

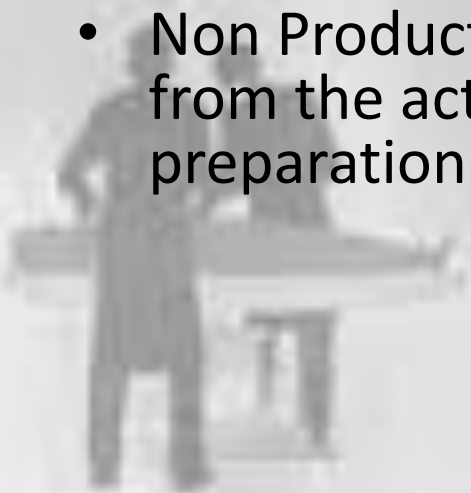
OT Utilization (with context to OT Non Productive Time)

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INTRODUCTION

- Utilization efficiency of the OR refers to time lag between the two consecutive surgical procedures and the efficiency with which the OT runs according to the scheduled plan. C
- Turnover time may be defined as the length of time that starts when one patient leaves the OR and ends when the next patient on the schedule enters the same OR.
- Non Productive Time refers to the time takes place apart from the actual surgical procedures. E.g.. Delay ,cleaning, ot preparation etc.

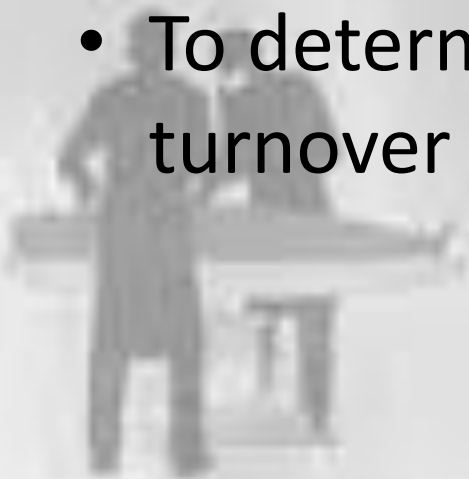


Research Questions

- i. What is the Utilization of OT in Asian heart institute, Mumbai?
- ii. What are the factors causing prolonged turn over time?
- iii. What are the factors causing delay of cases in OT?

OBJECTIVE

- To determine the non productive time during the turnover and overhaul to increase overall productivity.
- To determine the delays in surgical procedure.
- To determine the reasons behind the long turnover periods and delay in surgeries.



METHOD

- **Study area:** Asian heart institute,Mumbai.
- The study was focused on the Operation theatre at the 3rd floor (OT 1, 2, 3, 4,5and 6) followed by analyzing and comparing the data both retrospectively and prospectively.
- From the retrospective study on OT utilization, it was evident that there was non-productive time (NPT), which requires comprehensive correction.
- **Study Type :** Descriptive and Observational Research
- **Study Sample:** Surgical procedures in all the 6 OT's at the 3th floor Performed in the month of February to May 2017.
- **Study Period :** 2 Months (15th feb to 15th May, 2017)
- **Sampling Technique:** Purposive Sampling
- **Data Collection :** 120 Surgeries
-

Process flow in OT



RETROSPECTIVE PHASE



calculated ot utilization time

Starting with a retrospective analytic study, taking a random sample data of 300 surgeries I have been able to calculate the OT UTILIZATION.

OT UTILIZATION = 71 %



PROSPECTIVE PHASE



OBSERVATIONS AND FINDINGS

AVERAGE TURN OVER TIME OR NON PRODUCTIVE TIME = 36 MIN

STANDARD DEVIATION OF TURN OVER TIME =24.673

Considering **20 MIN** as the ideal turnover time..my opportunity
Would be all those cases taking more than 20 min of turnover
time.

71.3% of cases are above 20 minutes.

ANALYSIS

- ❖ Patient's clearance is a big issue that leads to delay and cancellation that eventually results in increased turnover time and non productive time.

delay in clearance



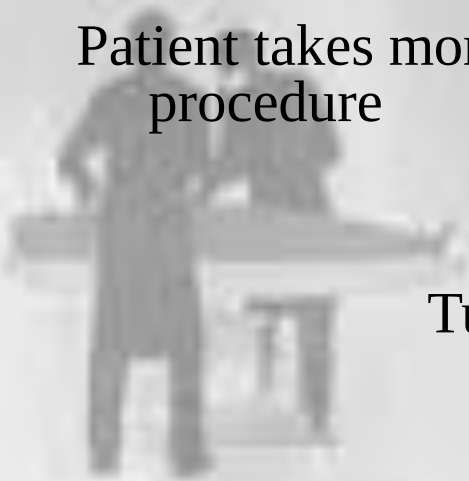
delay in calling time for the patient from ward to recovery



