Presented by :
Dr. Kalva Dharani
BDS, MHA
IIHMR, Jaipur

Guided by :
Dr. Sarthak Sengupta
Assistant professor
IIHMR university
Jaipur

BHAGWAN MAHAVEER JAIN HOSPITAL, VASANTHNAGAR , BENGALURU

In **1975,** to mark the **2500th** Anniversary of **LORD BHAGWAN MAHAVEER**, a group of philanthropic persons from the Jain Community in Bangalore **registered a Charitable Institution by the name of BHAGWAN MAHAVEER MEMORIAL JAIN TRUST** and laid the foundation stone on **23rd May 1976** by His **Excellency Late Sri Mohanlal Sukhadia**, Governor of Andhra Pradesh and **late Sri Uma Shankar Dixit**, Governor of Karnataka.

The main objective was to help the poor and needy for all caste and creed at a very affordable cost **,** However, no compromise is ever made in the quality of healthcare provided.

It has grown to a reputed and big hospital with over 500 + beds with all modern facilities.

BHAGWAN MAHAVEER JAIN HOSPITAL

VISION

Service to people with continual up gradation of technology and professional knowledge.

MISSION

To offer the best health care services by well qualified personnel.

To ensure uniform care to all patients and ensure safety of our patients ,attenders and the staff.

To develop state of art infrastructure to make this hospital a preferred health care destination for all patients.

OUR VALUES SYSTEM

Quality: The Hospital is committed to the continuous evaluation and improvement of all processes related to delivering comprehensive medical treatment and superior patient care.

Integrity: The Hospital will ensure that transparency among systems and physician practices will be maintained at all times.

Excellence: The Hospital will strive to foster teamwork, innovation, personal responsibility, and trust in every aspect.

Dignity: The Hospital will always uphold patient dignity, safety, and respect.

SCOPE OF SERVICES

- Anesthesiology
- Interventional Cardiology
- Non Interventional Cardiology
- Cardiothoracic and Vascular Surgery
- Psychiatry (OPD only)
- Renal Transplant
- Bone Marrow Transplant
- Critical Care (MICU, SICU, CCU, CSICU, NICU, PICU)
- Dental surgery and Aesthetic dentistry
- Oral and Maxillofacial Surgery
- Dermatology and Venereology
- Emergency Medicine
- Endocrine Surgery
- Endocrinology
- General Surgery
- Laproscopic Surgery
- Hand & Micro Surgery
- Hepatology
- Internal/ General Medicine
- Radiology
- Interventional Radiology
- Neuro Radiology
- Vascular Surgery
- Medical Gastroenterology
- Surgical Gastroenterology
- Medical Oncology
- Surgical Oncology
- Gynaecology Oncology
- Haemato Oncology
- Head & Neck Oncology
- Neonatology
- Nephrology (Including Dialysis)
- Neurology
- Neurosurgery
- Obstetrics & Gynaecology (Including High Risk Obstetrics Cases)
- Fetal Medicine
- Ophthalmology
- Orthopaedic Surgery (Including Joint Replacement surgery)
- Sports Medicine
- Otorhinolaryngology
- Paediatrics
- Paediatric Surgery
- Pain Medicine
- Palliative Medicine
- Physical Medicine and Rehabilitation
- Plastic and Reconstructive Surgery
- Pulmonary Medicine
- Rheumatology
- Urology

BMJH
Caring with Compassion

PATIENT SAFETY & QUALITY OF CARE
NABH
ACCREDITED

TOPIC : "EVALUATING FACTORS ASSOCIATED WITH THE CANCELLATION AND RESCHEDULING OF ELECTIVE SURGERIES"

STUDY PERIOD :

Patient undergone surgery at Bhagwan Mahaveer Jain hospital

(8 weeks (April 1st 2025 - June 1st 2025)

METHODOLOGY : Descriptive cross-sectional study

DEFINITION :

RESCHEDULING :

It is the process of adjusting the surgery schedule when the current schedule is subjected to disruptions on the day of surgery.

CANCELLATION:

It is defined as “a planned elective surgery which is not done on the purposed date.”

AIM:

To analyze the causes and impacts of surgical case cancellation and rescheduling in the operating theatre.

OBJECTIVE OF THE STUDY :

- To identify the primary reasons for cancellations and rescheduling, which include patient-related, administrative and medical factors
- To determine the rate of cancellation and rescheduling in the hospital's OT

.

