

A Study on the Reasons for Drop-Out Patients for Diagnostic Tests at Thumbay Hospital, Ajman, United Arab Emirates

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About the Organization

- Thumbay Group, U.A.E is a diversified international business conglomerate with its headquarters in Dubai, United Arab Emirates. Established in the year 1998 with the name Thumbay Group founded by its founder, an Indian Entrepreneur, Mr. Thumbay Moideen.
- The group operates in following sectors: Education, Healthcare, Medical Research, Diagnostics, Retail Pharmacy, Health Communication, Wellness, Nutrition, Hospitality, Real Estate, Publishing Technology, Media, Events, Medical Tourism etc.
- Thumbay network of hospitals is one of the largest healthcare providers in the region. Thumbay laboratory is the largest CAP accredited lab in UAE.
- It offers a diverse group of diagnostics test, Which includes microbiology, molecular biology, histopathology and other immunological tests.

Introduction

- As per the World Bank report the UAE population will grow from 9.4 million people in mid-2017 to 11.055 million by 2030.
- To compensate and fulfill this demand of increasing population hospital revenue is one of the important factors.
- Patient care, patient footfall and patient experience can help a hospital improve its financial performance.
- This will boost hospital Diagnostics service utilization.

Problem Statement

- Patients who attended OPD and were prescribed diagnostics tests, all of them did not avail the diagnostic services.

Literature review

1. **Atsumi Minamisawa Jin Narumoto1 Isao Yokota:** Patient dropout from treatment can lead to a deterioration in clinical condition, thereby increasing the need for more intensive therapy that incurs substantial social and economic losses. The aim of this study was to identify factors related to psychiatric patient dropout at a university outpatient clinic in Japan.
2. **John McKellarT, John Kelly, Alex Harris:** The aim of this study was to use pretreatment and treatment factors to predict dropout from residential substance use disorder program and to examine how the treatment environment modifies the risk for dropout. Method: This study assessed 3649 male patients at entry to residential substance use disorder treatment and obtained information about their perceptions of the treatment environment.
3. **Debasish Basu, Abhishek Ghosh, Siddharth Sarkar, Bichitra Nanda Patra:** Dropout from substance use disorders treatment is associated with poor outcomes. Although many factors have been associated with an early dropout of patients, the reasons for dropping out of treatment prematurely remain poorly understood particularly in the Indian context. This study was aimed to study socio-demographic and clinical variables predicting initial dropout of patients attending a tertiary care de-addiction treatment centre in north India. Methods: Information was extracted from the records of consecutive newly registered patients from January 2011 to December 2014. The patients who did not come for follow up within 30 days of the first contact were defined as initial dropouts.

Literature review

4. **Leila Hoseinie 1, Zhaleh Gholami 1 , Behrang Shadloo 1:** To assess drop-out rates and associated reasons among patients at the Iranian National Center for Addiction Studies (INCAS) clinic. In a one-year period (April 2014 to March 2015), all patients with drug dependence who had been referred for treatment and attended for a first assessment were included in this study (N=242). Drop-out rates within the first three months was 62% (SE= 0.05) and 82.4% (SE=0.03) for opioids and stimulants dependence, respectively. Analyses were performed using SPSS (Version 21.0) and STATA software, (version 13.0). From the patients' perspective, motivational inconsistencies were considered as the main reason for not starting or leaving treatment. The findings of this study could give service providers a better grasp of drop-out rates and the associated reasons.
5. **Gullapalli N Rao:** Improving patient care has become a priority for all health care providers with the overall objective of achieving a high degree of patient satisfaction. Greater awareness among the public, increasing demand for better care, keener competition, more health care regulation, the rise in medical malpractice litigation, and concern about poor outcomes are factors that contribute to this change.
6. **Zahra Mirsepassi1,, Javad Alaghband Rad2 , Vandad Sharifi3:** The purpose of this study is to evaluate the dropout rate and identify the predictors of dropouts in outpatient clinics in Roozbeh Psychiatric Hospital. A questionnaire designed by expert psychiatrists was filled. The questionnaire consists of information collected from medical records of 400 patients who consulted outpatient clinics of Roozbeh Psychiatric Hospital. The data were analyzed using SPSS16. Results The total dropout rate was 57.8% (males: 33.5% and females: 24.3%). The dropout rates in adult and child and adolescent clinics were 58% and 43.8%, respectively. A total of 11% of total dropout rate was in patients under 18 years, 41.8% was in patients aged 18 to 65 years, and 5% was in patients aged 65 years and over. There were significant relationships between drop out rate and variables of patients' age, educational degrees, occupation, referral point, and type of diagnosis. However, no significant relationships were found between drop out rate and gender or marital status of the patients.

