A STUDY ON PRE-OPERATIVE WAITING TIME AND SURGERY CANCELLATIONS

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Introduction – MEDANTA MEDICITY, Gurgaon

- Medanta Medicity is a multi-specialty medical institute located in Gurgaon. It was established in 2009, with cardiac surgeon, Dr. Naresh Trehan.
- It is an institution which not only treats, but trains also, while providing international standards of technology, infrastructure, clinical care, and a fusion of traditional Indian and modern medicine.
- Medanta's massive 2.1 million sq. ft. campus provides 1,600+ beds and facilities for over 22+ super-specialties, all under one roof. Each floor is dedicated to a specialty to ensure that they function as independent departments within a hospital.
- It is known for it's ultime practice and goals towards better tomorrow for their patients.

Introduction – PRE-OPERATIVE DELAYS AND SURGERY CANCELLATIONS

- When the patient arrives at the hospital for surgery, he needs to be assessed and prepared for surgery in the pre-operative room.
- A significant amount of work-up needs to be done to prepare the patient which includes patient notes, required health check up, the consultant review, OT staff ensuring the correct surgical instruments are available, financial clearance, anesthetist clearing the patient's health status as fit for surgery and preparation of OT.
- Reasons for the delays and cancellations are multifaceted and are related to patients, management issues, and clinical staff.
- surgery delays and cancellations have negative effects on both hospital and patients. Therefore, efficient management of pre-operative and operating rooms is crucial for both, the efficiency of hospitals and for a positive experience for patients

Research Question and Objectives of The Study

Research Question:

- Is there any patient delay in the pre-operative room in the hospital?
- What is the percentage of monthly OT cancellation?

Objectives:

- To find the pre-operative waiting time for patients stay in the hospital.
- To find out the reasons responsible for the delays.
- To find the number of OT cancellations in a month and reasons attributing to it.
- To suggest measures for optimal utilization of pre-operative room, operation theatre time and reducing surgery cancellation rates.

