

# DISSERTATION PRESENTATION

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**MBA Hospital Management**  
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A red emergency sign with the word "Emergency" in white, bold, sans-serif font. Below the text is a white arrow pointing to the right. The sign is illuminated and set against a blurred background of a building interior with lights.

# Emergency

**Study on the  
conversion  
pattern and  
reasons of  
refusals in  
Emergency  
Department  
at NH  
Jaipur**

# About Narayana Multispecialty Hospital, Jaipur

- Commissioned in 2011.
- NH Jaipur is a 330 bedded multispecialty tertiary care hospital, located at Pratap Nagar in Jaipur.
- The core values at NH are represented by the acronym “iCare”.
- **VISION** - The vision of Narayana hospital is to provide high quality healthcare with care and compassion at a reasonable cost at an outsized scale.
- Organization Mentor – Dr. Vijay Pratap Raghuvanshi (GM Administration)
- Serving as a Floor Coordinator since 10<sup>th</sup> Feb’21.



**RESEARCH QUESTION** – What is the rate of conversion and reasons of refusals in Emergency department at NH Jaipur?

**OBJECTIVES -**

1. To study the process flow of Emergency Department at NH.
2. To study the current status of conversion of Emergency patients into In-patient Department.
3. To determine the various reasons of refusal of Emergency patients.

# METHODOLOGY

**STUDY DESIGN –**  
Quantitative,  
Observational  
(Cross-sectional study)

**SAMPLE SIZE – 1891**  
(Data collection  
period- March to  
May'21)

Data collection  
procedure – Hospital  
Departmental records  
and observation

## **Inclusion Criteria -**

- All patients landing in ED
- COVID patients
- Patients revisiting in ED

## **Exclusion Criteria -**

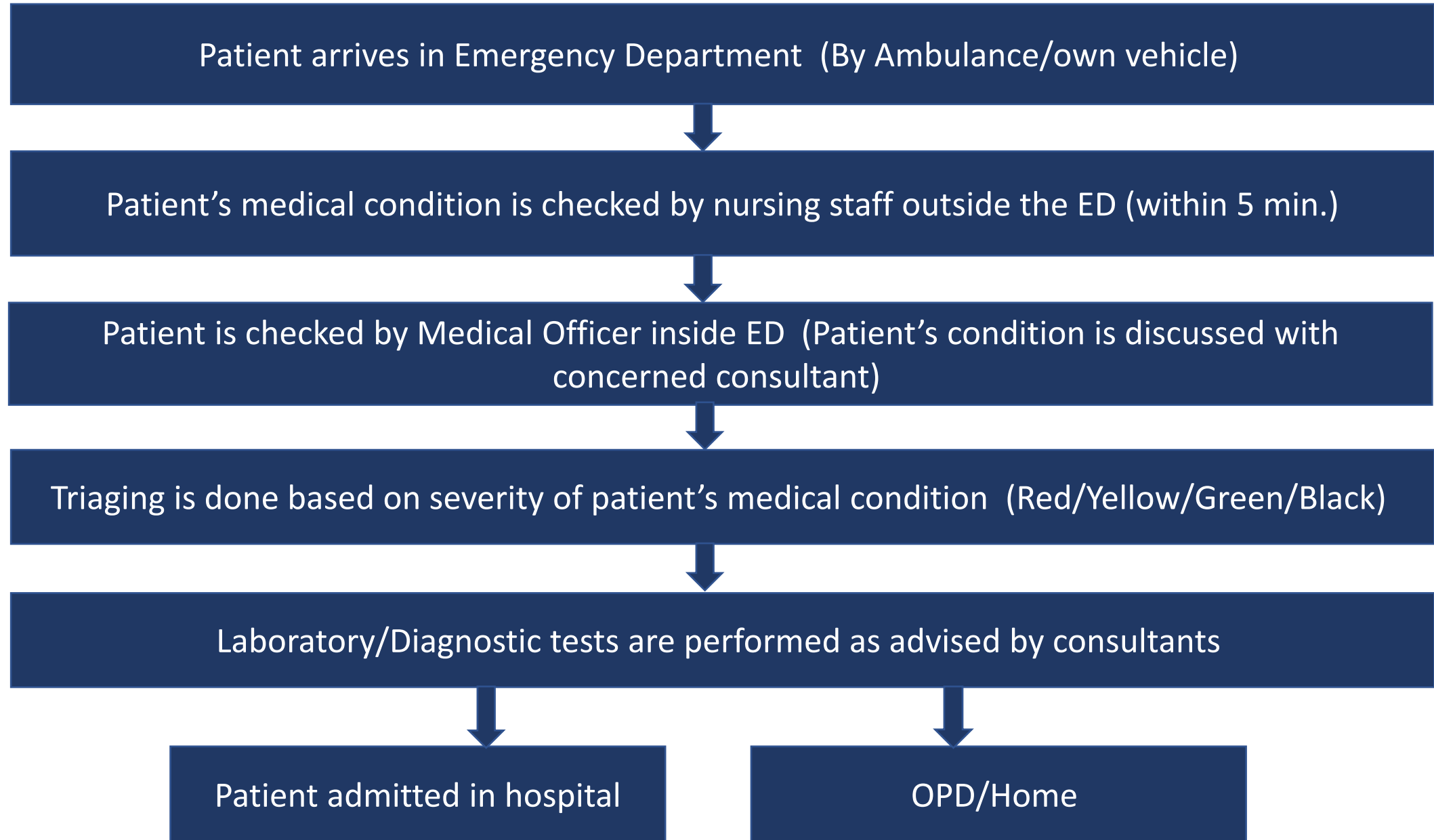
- OPD patients
- Brought dead patients

# Introduction

- Emergency Department is one of the most significant departments in the hospital.
- It can either make or mar the image of a hospital.
- Provision of prompt and efficient medical aid to ER patients will enhance patient satisfaction and also the probability of their conversion as 'In-patient'.
- As per studies, the hospital admissions through ED are higher in adults than paediatric population.
- Particularly, it is the patient's medical condition which influences hospital admission, but there can be other non-medical factors also.
- According to different studies, various reasons have been identified for admission refusal of ER patients. These may include financial incapability, preference for second opinion, wanting private consultant, unsatisfactory treatment services, lack of health insurance etc.