Patient takes more time to reach the recovery and delay in pre operative procedure

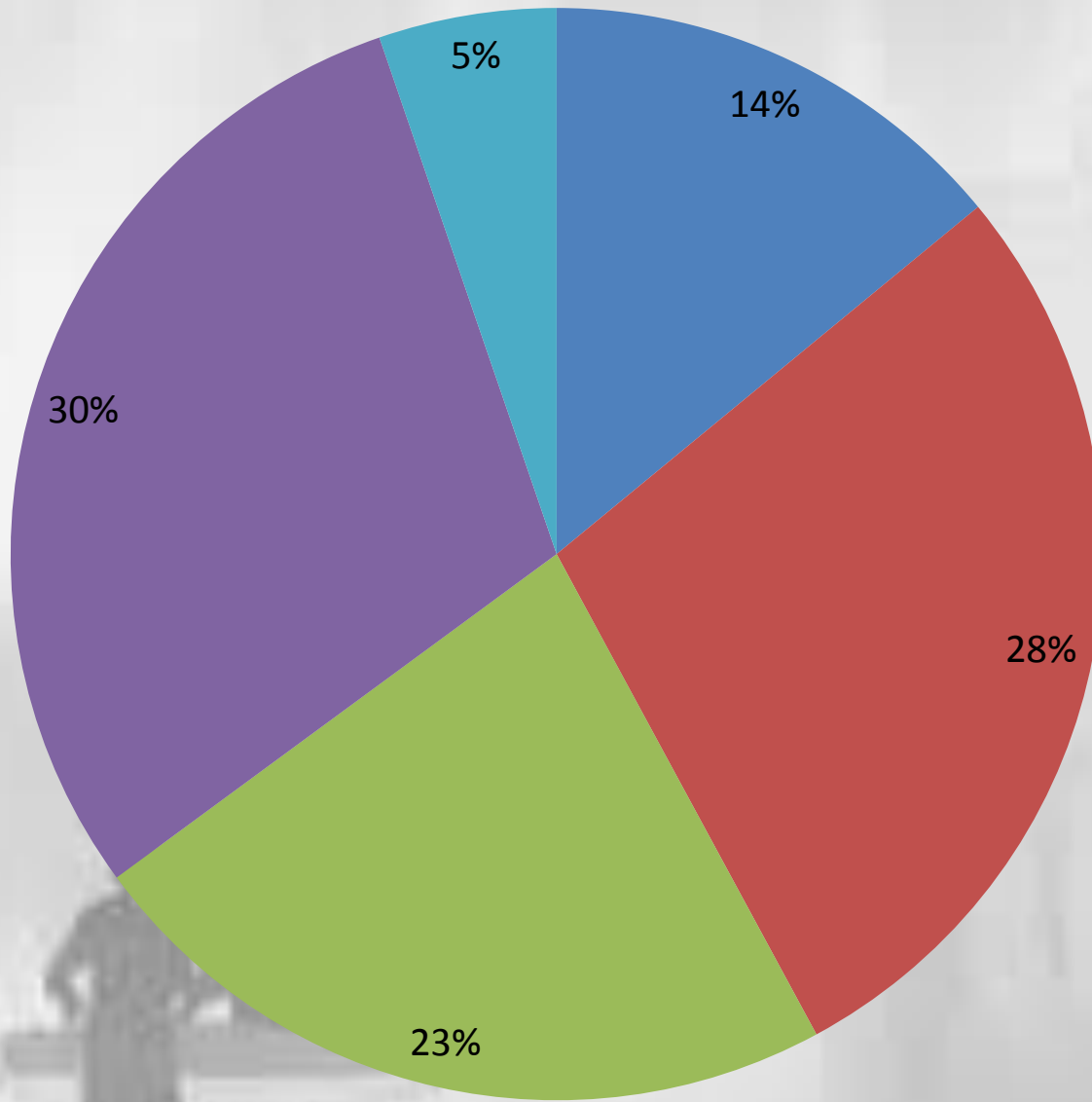


Turn over time for the OT increases



- ❖ Significant number of non admitted cases in the OT scheduled list leads to more chances for the cancellations of procedures that gradually brings more rescheduling in the scheduled list which is a lot of time consuming and time wasting process.
- ❖ A lot of chaos at the nursing station.
- ❖ Maximum number of first surgeries dont starts on actual scheduled time which leads to delay for the consecutive surgeries.