INCLUSION CRITERIA:

- ❑ All elective surgeries scheduled between 9:00 AM to 5:00 PM on working days
- ❑ Surgeries listed on the OT schedule for the given study period

EXCLUSION CRITERIA:

- ❑ Surgeries scheduled on Sundays and public holidays
- ❑ Emergency surgeries that are not pre-scheduled and require immediate attention

SAMPLE SIZE:

Total 1385 patients were evaluated out of which 110 samples were considered by following the Descriptive cross-sectional methodology which includes both insurance and cash patients, who have been scheduled for procedures at BMJH, Vasanthnagar Bangalore, under departments such as urology, orthopedics, cardiology, pediatrics, vascular, obgyn, smile train, gastroenterology, general surgery, etc.

SAMPLING TECHNIQUE:

The study was Descriptive cross-sectional study , during the study period the data has been collected for all scheduled surgical procedures in the departments from 9:00 am to 5:00 pm.

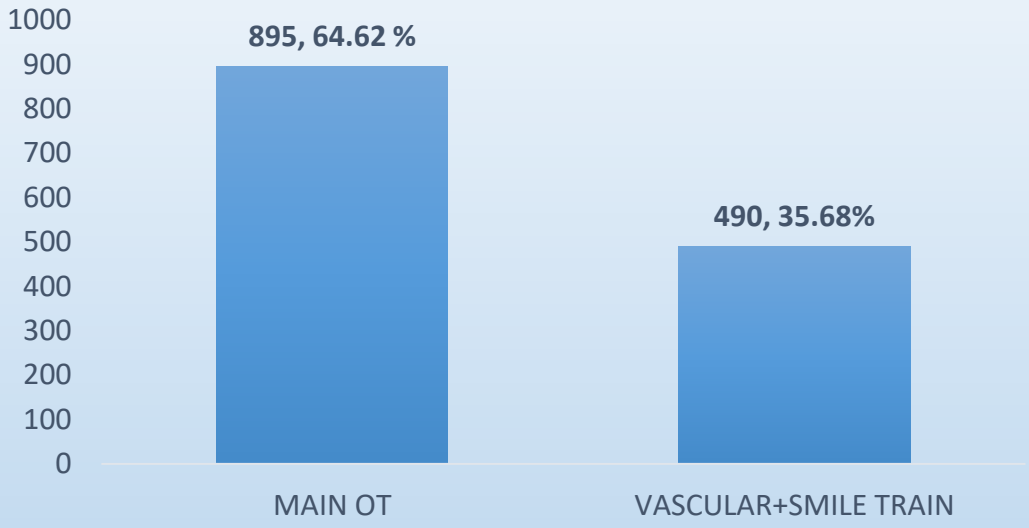
DATA COLLECTION PROCEDURE:

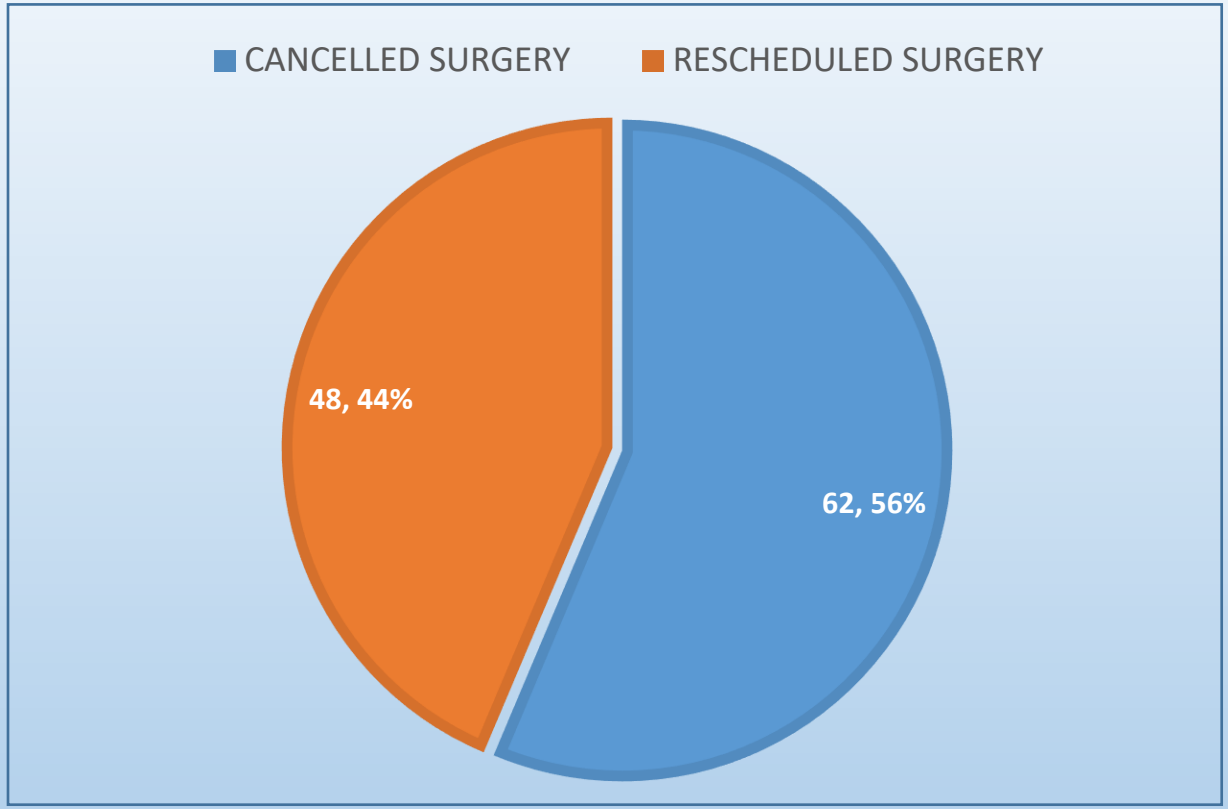
- Data was collected by using the approved OT list , rescheduled surgeries , cancelled surgeries data and the factors associated for delay and cancellations of surgeries.
- Data has been monitored and discussed with the OT in charges reasons for reschedule and cancellation of surgeries

THE FOLLOWING PARAMETERS WERE OBSERVED FOR 8 WEEKS:

- ❑ The total number of surgeries in the operating theatres
- ❑ Calculate the number of cancelled surgeries department-wise
- ❑ Calculate the number of rescheduled surgeries department-wise
- ❑ Analyze and segregate the most common reasons for the respective departments.