# EMERGENCY PROCESS OF NH



# REVIEW OF LITERATURE

| TITLE                                                                                                                                  | YEAR | AUTHOR                                                                                        | FINDINGS                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A qualitative study exploring the factors influencing admission to hospital from the emergency department</b>                       | 2017 | Ian Pope, Helen Burn, Sharif A Ismail, Tim Harris, David McCoy                                | There may be certain factors which may affect patient's decision to admit in the hospital. These factors may include waiting time, patient's social support, community follow up and even culture within ED. Some departmental factors like busyness, time of day and levels of senior support may also influence hospital admission.                        |
| <b>Factors affecting Hospital Admission of Non-critically Ill Patients coming to the Emergency Department: a Cross-sectional Study</b> | 2016 | Ashley E Lewis Hunter, Erica S Spatz, Steven L Bernstein, Marjorie S Rosenthal                | 51 % of hospitalizations were strongly or moderately influenced by one or more non-medical factors, including lack of information about baseline conditions (23 %); inappropriate approach to outpatient specialty care (14 %); need for a diagnostic testing or procedure (12 %); a recent ED visit (11 %); and insufficient access to primary care (10 %). |
| <b>Refusal of care within the Emergency department: Self reported reasons for leaving without completing treatment</b>                 | 2020 | Brenden Drerup<br>Dr. Catherine Marco, MD,<br>Department of Medicine, Wright State University | Maximum number of reported reasons was waiting time (23%), expectations not being met (23%), and having a negative interaction with ED staff (15%). Patients who left the ED without completion of treatment cited reasons including wait time, expectations not being met, and having a negative interaction with ED staff.                                 |



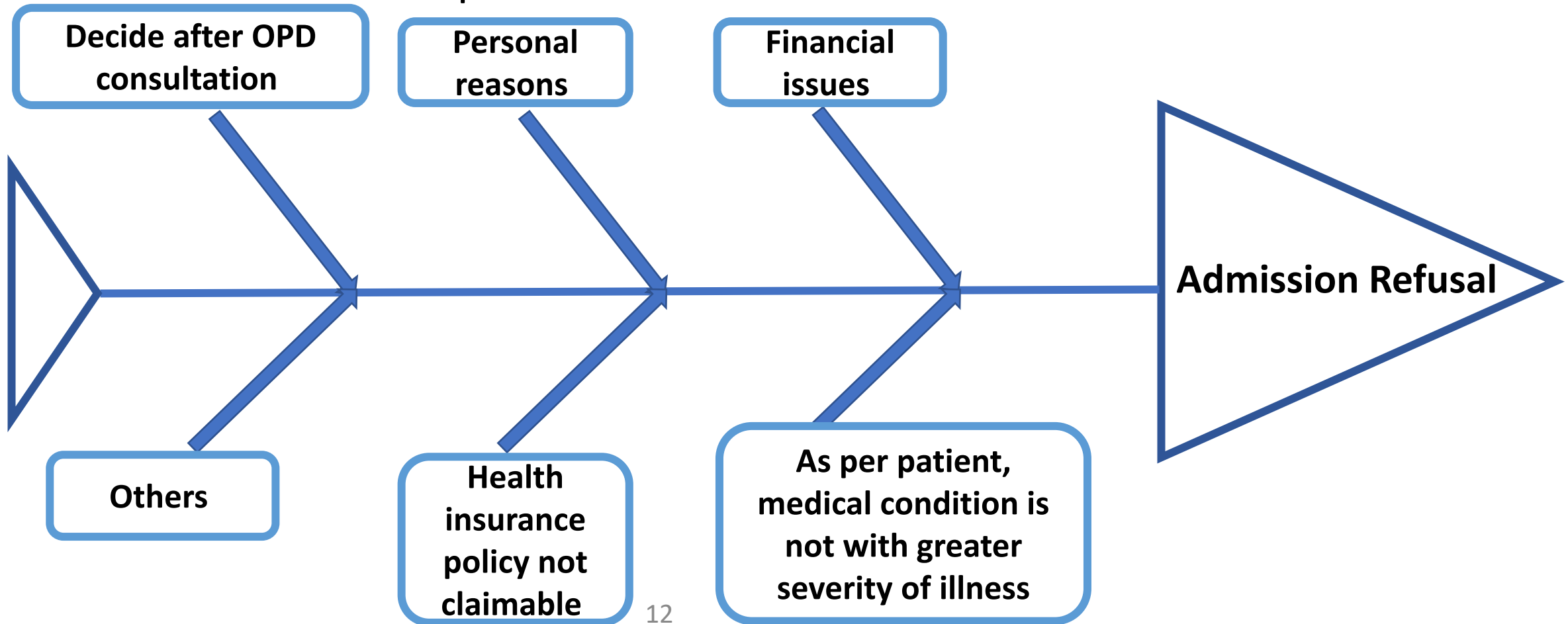
| TITLE                                                                                                                                    | YEAR | AUTHOR                                                                                                                                                                      | FINDINGS                                                                                                                                                                                                                                                                                           |
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| <b>Refusal of medical treatment within the paediatric emergency service: analysis of reasons and aspects</b>                             | 2014 | <u>Ramiz Coşkun Gündüz</u> ,<br><u>Halit Halil</u> ,<br><u>Cüneyt Gürsoy</u> ,<br><u>Atilla Çifci</u> ,<br><u>Seher Özgün</u> , <u>Tuğba Kodaman</u> , <u>Mehtap Sönmez</u> | The main reasons which were identified as the reasons for refusal were the restrictions regarding relatives staying with their children during hospital stay and admission to a different hospital                                                                                                 |
| <b>Against all advice: an analysis of out-of-hospital refusals of care</b>                                                               | 2003 | Stacey Knight 1, Lenora M Olson, Lawrence J Cook, N Clay Mann, Howard M Corneli, J Michael Dean                                                                             | Highest refusal of care was from patients of automobile crash, ranging from 8-11.7%. Hospitalization was greatest among children younger than 3 years and adults older than 64 years. Twenty-five adults died within every week of refusing EMS care, of whom 19 (76.0%) were older than 64 years. |
| <b>Inpatients awareness of admission causes and management plans of their clinical conditions at a tertiary hospital in South Africa</b> | 2010 | Langalibalele H Mabuza, Olufemi B Omole, Indiran Govender, John V Ndimande, Herman S Schoeman                                                                               | About half the respondents had global awareness of their admission reasons and management plans. Raising awareness of patients' clinical conditions should be a part of the healthcare practitioner-patient encounter.                                                                             |

