

PROCESS IMPROVEMENT OF PREVENTIVE HEALTH CHECKUPS



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AGENDA

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INTRODUCTION

- Health is defined as a state of complete physical psychological and mental well-being and not merely the absence of any disease (WHO). It has become a fact that disease attacks human beings regardless of age, sex, culture, occupation and other additional factors. Hence, it is always better to check the status of health even if one is in normal health.
- **What is Health Checkup?**
- A Health Checkup comprises of a series of tests that are designed to check if you are on the precise health track. The basic goal of a health checkup is to discover the hidden disease in the body, prevent it from building and decrease its effect on body. By taking up consistent health checkups, you are increasing your lifespan by improving your health and preventing it from deteriorating.
- Some of the benefits of health checkup are:
 - **1. Prevention is better than cure**
 - **2. Cut healthcare costs**
 - **3. Stress related Diseases**
 - **4. Makes you more aware about your Health**



THE OTHER SIDE OF MEDICAL HEALTH CHECKUP:

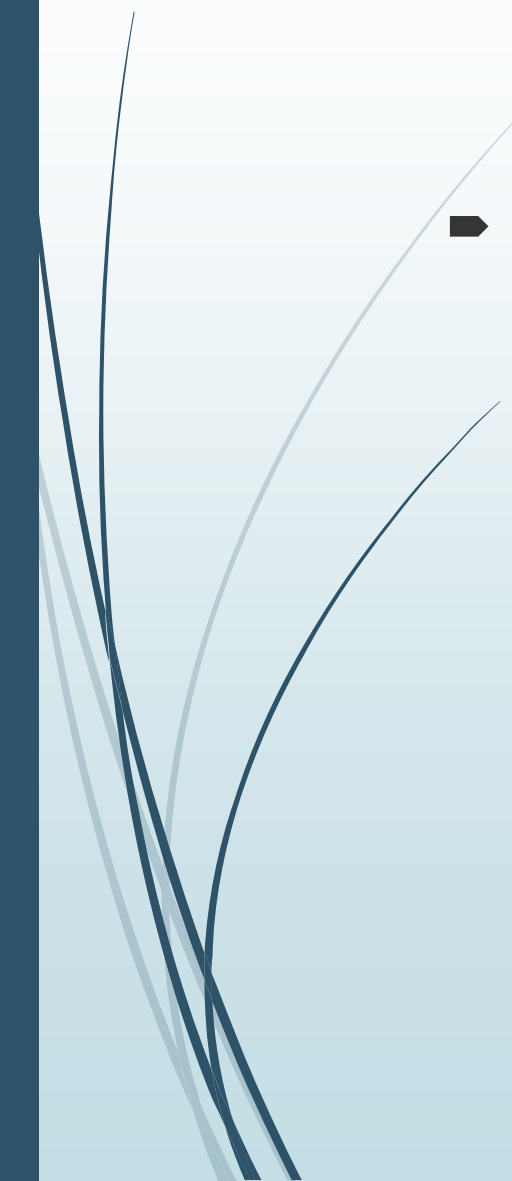
- While we cannot be certain that all health checks lead to benefit, as we know that all medical interventions can lead to harm. Possible troubles from health checks are over diagnosis, injury or distress or from invasive follow-up tests, over treatment, distress due to false positive test results, false reassurance due to false negative test results, possible addition of adverse health behaviors due to negative check results, adverse psychosocial effects due to labeling, and difficulties with getting the insurance.
- But, we can leave those arguments aside for the moment; because it is a real fact that preventive health check-ups help in catching maladies very early. It is always better to check the health condition even if one is in normal health, for anyone who is over 35 years of age.

LITERATURE REVIEW:

- An article “Knowledge, Attitude and Practice of Medical checkup” (2008) given by The Department of Health Disease states that prevention is now recognized as a superior strategy to decrease the morbidity and mortality of different types of diseases.
- Honey S, Bryant L, Murray J, Hill K and House A. (2013) (5) suggests that support for patient lifestyle change could help to reduce health inequalities and that the attitudes of healthcare professionals can influence the way in which that support is given.
- **Breast Cancer-** The Indian Scenario (2016) given by the Health Checkup Knowledge center stated that the Breast Cancer is the most Common cancer among women in India and accounts for 27% of all cancer in women. In urban areas, 1 in 22 women develops breast cancer during her lifetime. 1.45 lakhs of fresh cases diagnosed every year in India



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- Dorairaj Prabhakaran et.al (2016), stated that Premature mortality in terms of years of life lost because of Cardiovascular diseases in India increased by 59%, from 23.2 million (1990) to 37 million (2010).
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OBJECTIVES

To optimize the time spent in Preventive Health Checkup department

To analyze the gaps in the process flow of Preventive Health Checkup department.

To analyze the trend of health checkup department from Nov-2016 to Apr-2017

RESEARCH METHODOLOGY

- **DURATION OF STUDY**

- Feb 13th to May 13th

- **AREA OF STUDY:**

- Medical Health Checkup Department

- **SAMPLE SIZE:**

- 120

- **INCLUSION CRITERIA:**

- Customers who are healthy and come for health checkup alone and the customers from the companies tied up with Shalby hospitals for health checkup

- **EXCLUSION CRITERIA:**

- Inpatients

- **SAMPLING METHOD:**

- Convenience Sampling

- **TECHNIQUE OF DATA COLLECTION:**

- I will be taking TAT as well as total cycle time of each process in different health checkup packages for 120 samples. Process improvement is to carry out by applying Process Mapping and the time taken in the completion of the health-check process from the time of Billing till last consultation.