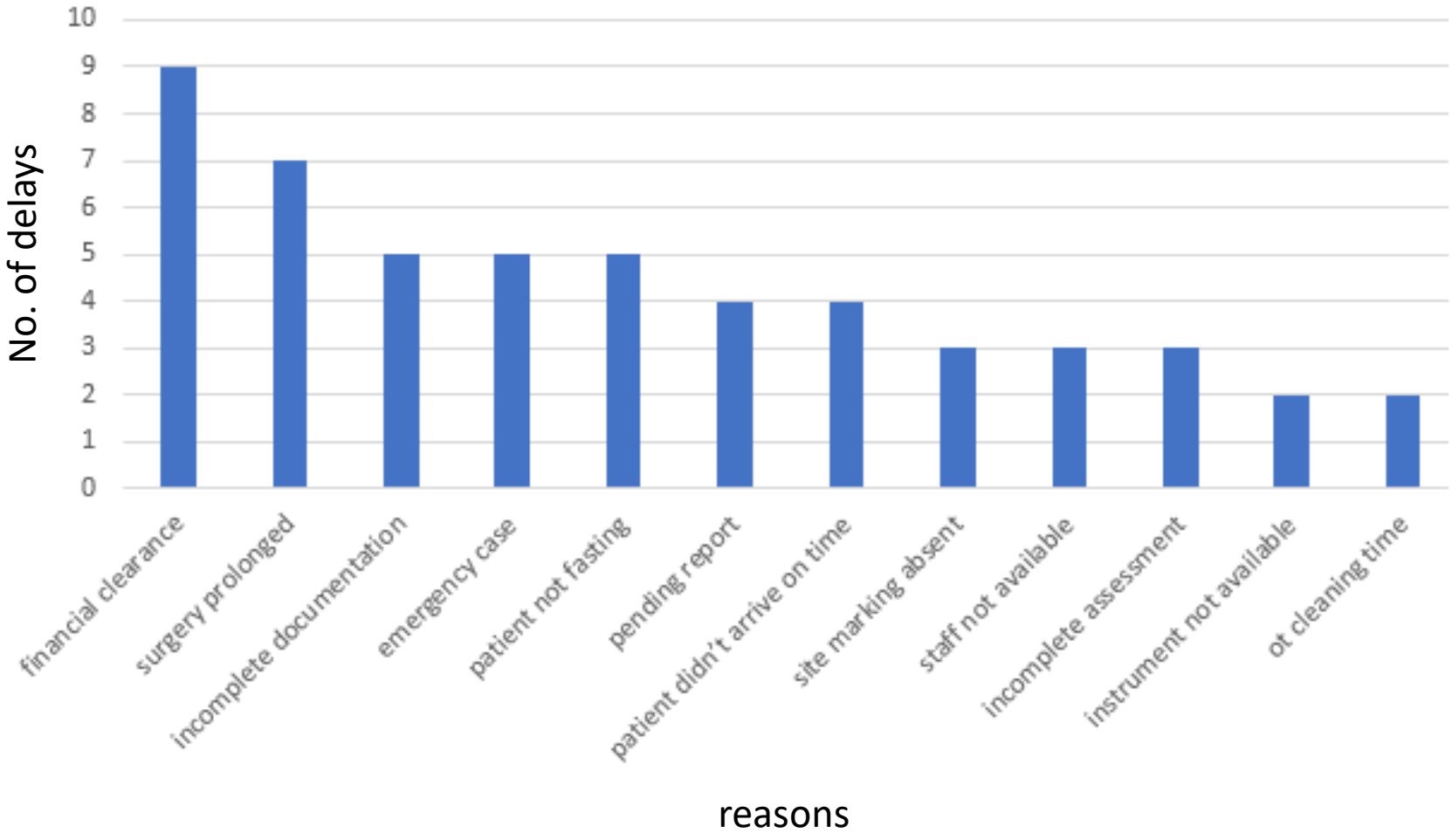
Methodology

- **Study type:** Observational descriptive cross-sectional study.
- **Study duration:** Three months (February 2019- May 2019)
- **Sample size**: The total number of patients admitted in pre-operative room in the study period and total number of elective surgeries scheduled in the study period.
- The primary data (qualitative) was collected through discussions with patients, doctors and staff to explore their experiences.
- The secondary data was collected through the handover registers and data maintained by the nursing staff in the Pre-operative room and by the OT reception staff. The in-time, out-time in pre-operative room and list of surgery cancellations was analyzed.
- Also, the various aspects leading to OT cancellations were studied to come up with relevant suggestions to reduce the pre-operative waiting time and to optimize the utilization of operation theatre time.

Findings

DEPARTMENT	NO. OF PATIENT DELAYS	TIME DELAY (max-min)	MEAN TIME DELAY (MIN)
UROLOGY	13	420-150	261.53
GASTROENTEROLOGY	11	410-130	235
PLASTIC SURGERY	09	395-210	264.44
ORTHOPAEDICS	07	220-170	170
BREAST SURGERY	03	490-120	313.33
GYNAECOLOGY	03	415-225	306.66
VASCULAR	03	360-140	273.33
HEAD & NECK	02	300-210	255
ENT	01	330	330

Reasons for pre-operative delays



OT cancellations

OT CANCELLATION REASON	PERCENTAGE
MEDICALLY UNFIT	30.35
NOT ADMITTED	45.91
FINANCIAL CLEARANCE	20.62
UNPLANNED	2.35
DISCHARGED	0.77

DEPARTMENT	NO. OF CANCELLATIONS	MOST COMMON REASONS
GASTROENTEROLOGY	45	Not admitted, financial dues
CARDIOLOGY	38	Medically unfit
ORTHOPAEDICS	38	Not admitted, medically unfit
UROLOGY	37	Not admitted, medically unfit
VASCULAR SURGERY	24	Medically unfit, not admitted
NEUROLOGY	21	Not admitted
ENT	21	Not admitted
PLASTIC SURGERY	13	Not admitted, financial dues
GYNAECOLOGY	06	Not admitted
THORACIC SURGERY	04	Not admitted
HEPATOLOGY	02	Medically unfit
HEAD & NECK	02	Not admitted, financial dues
BREAST SURGERY	02	Medically unfit, financial dues
OPHTHALMOGY	01	Medically unfit
PEDIATRICS	01	Not admitted

Causes

The causes for pre-op delay were patient related or management related:-

- The day care patients didn't arrive on time
- Delay in financial clearance.
- Incomplete documentation or pending reports.
- Patient not fasting as per schedule.
- Incomplete preoperative assessment.
- Delay in availability of equipment, machines or instruments (unavailable or undergoing sterilization).
- Emergency cases.
- Non-availability of staff for shifting patient.
- Prolonged ongoing surgery due to change of plan or complication.
- Absence of site markings.
- Increased time for OT cleaning in-between surgeries.

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The reasons for OT cancellations on the day of surgery were found to be:-

- Patient was declared medically unfit.
- Patient was not admitted on the day of planned surgery.
- The financial clearance was due.
- The patient was discharged before the schedule due to unforeseen or personal causes.

Conclusion

- Though there is no specified benchmark, but as per my literature review the patient should not be held in more than 120 minutes for pre-operative assessment and review.
- It was found that 52 patients had delays.
- The average delay in pre-operative waiting time is found maximum in breast surgery followed by ENT, gynecology, plastic surgery and vascular surgery.
- The maximum number of patient delays were found in urology department followed by GI, plastic surgery and orthopedics.
- The percentage of OT cancellation was found to be 257 cases in a month for 1176 scheduled surgeries which attributes to 22% of cancelled cases.

Suggestions

- A call from the hospital two days prior to scheduled surgery to make sure of the availability and fitness of the patient. Improving communication between patient and hospital shall improve patient compliance to schedule.
- Emphasis on prior financial clearance.
- Adherence to the document checklist and conducting compliance audits.
- A pre-operative clinic setup for complete work-up and documentation, reports, consent forms. A prior health work-up is must to rule out or manage any ongoing medical condition and also gives opportunity to clear patient's fear or doubts regarding the surgery.
- Scheduling surgeries in such a way that there is enough time in between similar procedures requiring the same instrument or equipment.
- Adequate well-trained staff for in-between cleaning of OT.
- Proper patient counselling for why and how long he/she is supposed to be fasting.
- One operation theatre exclusively prioritized to cater emergency cases first.

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- Well estimated time duration for surgeries considering chances of complications and operation room sterilization time.
- Patient involvement in deciding the date for planned surgery.
- Overlapping induction, i.e. induction of anesthesia with an additional team while the previous patient is still in the OR to increase the OR productivity by decreasing the non-operative time. Also, we can save OR time by inserting epidural catheters and peripheral, central intravenous access in the side room prior to shifting the patient while the previous patient is still in the OR **.**
- The discharge on request patients could be contacted again for a suitable appointment as per their convenience for counselling and re-consideration.

THANK YOU