Objectives of the study

- To understand reasons for not availing recommended diagnostics tests by OPD patients at Thumbay Hospital, Ajman.
- To carry out root cause analysis (RCA); and to conduct Corrective and Preventive actions (CAPA) for enhancing use of diagnostics services at Thumbay hospital, Ajman.

Methodology

- The study was carried out at Gulf Medical University Laboratory” & Thumbay Hospital Ajman, United Arab Emirates.
- Reference period- 3 months (December 2017, January-February 2018) for secondary databased on the organizational records
- The study is descriptive in nature. All the OPD registered patients who have not availed prescribed tests at Thumbay Hospital Ajman were considered. Which includes Patient details like Name, Contact detail, Total number of test prescribed.
- A total of 24360 records were reviewed to estimate the drop out. Based on the overall drop rate and revenue impact. This study was decided to conduct.

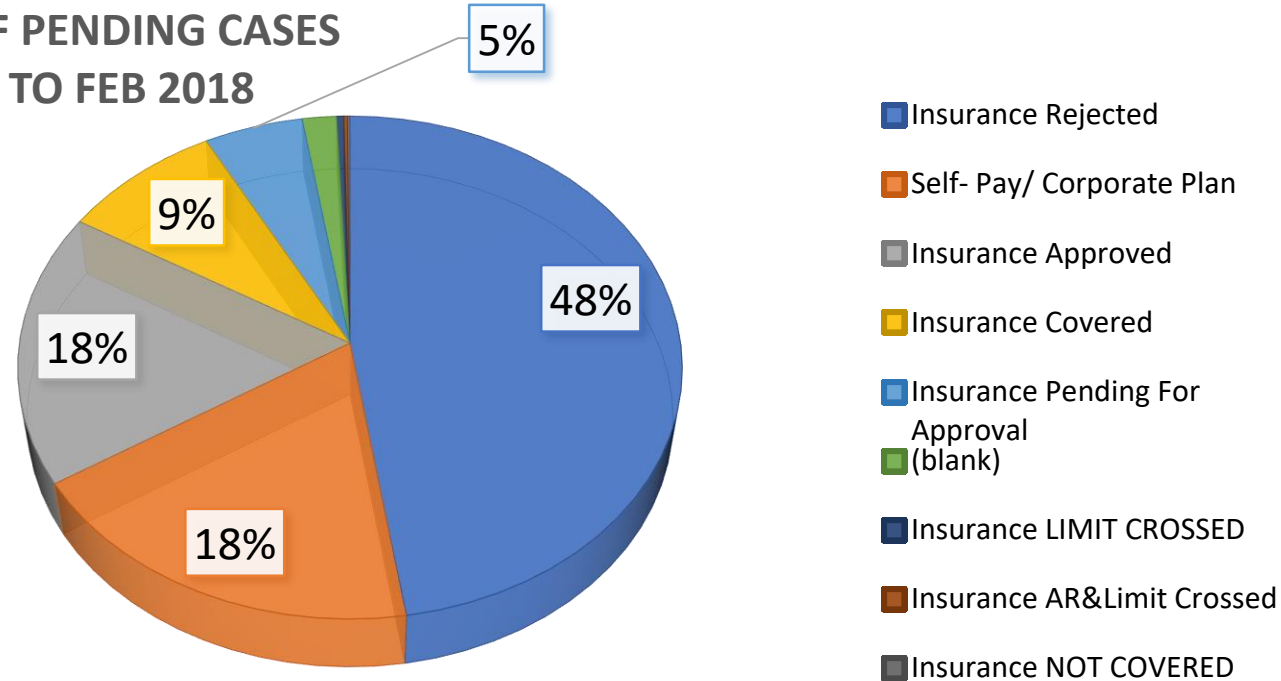
Methodology..