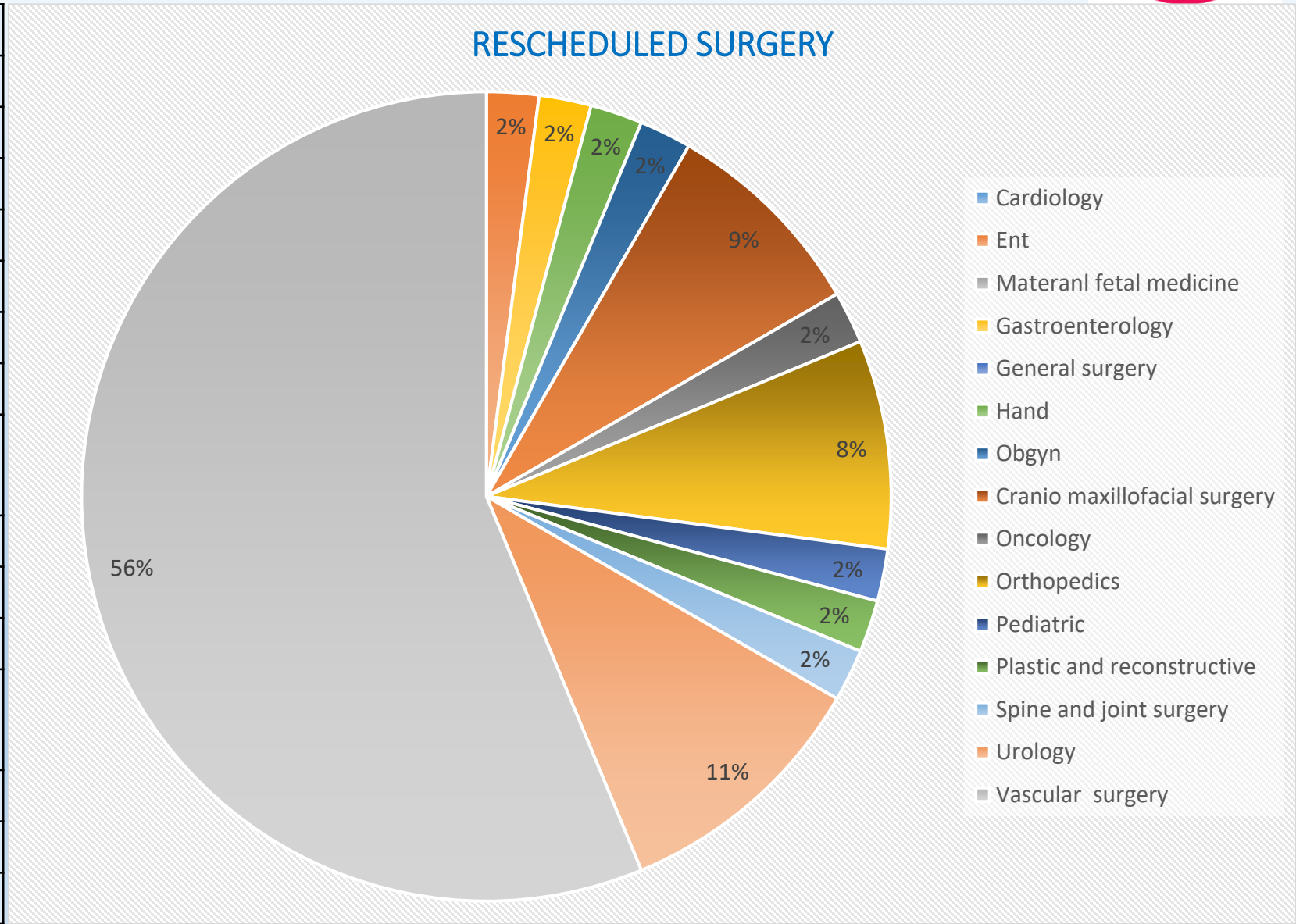
STUDY POPULATION



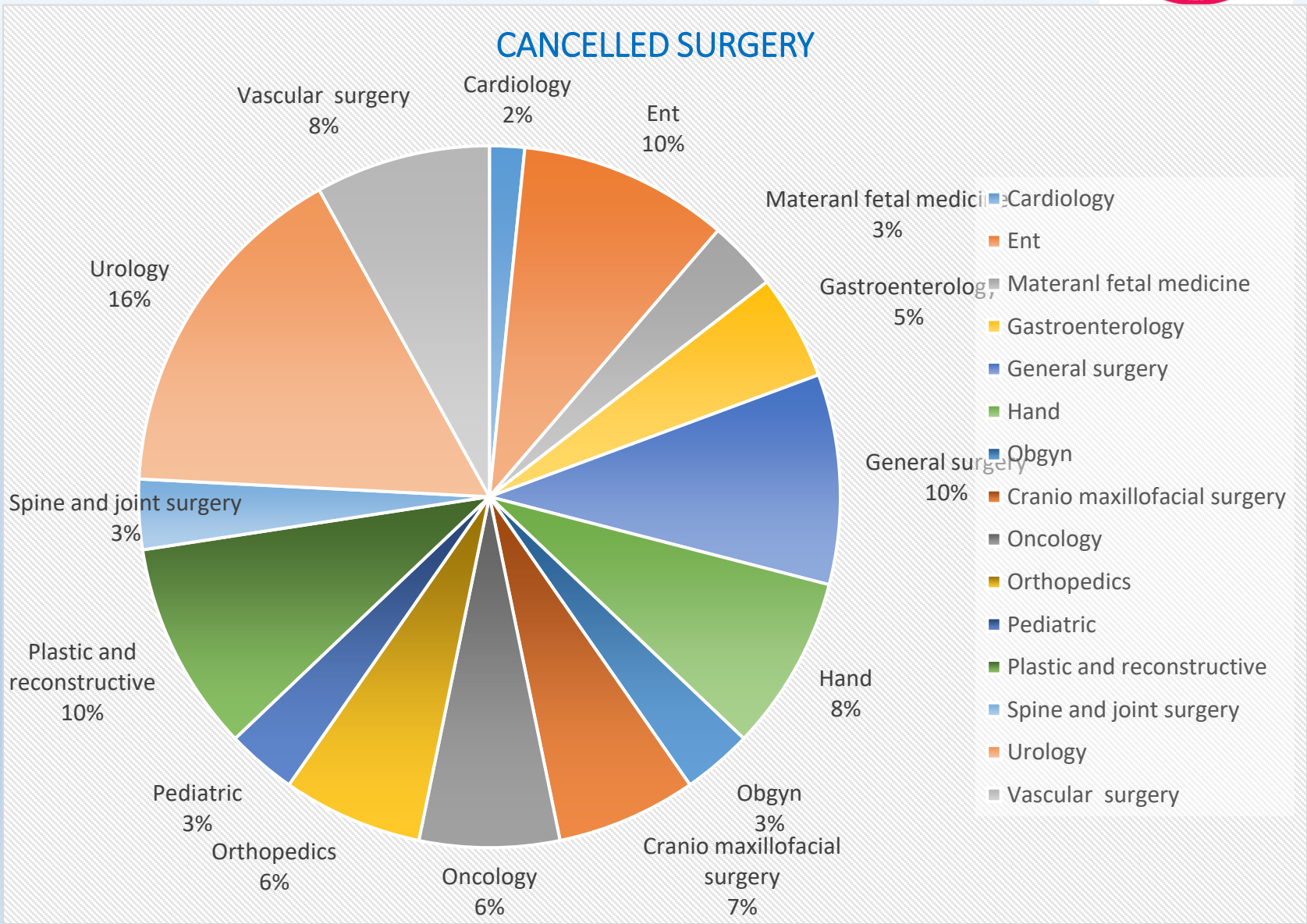


The study population was 1385 , out of which 110 patients were considered by following the Descriptive cross-sectional methodology and it was noticed rescheduled were 48 patients and cancelled were 62 patients

