# Improving Hospital Turn Over Time in Stop Over

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The purpose of the case study is to identify and provide effective tools to reduce down the turnaround time in stop over unit in Hospitals. Stop over Units (SOUs) provide an intermediate level of care between the Intensive Care Units (ICUs) and the general medical-surgical wards. Since SOUs are comparatively having less staff than ICUs, they are less costly to operate. However, they are also unable to provide the level of care required by the bedridden vatients.

Due to the reduced staffing requirements in the SOU, Critical patients who are treated in the SOU are not be able to receive the high level monitoring and care as provided in the ICU, resulting in substantial degradation of the quality of care. Hence, not only ICUs provide care for the sick patients, they can also be considered 'flexible servers' in the sense that they can also treat moderately severe patients. It was found that the inadequate patient information, lack of communication and lack of coordination are the major leading causes of delay in transfers from Stop over units to the respective floors. The issues can be resolved if corrective measures are taken on time.

Keywords: Intensive Care Unit, Male Surgical Ward, Staff Nurse Ratio, Coronary Artery Bypass Graft, Consultant, Bed Tracking System, Discharge, Surgery, Housekeeping, Green Slip, Red Slip

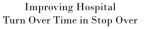
# INTRODUCTION

The ABC hospital has inpatient capacity of 342 beds inclusive of 53 critical beds in different specialties. The services offered are comprehensive, covering, investigation and diagnosis to therapy, surgery and post-operative care. The inpatient services are complemented with a day centre, out-patient facilities and an exclusive centre for health check for executive. With over70 hospitals based consultant, unique consultant's features of the hospital is that is always an experienced specialist on hand to initiate treatment without delay. The various specialties covered are Cardiology, Cardiothoracic Surgery, Neurology, Neurosurgery, Oncology, General Medicine and General Surgery; etc. The diagnostic facilities offered by the Hospital are comprehensive to include Laboratory services, Imaging, Cardiology, Neurology and Pulmonology. The laboratory services are available round the clock and include biochemistry, haemotology, microbiology, serology and histopathology, transform medicine. Imaging forms a key part of the diagnostic facility at the hospital. The Department offers wide services from general radiography, ultra sonography and mammography to high end services like magnetic resonance imaging (MRI), spiral CT scanning and digital subtraction angiography, along with intervention procedures and nuclear imaging

Staff nurse ratio in ICU- 1(Nurse):1(Patient) with one senior consultant and junior resident doctor & one head nurse. In 30 bedded MSW (Male surgical

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Ward) ratio – 1(Nurse):3 or 4(Patients), one head nurse and the general Nurse Availability flow in hospital–Morning time (maximum), Afternoon time (Moderate) and Night time (Least).In ICU there is 6 housekeeping member and the male surgical ward consist 2 housekeeping staff. The stop over unit (SOU) or step down unit is the most important physical aspects of the ABC hospital, it avoids the over congestion of patient traffic in the ICU ward. Here, stabilized patients are transfer to post surgical room; i.e. MSWard to provide intermediate and moderate care.

The ABC hospital was able to maintain the minimum standardized bed transfer protocol. The average stop over unit was 18 patients per day.

## THE CASE STUDY SCENARIO

On 23rd of August 2014, Mr. John has arrived for the CABG (Coronary artery bypass graft) surgery in ABC Hospital. After the third day of surgery, Mr. John was stabilizing to normal state in ICU. Then the junior resident doctor Simon has verbally told the ICU head Nurse MissLopaz to immediately shift the patient Mr. John to MSW (Male surgical ward) at the afternoon hour. Meanwhile MissLopazhas gone outside from the ICU for a cup of coffee and everyday she felt herself tired and miserable to manage entire

53 critical beds. Around 12.30 pm on 26th of august 2014, all the morning shift staff nurses was about to leave the ICU ward, in between MissLopaz enters the room and called the staff nurse Miss Julie, who was taking care of the patient Mr. John and told her to shift that patient in MSward on the allotted bed no. 42. But Julie was in such a hurry and excited mode to go home to celebrate her birthday party, and then she encountered with Layla staff nurse of the MSward and hand over the situation of shifting John from ICU to surgical ward in the given allotted bed. John was brought down to MSWard and shifted him to bed no. 41 because the bed 42 was not ready, linen shortage was there and one of the housekeeping staff was on leave. Here, Layla decided to shift John on bed 41 and she was unaware that bed no. 41 was occupied by other patient.

