospital Discharge Process Using Lean Approach

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Introduction

Introduction: "Discharge is a process by which a patient is shifted out from the hospital with all concerned medical summaries ensuring stability. The discharge process is deemed to have started when the consultant formally approves discharge and ends with the patient leaving the clinical unit. It is a very important indicator of quality of care and patient satisfaction. Delay in Discharge of the patient also increases the pressure on beds of the hospital Delay in discharge is bad for both hospitals and the patients. It increases cost to the hospitals and is depressing to the patients. Delayed discharge also increases the patient's exposure to hospital acquired infections . So, effective strategies must be in place to solve this issue. National Accreditation Board for Hospitals and Health Care Organizations has set a standard of 180minutes for the completion of the discharge process.

AIM: Our aim is to assess the time taken for discharge and also to reduce the delay and also to enhance the quality of discharge process to improve patient satisfaction.

Methodology

In order to identify the key areas of discharge documentation that required improvement, a survey was conducted in a Rapid Improvement Event (RIE) using LEAN methodology to gain a full understanding of the process and the key issues and information required upon patient discharge from hospital. Key performance indicators was also added to analyse the bottlenecks in the discharge process and also we collected feedback from patients to know the satisfactory level during discharge process.

Study Design:
- A prospective observational study

Study Site:
- Ganga Medical Centre and Hospitals (P) Ltd, Coimbatore.

Study Period:
- 1 year (Phase I : Jan to April -2021 ,

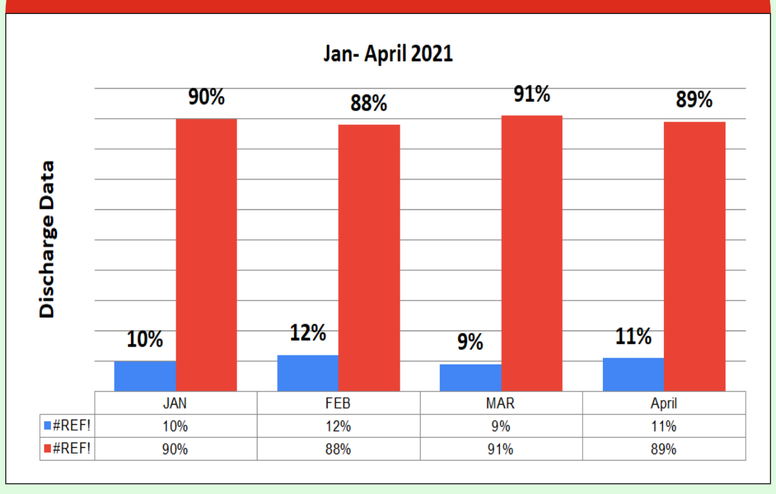
Phase II :
- May to August-2021,

Phase III:
- September to December- 2021)

Study Population:
- Patients discharged during study period

Study tool:
- Paretto chart, Why analysis & Fish bone diagram.