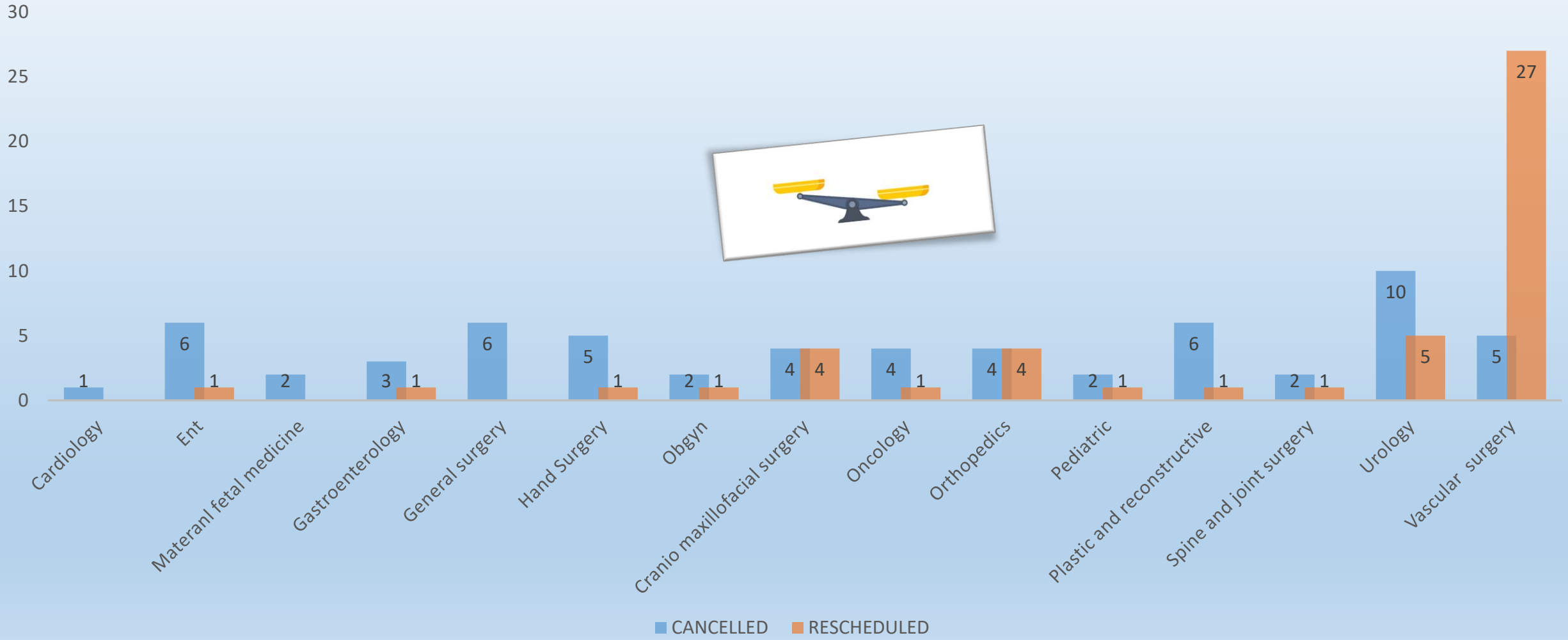
DEPARTMENT	RESCHEDULED
CARDIOLOGY	0
ENT	1
MATERNAL FOETAL MEDICINE	0
GASTROENTEROLOGY	1
GENERAL SURGERY	0
HAND SURGERY	1
OBGYN	1
CRANIO MAXILLOFACIAL SURGERY	4
ONCOLOGY	1
ORTHOPAEDICS	4
PAEDIATRIC	1
PLASTIC AND RECONSTRUCTIVE	1
SPINE AND JOINT SURGERY	1
UROLOGY	5
VASCULAR SURGERY	27