| TITLE                                                                             | YEAR | AUTHOR                                                                                                       | FINDINGS                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------|------|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reasons for refusal of admission to intensive care and impact on mortality</b> | 2010 | Gaetano Iapichino, Davide Corbella, Cosetta Minelli, Gary H Mills                                            | Intensivists take care to avoid admitting patients considered not critical enough for ICU, while they do not consider age as an honest reason for refusing admission. Surgical patients are generally received at the expense of medical patients.                                                                                                                              |
| <b>Reasons for delay in inpatient admission at an emergency department</b>        | 2004 | Mohammad A Tashkandy, Zohair Jamil Gazzaz, Mian Farooq, Khalid O Dhafar                                      | Out of the admitted patients, 67% were delayed mainly because of the late advised admission. The major reason of delay was multiple consultations followed by file making process, critical care management, investigation done on the way towards & multiple assessments in several ED areas and lesser number were delayed due to poor response of patients to ED management. |
| <b>Low hospital admission rates for respiratory diseases in children</b>          | 2010 | Johannes Hjm Uijen 1, François G Schellevis, Patrick Je Bindels, Sten P Willemsen, Johannes C van der Wouden | Children within the general population with respiratory diseases (especially asthma) had very low hospital admission rates. In urban regions children were more frequently admitted because of respiratory morbidity.                                                                                                                                                           |

| TITLE                                                                                                                                        | YEAR | AUTHOR                                                                              | FINDINGS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Prevalence and trends of the adult patient population within a paediatric emergency department</b>                                        | 2012 | <u>Tara Rhine</u> , <u>Mike Gittelman</u> , <u>Nathan Timm</u>                      | It was found that visits of adult patients in Urban PED have increased to a certain extent during the past 5 years. During the 5-year study period, overall PED visits augmented by 9% whereas adult patient visits increased 29% . It is essential to train PED staff on how proper care need to be taken for adult patients.                                                                                                                                                                     |
| <b>Refusal of emergency medical care: An evaluation of patients who left without being seen, abscond , and left against medical guidance</b> | 2021 | Catherine A Marco , Morgan Bryant , Brock Landrum, Brenden Drerup , Mitchell Weeman | Out of the entire sample, thirty-eight percent of participants left against medical advice, 23%abscond, and 39% left without being seen by a healthcare provider. When comparing by groups, patients who left AMA were notably older than those that eloped or left without being seen ( $p < 0.001$ ). Among 68 patients interviewed by telephone, the majority of reasons for refusal of care included wait time (23%), unmet expectations (23%), and negative interactions with ED staff (15%). |