- During Feb-March, 2018 OPD registers were reviewed on daily basis to follow up the patients for their diagnostic if they could not complete it. A total of 703 patents were found dropped out.
- For follow up, telephonic interview method was used and if they did not pick up the phone, calls were made thrice and the response rate was 73%. The reasons for no response were: wrong number, out of range and not reachable.
- The interview schedule captured information on the following:
 - Whether the test is done at same or other place or not.
 - If not then what was the problem, When he/she will get the test done
 - Whether the test is approved under the Insurance or Not
 - Does he/she would like to avail home sample collection facility.
 - If not willing for the test, specify the reason?
- The results were shared with the management group for the further Brainstorming and corrective action.

Results

- Could not access the socio-demographic information

SNAPSHOT OF PENDING CASES
DEC 2017 TO FEB 2018

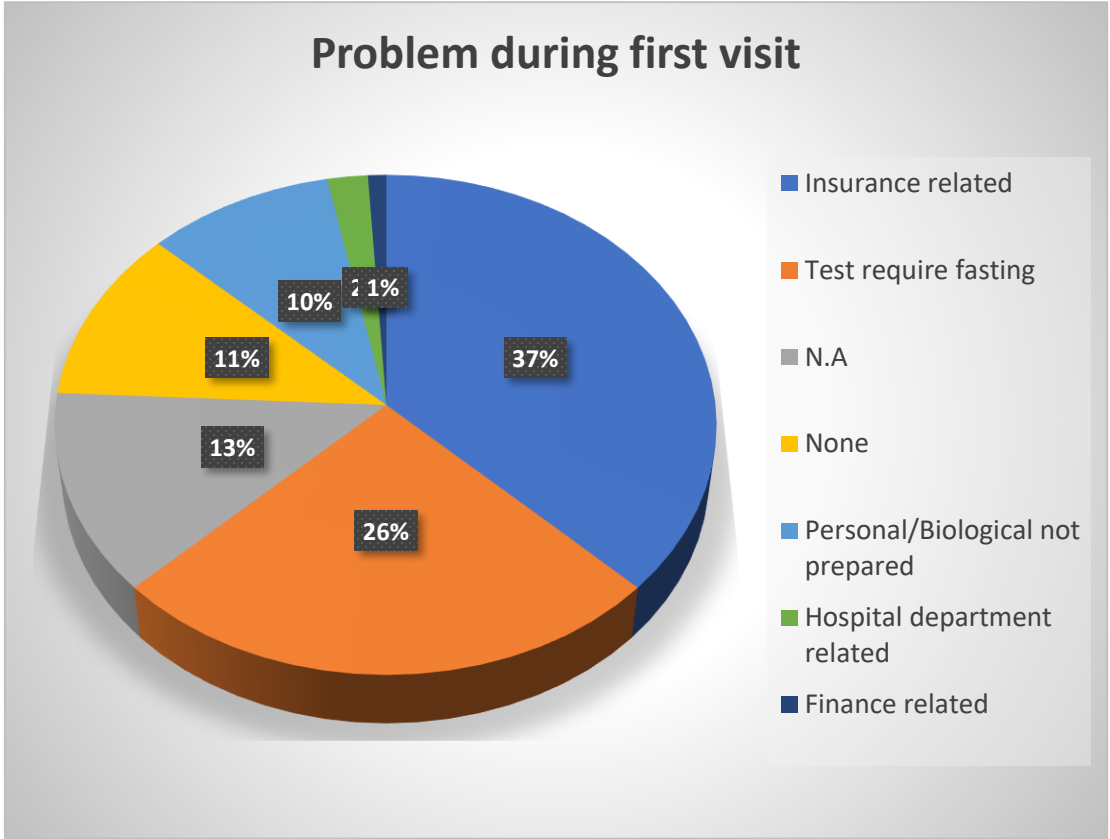


- Out of 516 patients who were contacted through telephonic interview, 192 (37%) of the patients had insurance related problems during their first visit to the hospital. Which includes Delay in insurance approval, no information update about the insurance approval, long waiting in insurance department.