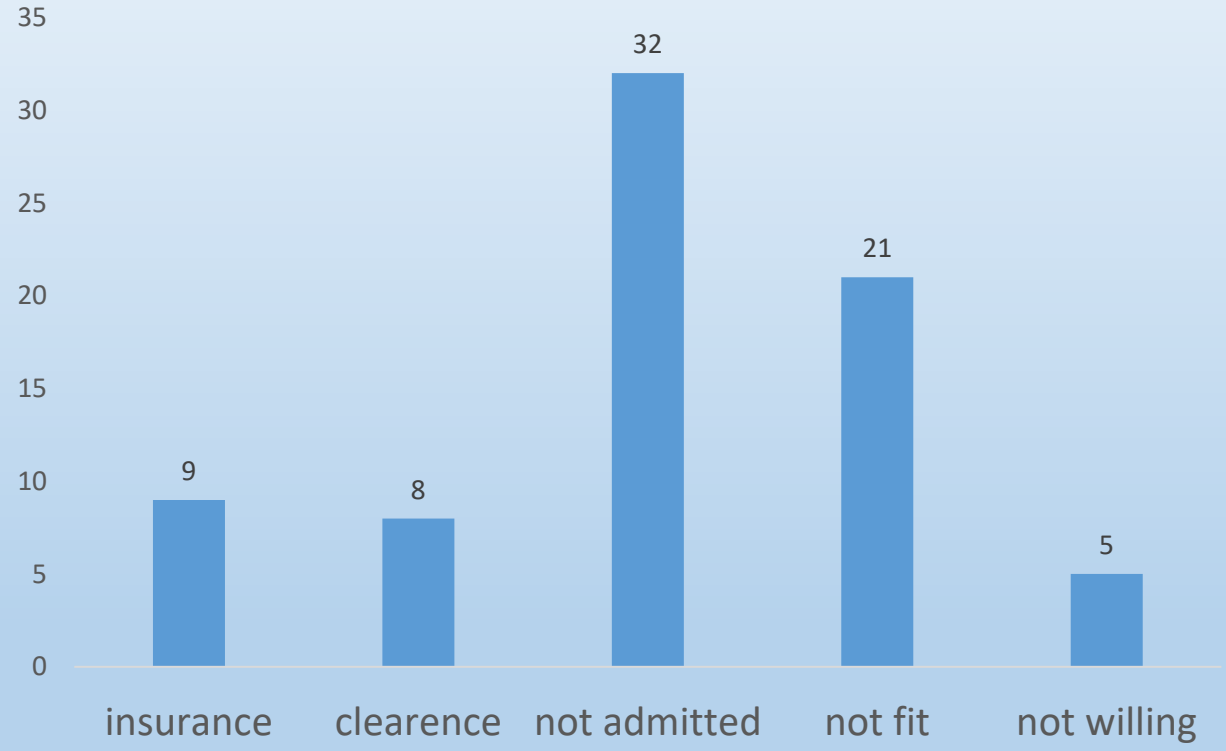
DEPARTMENT	CANCELLED
CARDIOLOGY	1
ENT	6
MATERANL FETAL MEDICINE	2
GASTROENTEROLOGY	3
GENERAL SURGERY	6
HAND SURGERY	5
OBGYN	2
CRANIO MAXILLOFACIAL SURGERY	4
ONCOLOGY	4
ORTHOPEDICS	4
PEDIATRIC	2
PLASTIC AND RECONSTRUCTIVE	6
SPINE AND JOINT SURGERY	2
UROLOGY	10
VASCULAR SURGERY	5