Phase I Jan- April 2021



	JAN	FEB	MAR	April
#REF!	10%	12%	9%	11%
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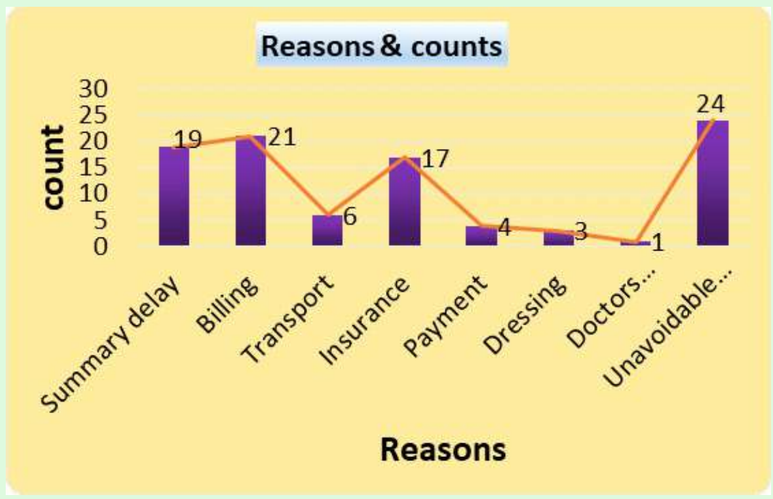
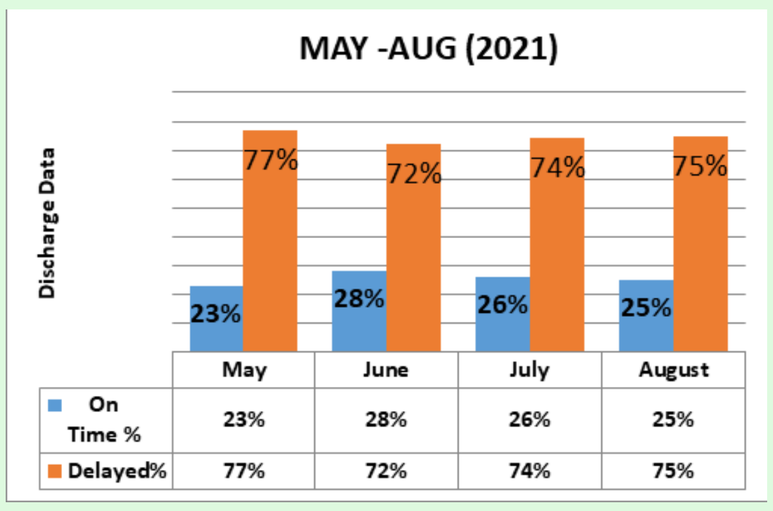
	Summary Delay	Billing	Transport	Insurance	Payment
JAN	350	332	90	320	35
FEB	310	289	93	340	94
MAR	385	460	185	150	150
April	254	385	87	338	54