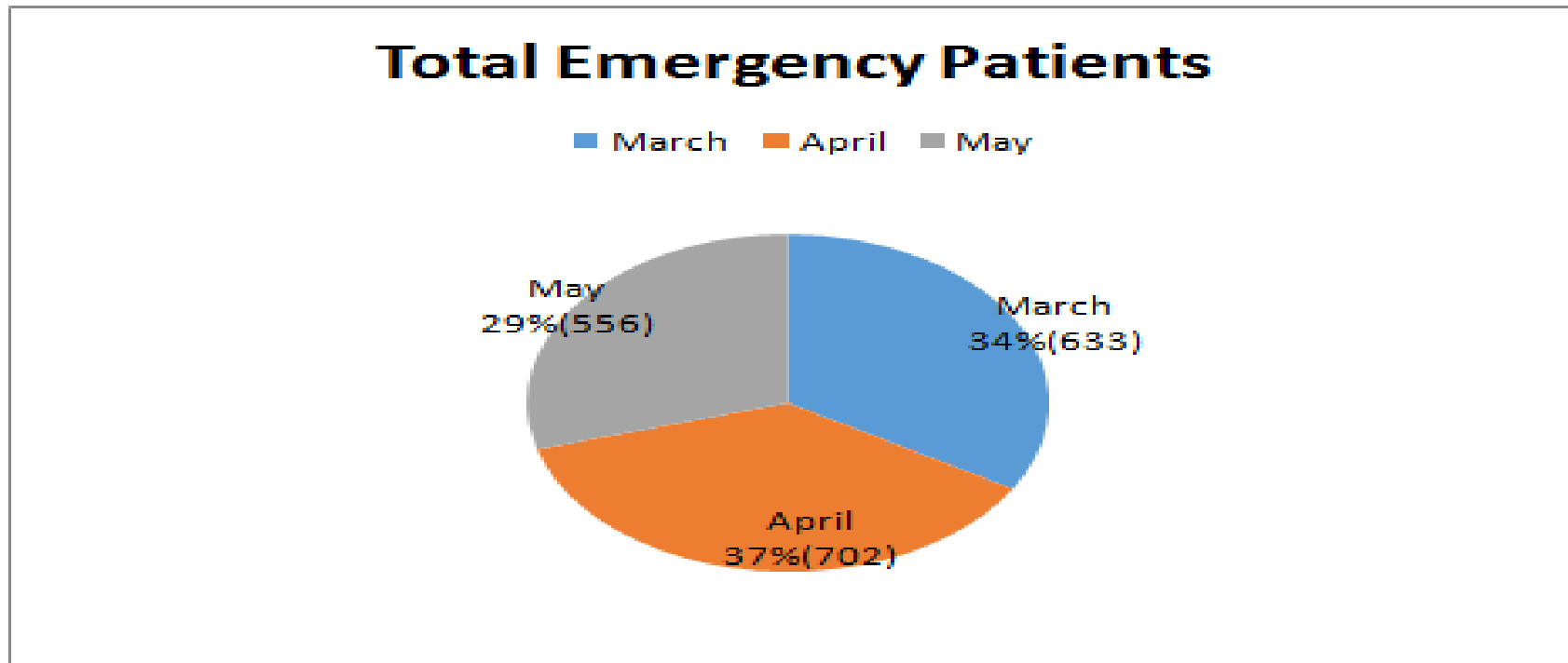
# TOOLS USED IN ANALYSIS

- Fish bone Diagram
- Pie-charts & Graphs

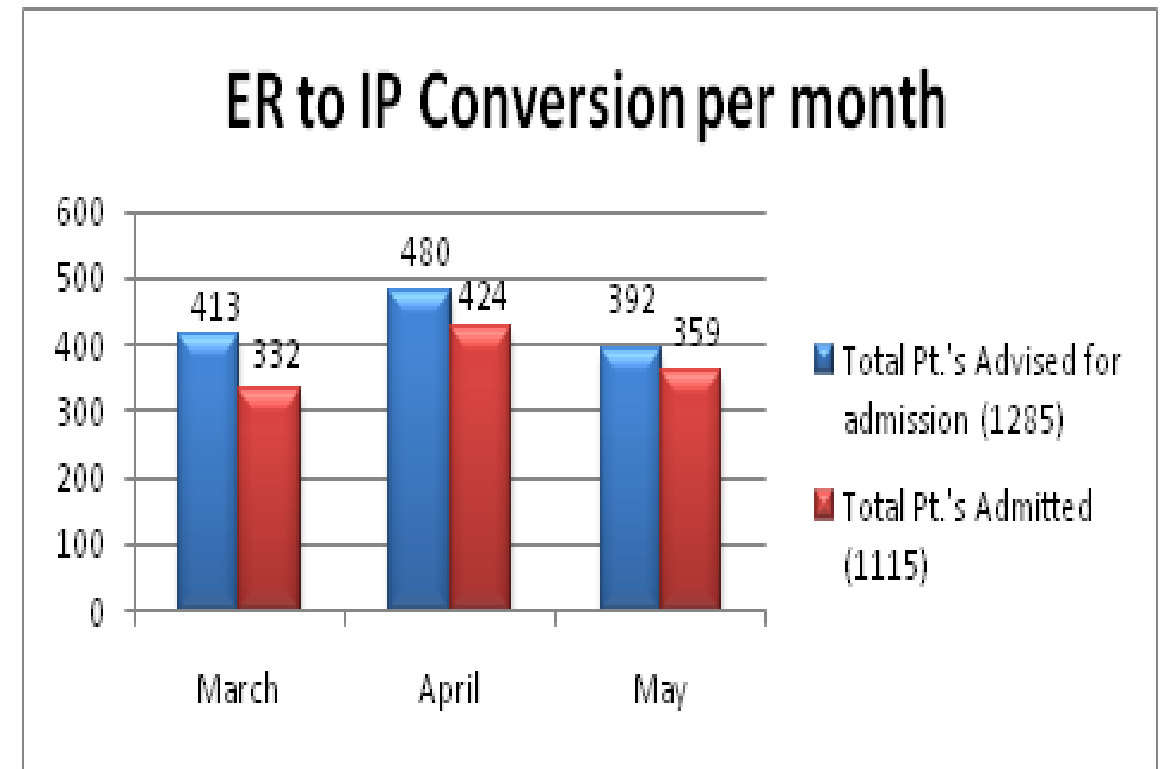
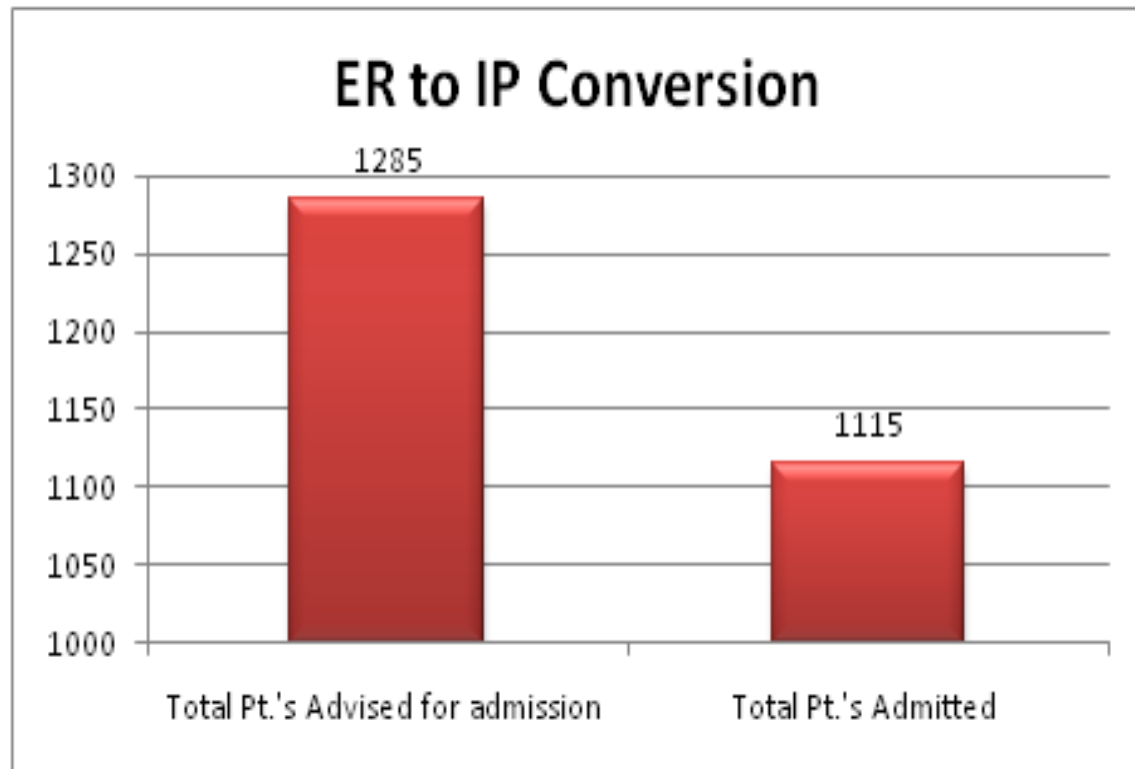


# RESULTS

| Months | ER Patients | Male | Female | Paediatric | Adult |
|--------|-------------|------|--------|------------|-------|
| March  | 633         | 376  | 257    | 56         | 577   |
| April  | 702         | 391  | 311    | 36         | 666   |
| May    | 556         | 348  | 208    | 26         | 530   |
| Total  | 1891        | 1115 | 776    | 118        | 1773  |