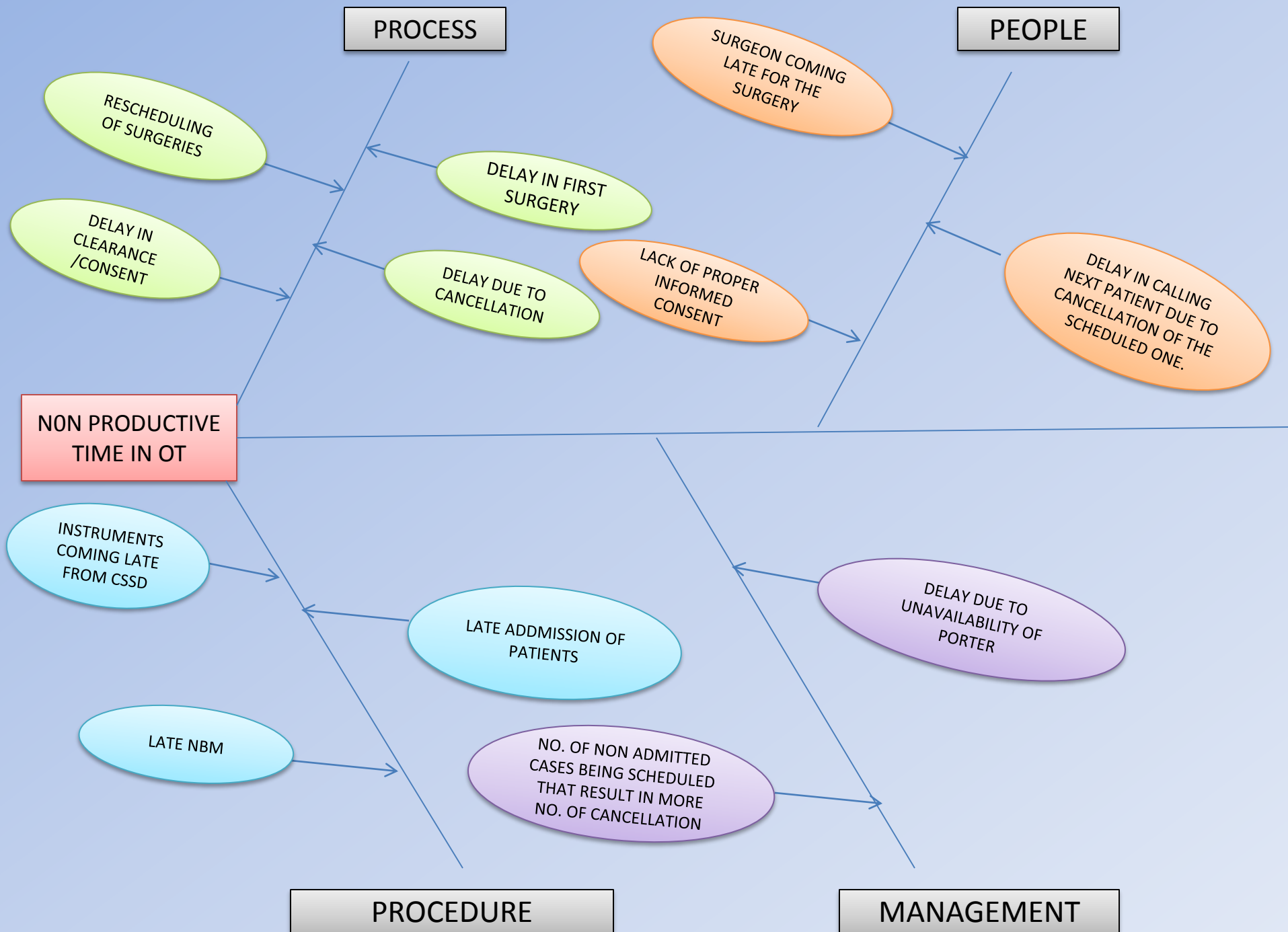
■ Doctor came late for the surgery

■ Patient's clearance got delayed

■ OT Preparation/cleaning took longer

■ Surgery rescheduled due to cancellation

■ Porter unavailability



RECOMMENDATIONS

- ❖ Patient clearance should be done prior to one day before the surgery. (CONSENT, TPA, HHH REPORT, 2D ECHO REPORT etc....)
- ❖ Reducing the number of cancellation by reducing the delay time that takes place in handovering of patient's clearance.
- ❖ Limiting the number of non admission cases that eventually falls into cancellation and that leads to rescheduling of the surgeries.
- ❖ A Digitalized monitor in the OT that shows which surgery going to perform or happen in which of the OT with proper information about the patient, calling time and patient clearance status.(INNOVATIVE H.M.S)