Results

Per cent distribution of the respondents by drop out reasons

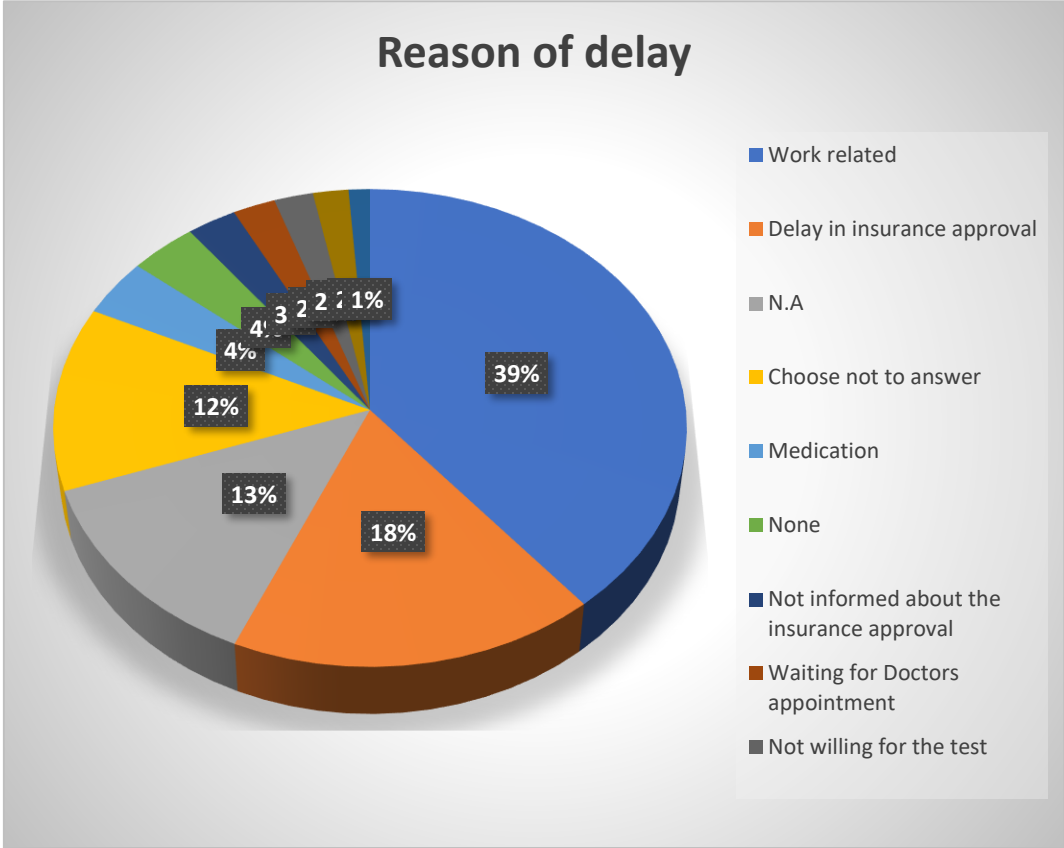
Reasons	No of Patients	Percentage
Insurance related	192	37
Test require fasting	132	26
No response	67	13
No specific reason	58	11
Personal/Biological not prepared	51	10
Hospital department related	11	2
Finance related	5	1



Results

- 132 (26%) of the patients postponed the test due to the test requirement. When these patients were further probed for the delay reasons (39%) of them had work related problems due to which they either postponed or canceled the prescribed test. (17%) of the patients delayed the test due to delay in the insurance approval of the test.