The head nurse of the general ward came and injected John with an antibiotic medication. Afterward, Mr. John developed an adverse allergic reaction; he was feeling discomfort and continuously complaining about the chest pain. The staff nurse Layla tried to settle down the problem, but she couldn't handle it and situation becomes more critical.

As a Hospital Administrator, how will you handle this crisis to save the brand image of the ABC hospital?



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## **CHALLENGES**

- Lack of co-ordination within the departments.
- Communication distortion was seen among the doctors, head nurse and staff nurses.
- Beds were not ready for the next patient on time.
- Shortage of manpower was seen in the Male Surgical Ward.
- Shortage of beds linen.
- The working hours for the most of the housekeeping staff did not match the peak work flow of patients discharge.
- Roles and responsibilities were not clear amongst the nurses.
- MSWard was lessening with the nurse staff as comparison to ICU ward.
- Staff nurses of the MSWard have to handle the bedridden patients as well as taking the pressure of the off patient outcomes for more efficiency.
- Poor monitoring part of the head nurse in the ICU which ultimately leads to degradation of quality service.

## RECOMMENDATION

- 1. Standardized protocol: There should be standardized protocol which can be followed by the staff to put an end to this casual attitude of staff and allows transfer of beds on time, rather than as per the convenience.
- 2. Innovative low cost strategy to speed up cleaning process: Two jars can be placed at the nurses' station one to represent clean beds and the other to represent dirty. Once a patient is checked out, the nurse put a bright red slip of paper with the patient's room number into one of the jars. When housekeeping staff finished cleaning and preparing the room for an incoming patient, they removed the slip from the first jar and put the green slip in the second

- jar with the same room no. on it. The green slip in the jar served as a highly visible reminder to the unit clerk that an open bed was available and ready to be used.
- **3. Standardization of nursing units:** Once the nursing units are standardized there will be an automatic improvement in communication.
- Responsible person:- A person in each department should be made responsible for the transfers who would be accountable for unusual delays.
- Purchase of Electronic bed tracking system:-This solution is not only for stop over units but can help in the overall transfers of bed efficiently. Bed tracking systems help intake staff assigns patients to units more quickly, with a better fit to the unit that has the services they need. The systems can be designed to anticipate a patient's discharge date based on diagnosis and other characteristics, which helps care coordinators make sure patients remain on Track for discharge. The tools also help hospitals identify and plan for times when patient demand may exceed available resources. Strategies such as borrowing nurses from other units can be employed before turning patients away.
- Information systems on bed utilization and availability
- 7. Essential features of an effective and fully developed information system on bed utilization and availability the system:
- 8. Provides rapid access to comprehensive, timely and accurate data on current bed utilization and availability across every inpatient bed. This will include:
  - Whether a bed is occupied or available
  - Who is occupying the bed, their date of admission and their expected date of discharge and whether discharge is overdue
  - Whether the bed is occupied by an outlying



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#### patient

- The type of ward on which the bed is located (e.g. medical or surgical)
- Whether the bed is in a bay or in a single room Whether the bed is in a male or female bay Whether the bed is in an elderly / adult or pediatric facility Is linked to a diary facility for scheduling inpatient beds for elective patients when they are invited in, for their day of admission and their expected lengths of inpatient stay.
- Records patterns of bed utilization
- Availability over time to allow strategic review of bed complement and configuration.

#### REFERENCES

Improving Turnaround Time in Stop over Unit in ABC Hospital By Bhawana Khattar, 2015

Halpern NA, Pastores SM. Critical care medicine in the United States 2000-2005: an analysis of bed numbers, occupancy rates, payer mix, and costs. (Critical care med 2010)

"Understanding the benefits of Active RFID for assets tracking" Hi tech security solution, August 2008 Institute for Healthcare Improvement. Optimization Patient Flow: Moving Patients Smoothly through Acute Care Setting. Boston, M.A:2003

British Association of Critical care nurses (2009) Standards for nurse staffing in critical care.

"Hospital Nurse Staffing & Patient Mortality, Nurse Burnout and Job satisfaction" The American Journal of American Medical Association, 2002

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