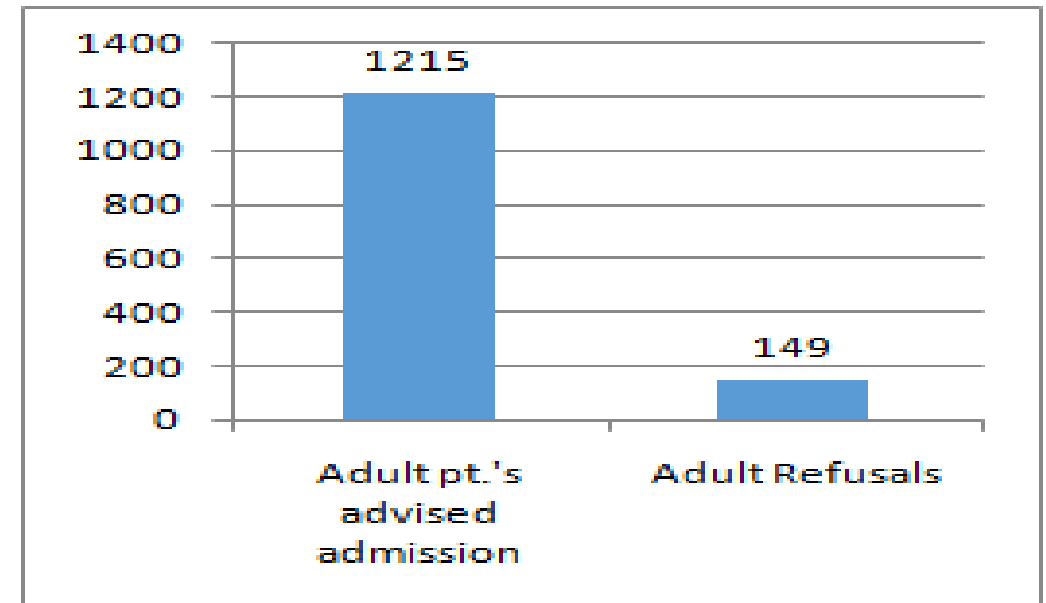
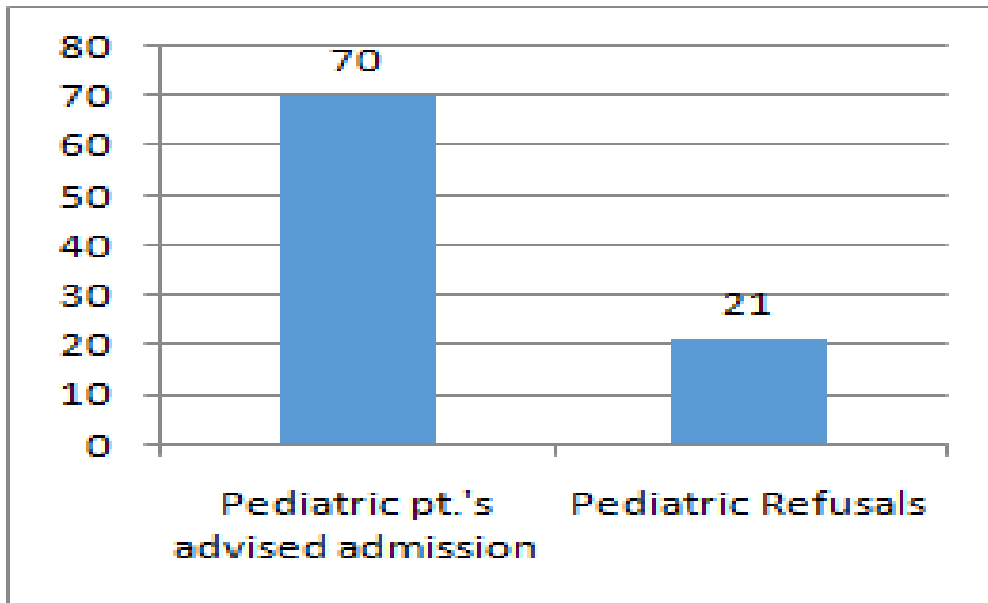
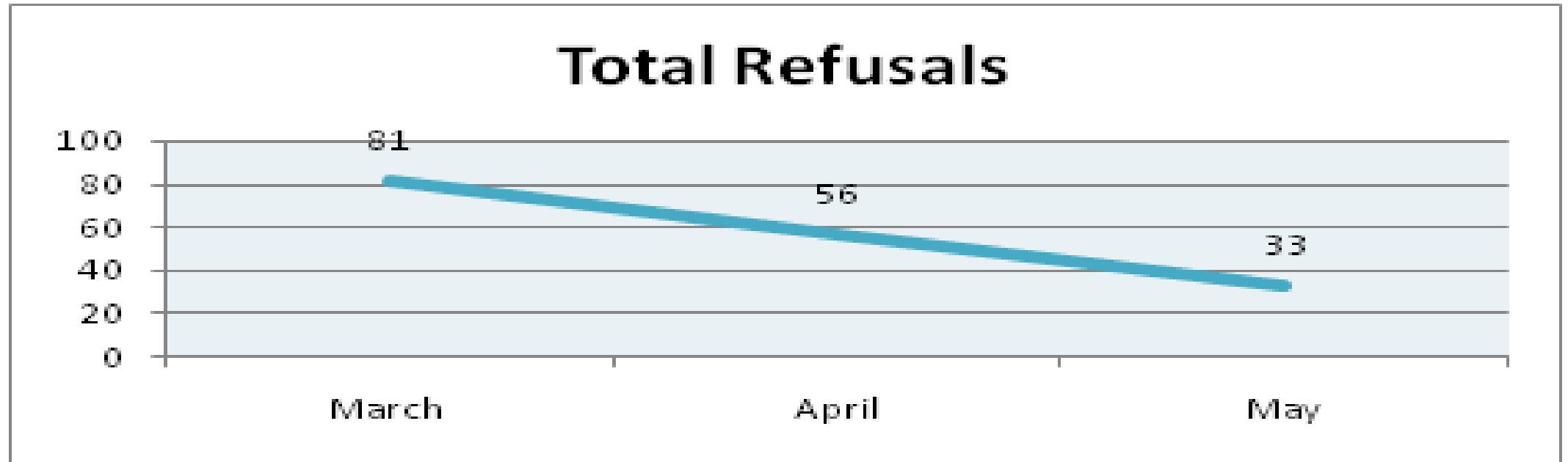