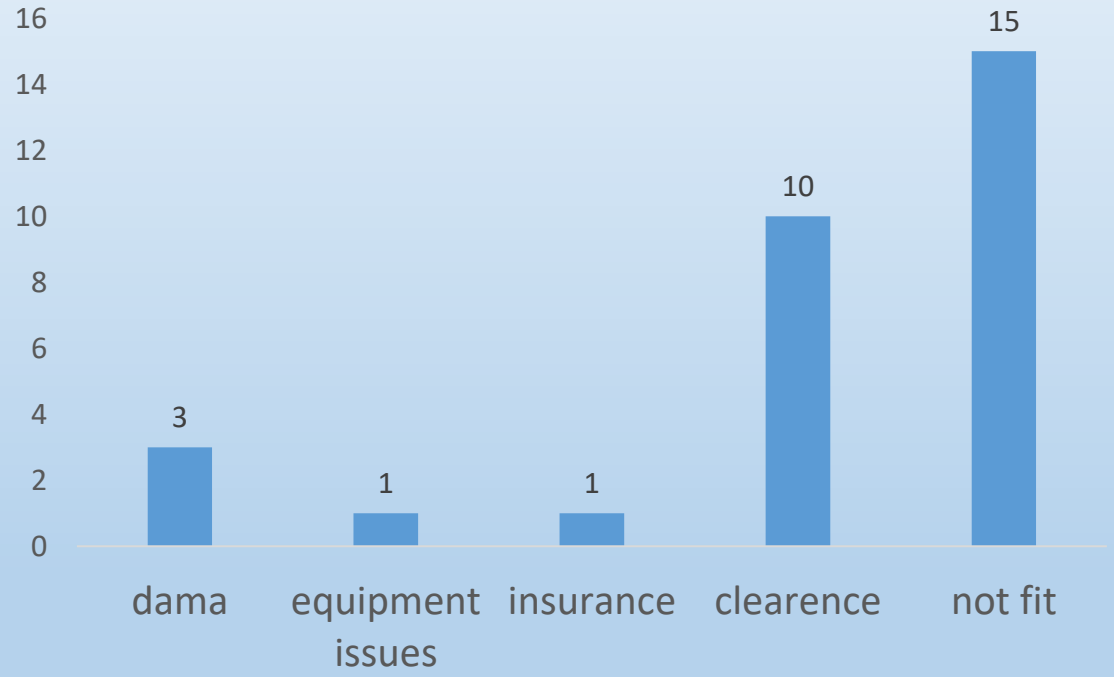
COMPARISON OF CANCELLED AND RESCHEDULED SURGERY



REASONS FOR CANCELLATION AND RESCHEDULING OF SURGERY AT MAIN OT



REASONS FOR CANCELLATION AND RESCHEDULING OF SURGERY AT VASCULAR OT



DEPARTMENTAL COMPARISION ON CANCELLATION OF SURGERY

DEPARTMENT	INSURANCE	CLEARENCE	NOT ADMITTED	NOT FIT	NOT WILLING	DAMA	EQUIPMENT ISSUES
CARDIOLOGY	1						
ENT			7				
FETAL MEDICINE			2				
GASTROENTEROLGY	1		2				
GEN SURGERY	1	1	2	1	1		
HAND SURGERY			2	3			
OBGYN			1	1			
CRANIOMAXILLO FACIAL SURGERY			3	1			
ONCOLOGY		1	2		1		
ORTHOPAEDICS			2	2			
PEDIATRIC		1			1		
PLASTIC			5		1		
SPINE				2			
UROLOGY	1		5	3	1		
VASCULAR						3	

DEPARTMENTAL COMPARISION ON RESCHEDULING OF SURGERY

DEPARTMENT	INSURANCE	CLEARENCE	NOT ADMITTED	NOT FIT	NOT WILLING	DAMA	EQUIPMENT ISSUES
CARDIOLOGY							
ENT				1			
FETAL MEDICINE							
GASTROENTEROLGY	1						
GEN SURGERY							
HAND SURGERY				1			
OBGYN				1			
CRANIOMAXILLO FACIAL SURGERY	2	1		1			
ONCOLOGY				1			
ORTHOPAEDICS				4			
PEDIATRIC	1						
PLASTIC		1					
SPINE				1			
UROLOGY	1	2		2			
VASCULAR	1	10	16				1

