

Study and Evaluation of Turn-Around-Time between Surgeries in Operation Theater

INTRODUCTION:

Recently, it has been observed that delays in the operating room have a negative effect on its efficiency and the working environment and they negatively affect both, patients and the health care workers. However, solutions for inefficiencies in the operating room cannot be devised unless the delays that occur on the day of surgery are better understood. Hence, my study aims at reducing the Turn-Around-Time between two surgeries.

AIM:

To Reduce the waiting time of patients in Operation Theatre in Kokilaben Dhirubhai Ambani Hospital.

OBJECTIVES:

- To study the patient flow in Operation Theatre.
- To study the average time spent by the patient in wards/ICU/Recovery Room before the commencement of Operation.
- To study the determinants of patient's delay in Operation Theatre in KDAH.
- To analyse and prioritize the causes which are leading to increase in waiting time of patients in OT.
- Based on the analysis, suggesting measures to reduce the waiting time of OT which are economically viable, environmentally sound and socially responsible.

METHODOLOGY

- Study Area: Kokilaben Dhirubhai Ambani Hospital, Mumbai
- Type of Data: Direct observation— Primary Data
- Documentation Compliance— Secondary Data
- Tool for Data Collection: An instrument
- Sample Size: Direct Observation— 210
- Documentation Compliance— 90

DATA SOURCE

- **For practical Implementation:** Data were collected by means of non-participant observation in the operation theater.
- **For completion and documentation:** By auditing the completion and documentation of scheduled surgeries.

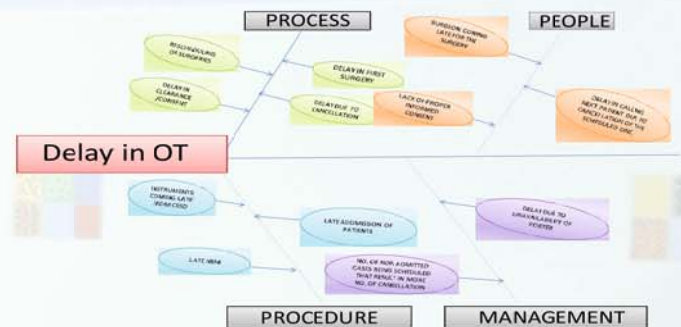
PROCESS FLOW



- Patient clearance should be done prior to the surgery.
- A digitalized monitor in the OT that shows which surgery is going to be performed with proper information of the patient and the clearance status.
- Reducing the number of cancellation by reducing the delay time that takes place in hand-overing of patient's clearance.

ANALYSIS

- Significant number of non-admitted cases in the OT scheduled list leads to more chances for the cancellation 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 don't start on actual scheduled time which leads to delay for the consecutive surgeries.



FINDINGS

- The turnover range deviate between 0-20 mins. 78.3% cases are above 20 minutes.
- The results also found that surgical staff play a critical role in averting and anticipating delays.
- Perioperative system delays are a common type of error in the operating room.
- Furthermore, an initial delay is associated with additional subsequent delays, propagating a vicious cycle.

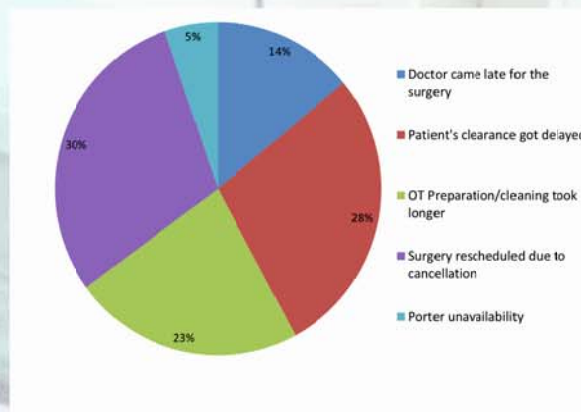


fig:
Underlying causes
of delay in OT

RECOMMENDATIONS:

- Patient clearance should be done prior to the surgery.
- A digitalized monitor in the OT that shows which surgery is going to be performed with proper information of the patient and the clearance status.
- Reducing the number of cancellation by reducing the delay time that takes place in hand-overing of patient's clearance.