Phase II May- Aug 2021

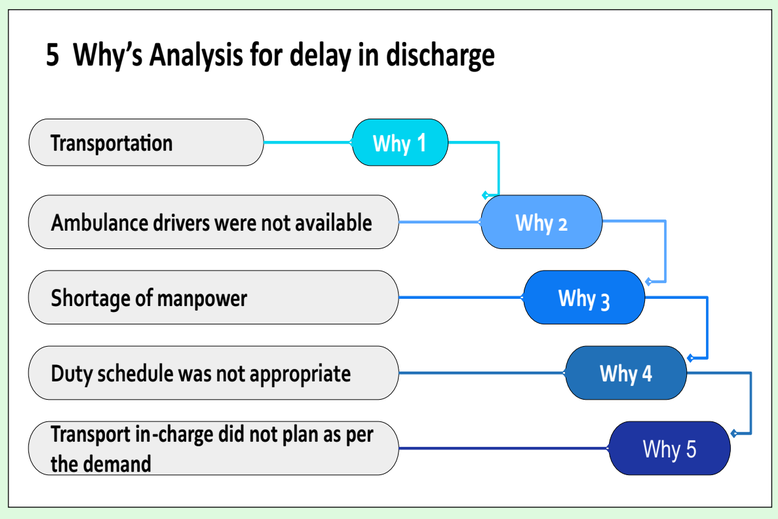
PARETO CHART

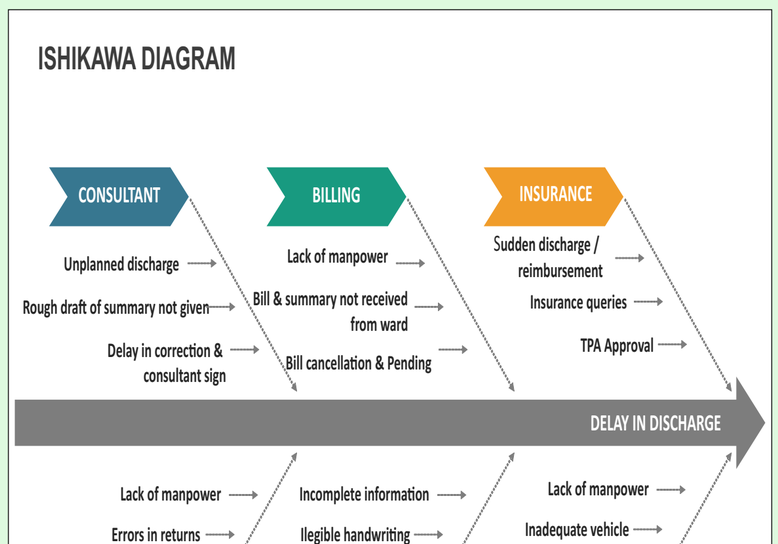




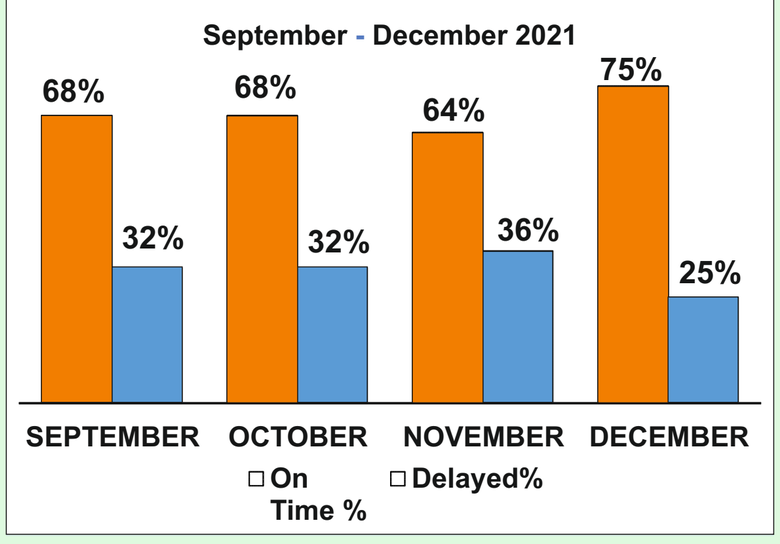
	May	June	July	August
On Time %	23%	28%	26%	25%
Delayed%	77%	72%	74%	75%

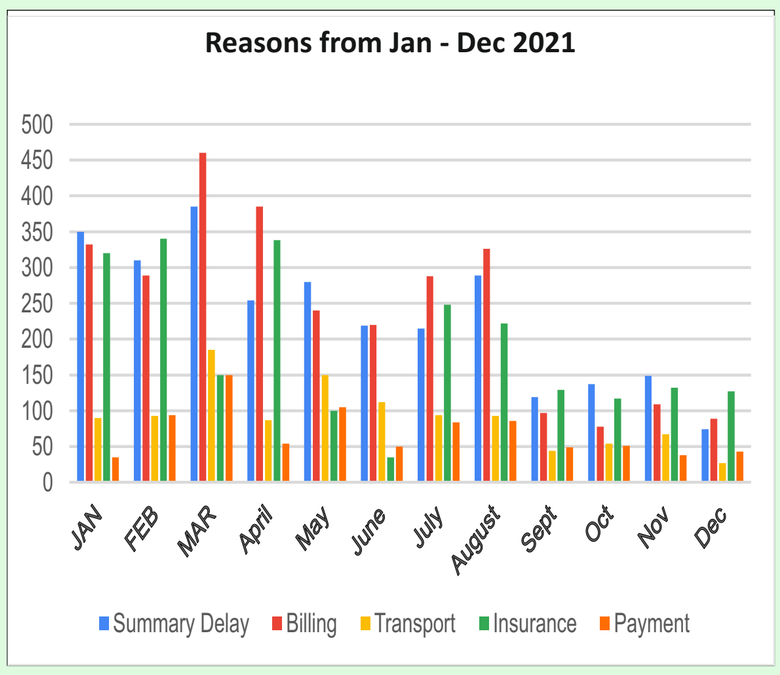
Real Time Tracking App- Ganga Namathe





Phase III





Findings

- Mobile phone compatible app is being introduced where GROs, Floor supervisors, ward secretaries and all related personnel can view the status of discharge.
- Hourly basis report will be viewed by the Executive GRO.
- Preparing documents for planned discharge priorly 24 hours in advance.
- Time limit has been fixed for each case sheet as two hours
- Communication team has been formed with physician assistant, Guest relation dept to make the discharge process more easy.
- Standard time for discharge has been fixed as 12.00 noon, extension time limit has been given as 2 hours.
- Weekly meeting with Guest Relation Officers (GRO's), ward secretaries and billing dept has been fixed. The reasons for the delay will be escalated to the other department heads.

Conclusion

The current study explores the effect of applying lean management to reduce cycle time of patient discharge process and found a statistically significant difference and reduction in total time of patient discharge process before and after applying lean management. As well, the majority of patients were highly satisfied from discharge process after applying lean management. All departments involved in the discharge process should be adequately staffed, depending on the patient load in the hospital. Staff recruited for these departments should be trained in discharge procedures.

Future plan is to achieve 95% adherence to discharge time target by April 2022.