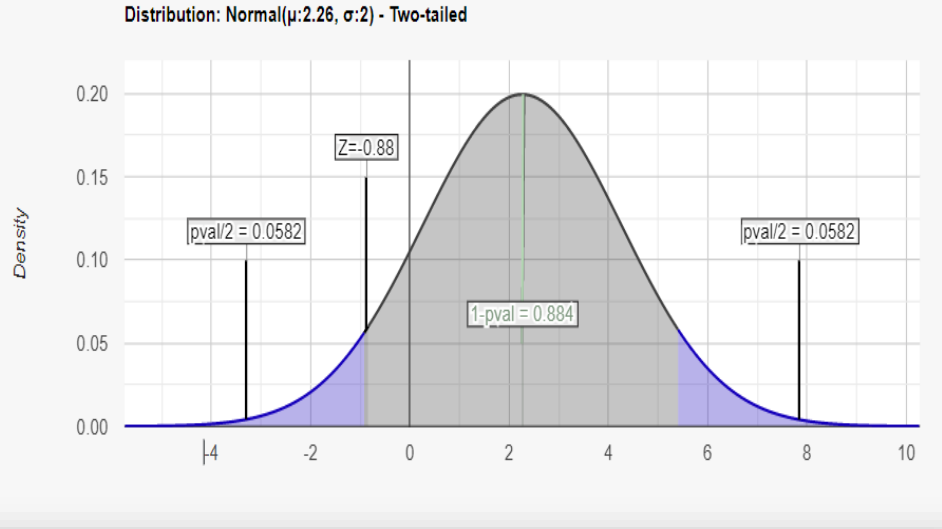
ROOT CAUSE FOR THE CANCELLATION AND RESCHEDULING OF SURGERY

PEOPLE	Cause: Not admitted Not fit Not willing	Action: Pre-admission checklist Pre op counselling
PROCESS	CAUSES: Scheduling Pre op assessment insurance	Action: Daily OT briefings
EQUIPMENT	CAUSES: Maintenance	Action: Weekly equipment audits
OTHERS	CAUSES: Communication documentation	Action: Patient remainders Staff training

RESULTS

During the 8 week study period 4.48 % of the scheduled elective surgeries were cancelled and 3.3% were rescheduled together these disruptions effected operating theatre efficiency leading to unused time slots increased staff workload and delays for other patients and Using this information, the two tailed p-value is calculated and result shows 0.1164. Since this p-value is less than 0.05 and its considered to be statistically significant.

The two-tailed p-value equals: 0.1164



Solution

P = P(Z < 0.5) = 0.05821
1 - P = P(Z > 0.5) = 0.9418
P-value = 2 * Min[P, 1-P]
P-value = 2 * Min[0.05821, 0.9418]
P-value = 2 * 0.05821 = 0.1164

p(Z < -0.88) + p(Z > 0.88) = 0.1164
Since the p-value (0.1164) is greater than α (0.05), H_0 is not rejected. (0.1164 > 0.05)

IMPACT DURING CANCELLATIONS AND RESCHEDULING OF SURGERIES :

- With each cancellation, the slot for that particular OT is left unused
- The OT slot is not used as it was planned originally, which can cause gaps or overtime on the other days
- Overload on the surgeons, anesthetists and nurses, when the procedures are rescheduled
- Patient Flow: Other patients may face delays, longer waiting lists, or rushed care when cases are rescheduled.
- Revenue Loss: Each cancelled/rescheduled surgery is a direct loss of potential income and increases per-case cost
- Not Admitted/Not Fit: They cause last-minute cancellations, making it hard to fill the slot.
- Equipment Issues: Lead to sudden cancellations, disrupting the entire OT schedule for the day.

SUGGESTIONS :

- ❑ Better financial counseling
- ❑ Involvement of OT in charge for follow up
- ❑ Streamline prior authorization
- ❑ A systemic approach need to be identified to reduce the medical cancellations

CONCLUSION:

In conclusion, surgery cancellations and rescheduling can have significant impacts on patients, the healthcare system, and the overall healthcare landscape. While some cancellations may be unavoidable due to medical reasons, many are potentially avoidable with better planning, communication, and resource management.

THANK YOU