# ER to IP Conversion

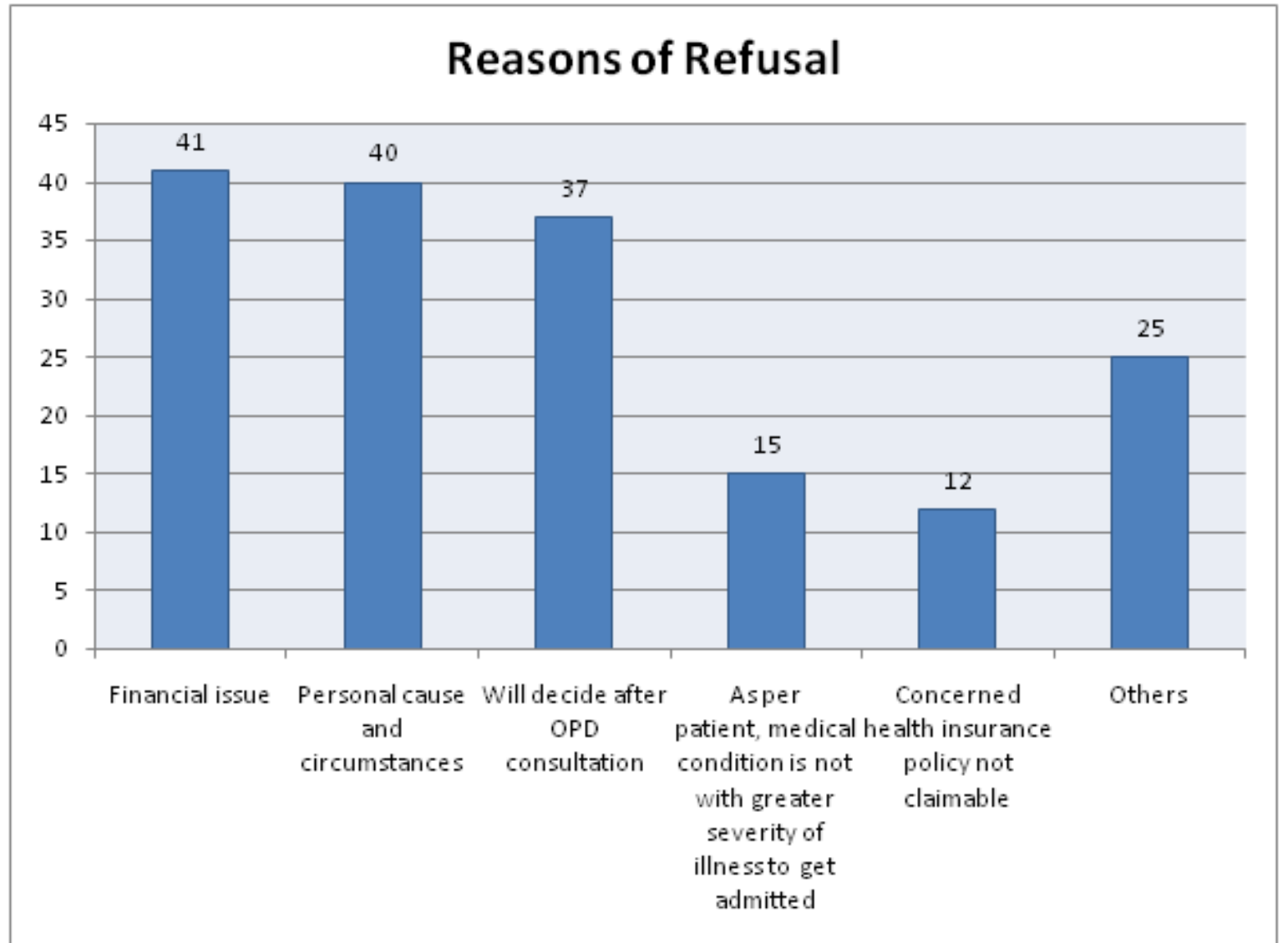




**Total Refusals=170**



# Reasons of Refusal



# 'OTHERS' Category

- Patient wants to take second opinion or wanting treatment in other hospital.
- Patient entitled to avail medical services from their own employer (Armed/Navy/Air forces/INR).
- Only reached in emergency, undergoing treatment with primary physician.
- Refusal from hospital due to unavailability of bed in COVID ICU.
- Not satisfied with treatment.
- Want to refer other metro city hospital for treatment.
- Due to COVID prevalence.

# Personal Causes

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Patient don't want to stay in hospital, going home under own responsibility.

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There is family function at home, so don't want to get admit.

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Patient not accompanied with any family member to take care of.

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Patient going out of station, so can't avail treatment at present.

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Patient preferred home care and treatment.

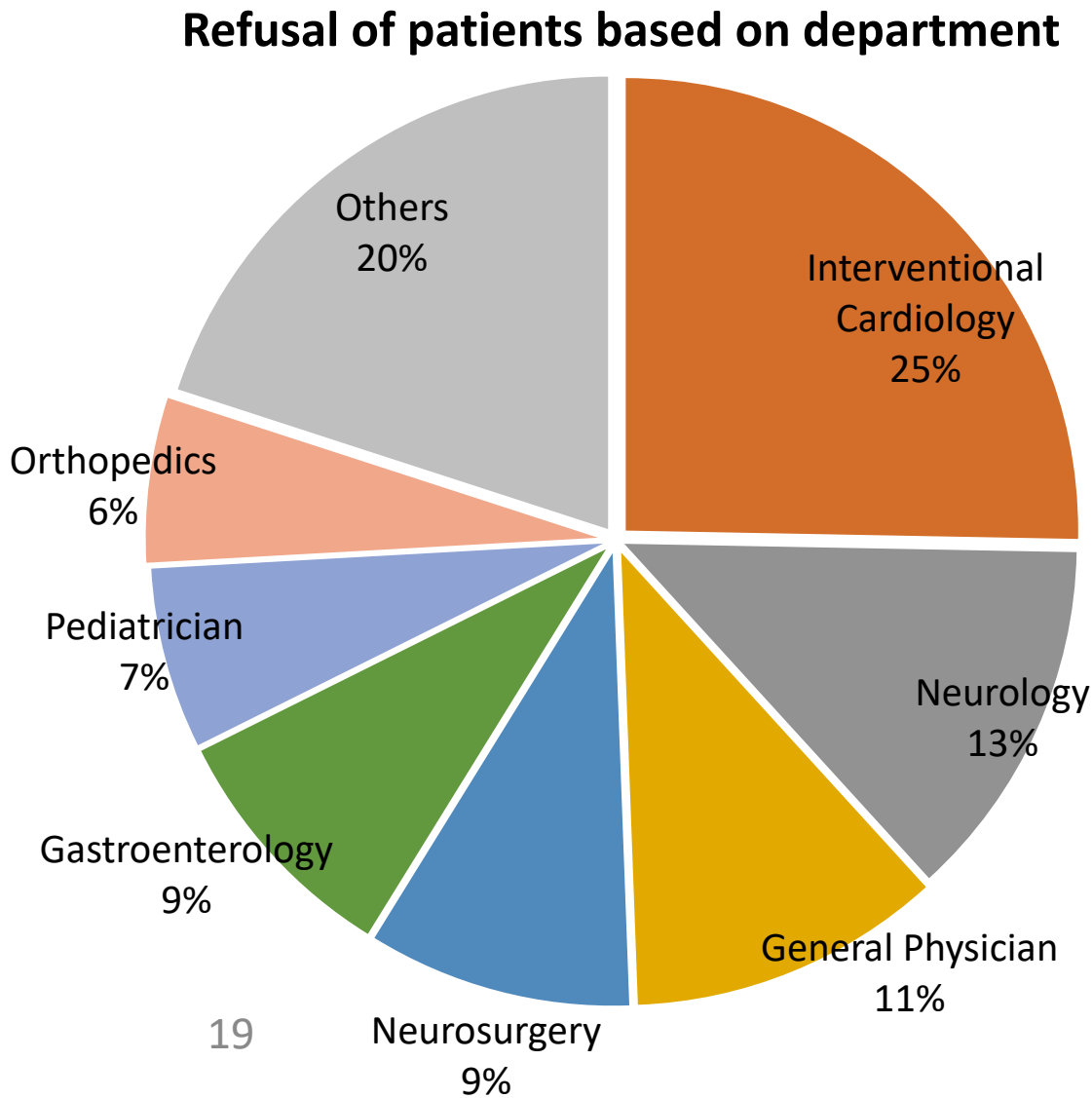
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Patient tested COVID +ve, want home quarantine (self isolation).