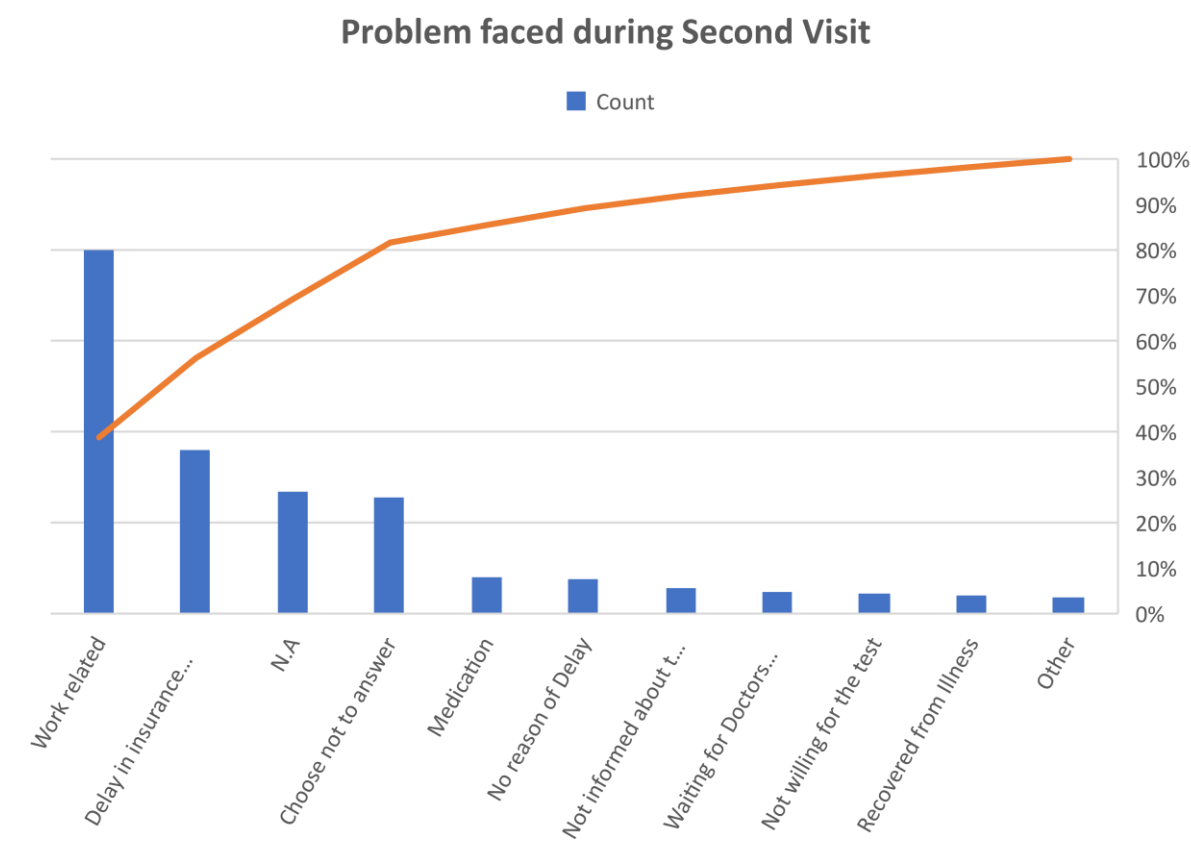
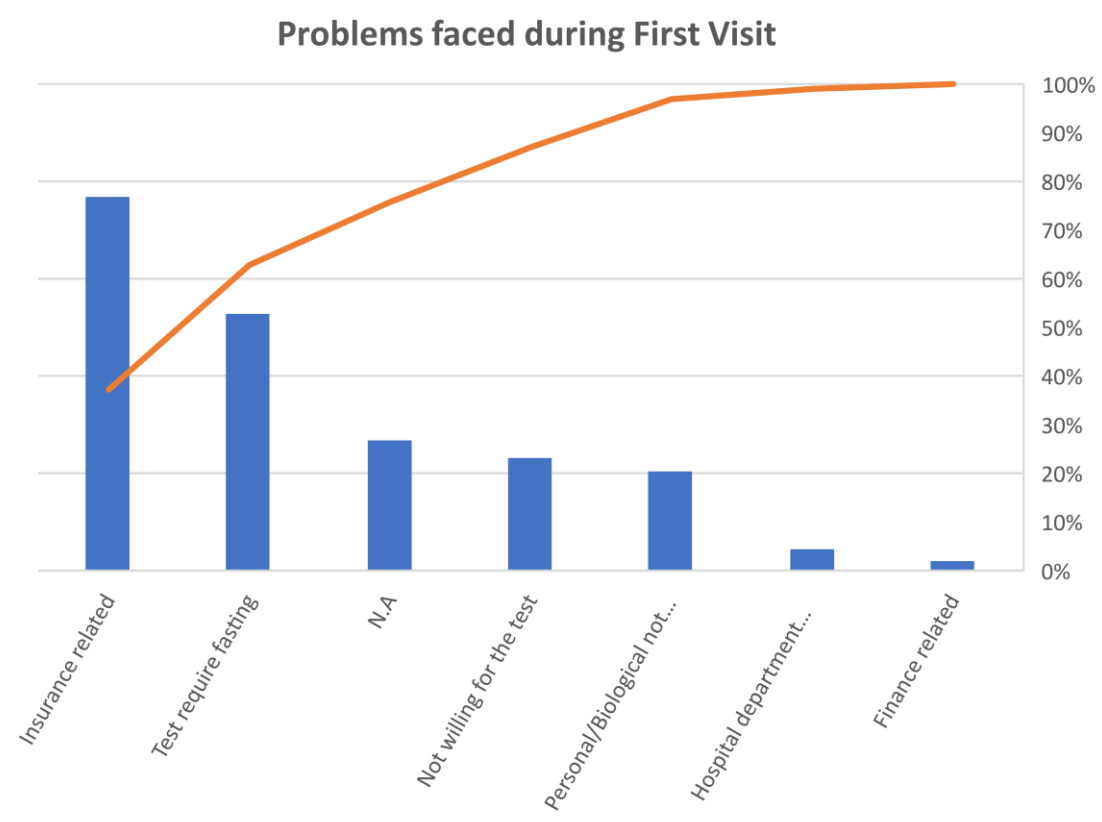
Reasons	No of Patients	Percentage
Work related	200	39%
Delay in insurance approval	90	17%
N.A	67	13%
Choose not to answer	64	12%
Medication	20	4%
None	19	4%
Not informed about the insurance approval	14	3%
Waiting for Doctors appointment	12	2%
Not willing for the test	11	2%
Recovered from Illness	10	2%
Other radiology test	6	1%
Not informed about insurance approval	2	0%