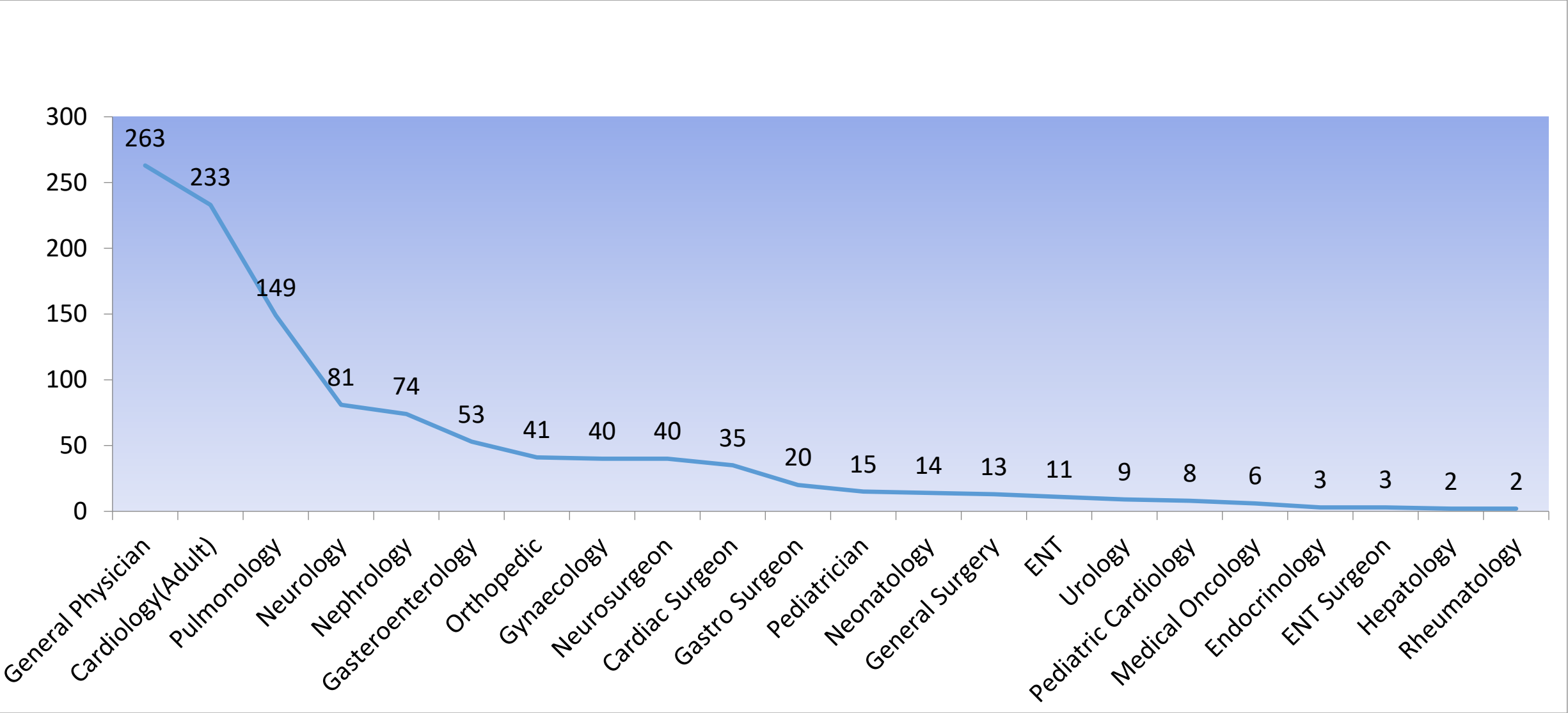
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# Department wise admission refusal

| Refusal of patients based on department |    |
|-----------------------------------------|----|
| Interventional Cardiology               | 43 |
| Neurology                               | 22 |
| General Physician                       | 19 |
| Neurosurgery                            | 16 |
| Gastroenterology                        | 15 |
| Paediatrician                           | 11 |
| Orthopaedics                            | 10 |
| Others                                  | 34 |

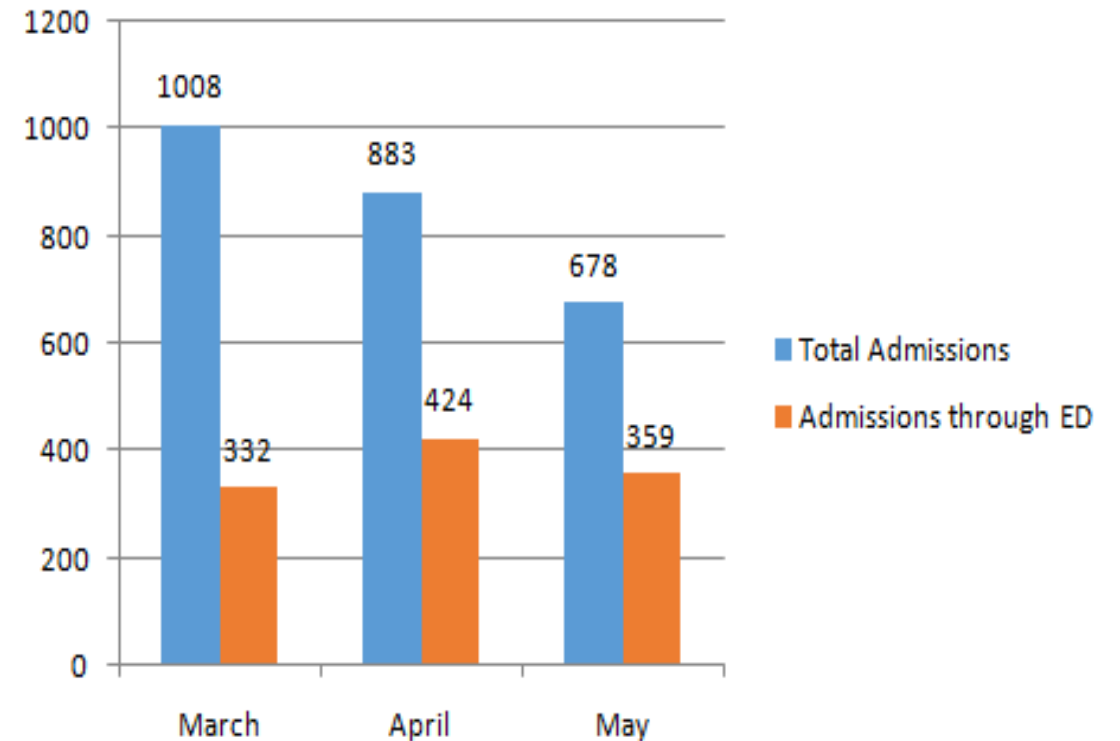
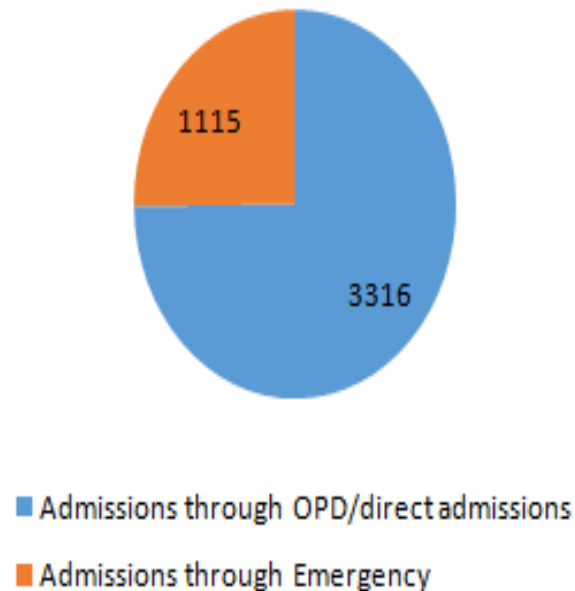