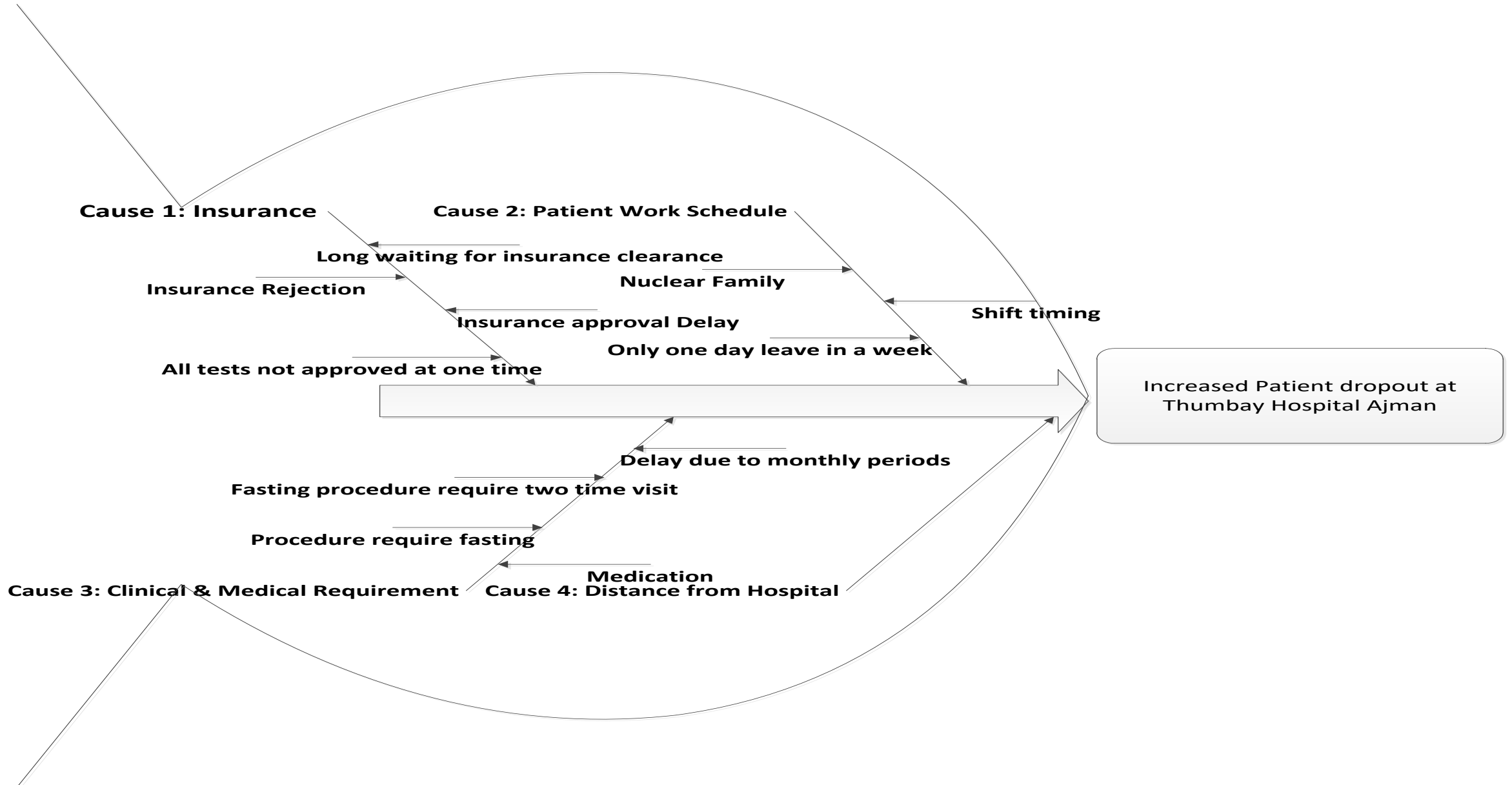
Results

- The overall dropout rate was higher among insurance approved and insurance rejected cases. It was found that in case of insurance approved cases there was 10% or 20% of copayment involved and the insurance rejected cases there were some high cost tests like Vitamin D test, Molecular diagnostics test and prenatal screening test which were directly rejected by the insurance company so patients avoided those high cost tests.

DATA ANALYSIS- Pareto Chart



Data analysis : Fishbone



CAPA

Sl No	Category	CAPA	Call Centre	Home Collection
1	Insurance Rejected	1. Analysis of reasons of Pre Billing Rejection on a weekly basis by Insurance dept and submission of report to COO Thumbay Labs & Individual Facility COO.		
		2. Necessary mechanism to be put in place to reduce the pre billing rejections.		
		3.Reach out to rejected patients and offer discounted rate as approved by management	Y	Y
2	Self- Pay	Reach out to self pay patients and offer discounted rate as approved by management.	Y	Y
3	Insurance Approved	Reach out to patients and convince them to come to the respective facility, offer home collection if required	y	y
4	Insurance Covered	1. Process review by individual hospital facility and do necessary modifications to ensure that the cases which are covered and can be converted to immediate billing shall not go out of hospital without giving sample .	Y	Y
		2. In case sample is not collected on same day then reach out to the patients and convince them to come to the respective facility, offer home collection if required		
5	Insurance Pending For Approval	1. Analysis of cases on a day to day basis and alert to be generated to Hospital insurance approval team where any case is in pending stage for more than 48 Hrs by Hospital insurance dept. 2. Any case where status exceeds 72 hrs and the case is pending for approval an alert to be sent to COO Thumbay Labs & Individual Facility COO. 3. TAT for approval to be monitored by insurance dept and a report need to be submitted for the same		
6	Miscellaneous	To be considered in second phase		

Discussion

- Patient dropout study was done in various healthcare setting where the drop out study was carried out in case of clinical setting or long term patient treatment like cancer treatment or psychiatric treatments.
- Patient dropout in relation to Insurance has not been reported in any of the literature till date. This study is first of its kind in nature.
- This study directly reflects the financial impact on the hospital.

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Thank you