# Categorization of Admitted Pt.'s as per Department



# Total Hospital Admissions through Emergency Department

## Total Admissions in hospital



# CONCLUSION

- Considerable number of patients converted from ED into IPD.
- During the duration of three months, the conversion of ER patients into IPD was 86.7% and it has been continuously increasing from March to May.
- The number of admissions through ED is 25.16 % of total admissions (March-May)
- The total number of refusals inferred during the study was 170, of which financial issue and personal reasons were the rationale of majority of patients.(A small proportion of refusals were from hospital side as well due to unavailability of beds in COVID ICU)
- On differentiating the refusals based on age, 149 (87.64%) refusals were from adult population and 21 (12.35%) were paediatric refusals.
- On comparing the number of refusals based on different departments, majority refusals were under Interventional Cardiology (25%) followed by Neurology (13%) and Internal Medicine (11%).
- Increasing pattern of ED to IPD conversion from 'March to May' may be accredited to the fact that COVID patients were included in the study & less percentage of regular patients reached to hospital. In addition, continuous counselling done by ER staff & doctors and initiation of Free Ambulance services by hospital, has augmented the ER to IP conversions.



# RECOMMENDATIONS

Proper identification and counseling (financial & emotional) of patients at NH.

Continuous follow up for those patients who are denying admissions, saying they will get admit after OPD consultation.

Counseling those patients who are refusing admission due to their health insurance policy not claimable in the hospital.

Some discount could be offered to patients having affordability issues.

There should be a professional in ED. Also, consultant visit must be scheduled before admission in the hospital.

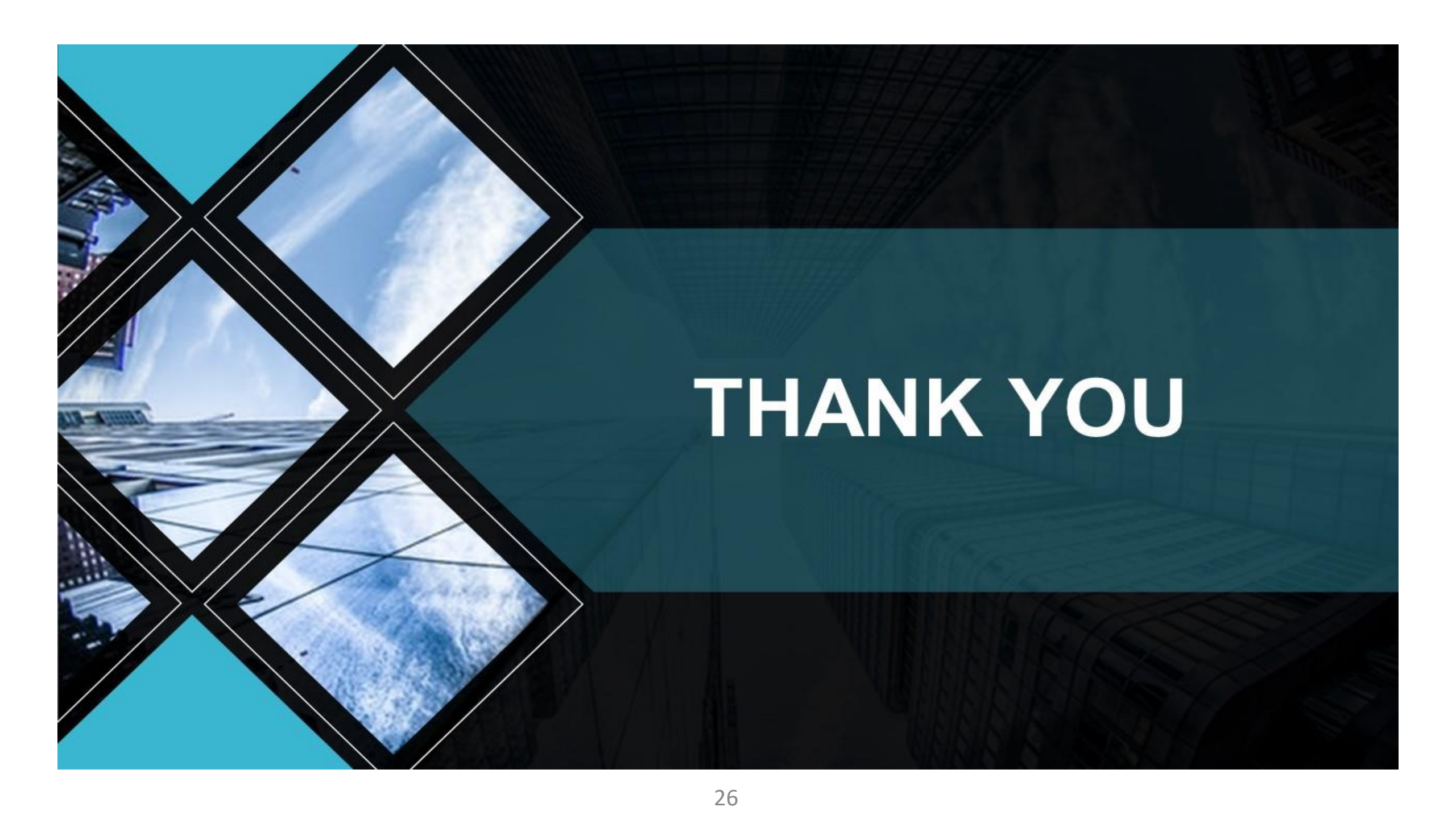
Video consultation can be arranged for patients discharging on Sunday or holidays. (Total 42 refusals on Sunday/holidays out of 170) .

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**THANK YOU**