PROCESS MAPPING:

- Process mapping is “A pictorial representation of the sequence of actions that comprise a process”

PURPOSE OF PROCESS MAPPING:

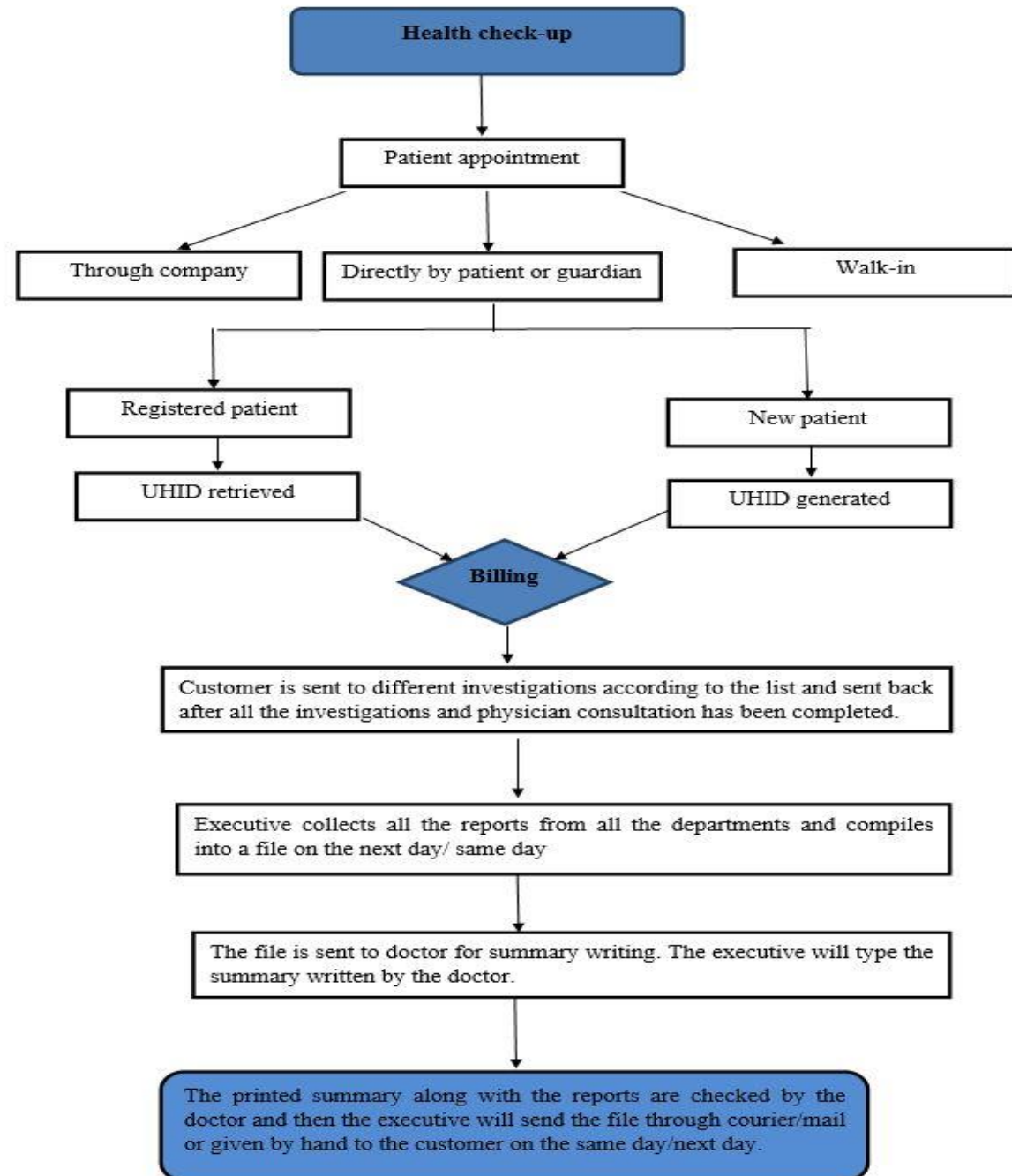
- The idea of process mapping is for better understanding. It involves the gathering and organizing of information about different activities and displaying them so that they can be improved and questioned by knowledgeable people. Process maps help in understanding by abstracting, by using visual charting symbols constantly and masking unnecessary details.



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- **Process maps are used to:**
- Document processes
 - ❖ Describe in detail and understand about the work which is done.
 - ❖ Provide a reference to discuss how things are done.
- Analyze and improve the processes
 - ❖ Generate ideas for upgrading
 - ❖ Identify areas of re-work and complexity
 - ❖ Demonstrate process improvements

- The process mapping is depicted with the aid of a work flow diagram to bring forth a clear understanding parallel or series of processes.



FINDINGS:

Average health check-ups per day -13

Average corporate health check-ups-10

Average self paying health check-ups-2

Average OPD per day - 27

➤ OP registration needs - 3 min

➤ Posting needs – 3 to 4 min

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Average health checkups – 13

Average OP registration time for 13 health checkups- $13 \times 3 = 39$ min

Average time taken for posting is = 40 min to 52 min

Average registration time for 27 OPD = 1 hour 11 min

2 hour 40 minutes to 3 hours

THIS SHOWS THAT POSTING CAN BE DONE PRIOR TO 12'O'CLOCK AT ANY CIRCUMSTANCES

BUT IN SOME CASES, LIKE WHEN NUMBER OF HEALTH CHECKUPS and OPD ARE MORE; For example 23

OP registration time -69 min

Time taken for posting -69-92 min

Time taken for OP registration- 69 min

Total time Around 4 hours



Example of an improper process flow:

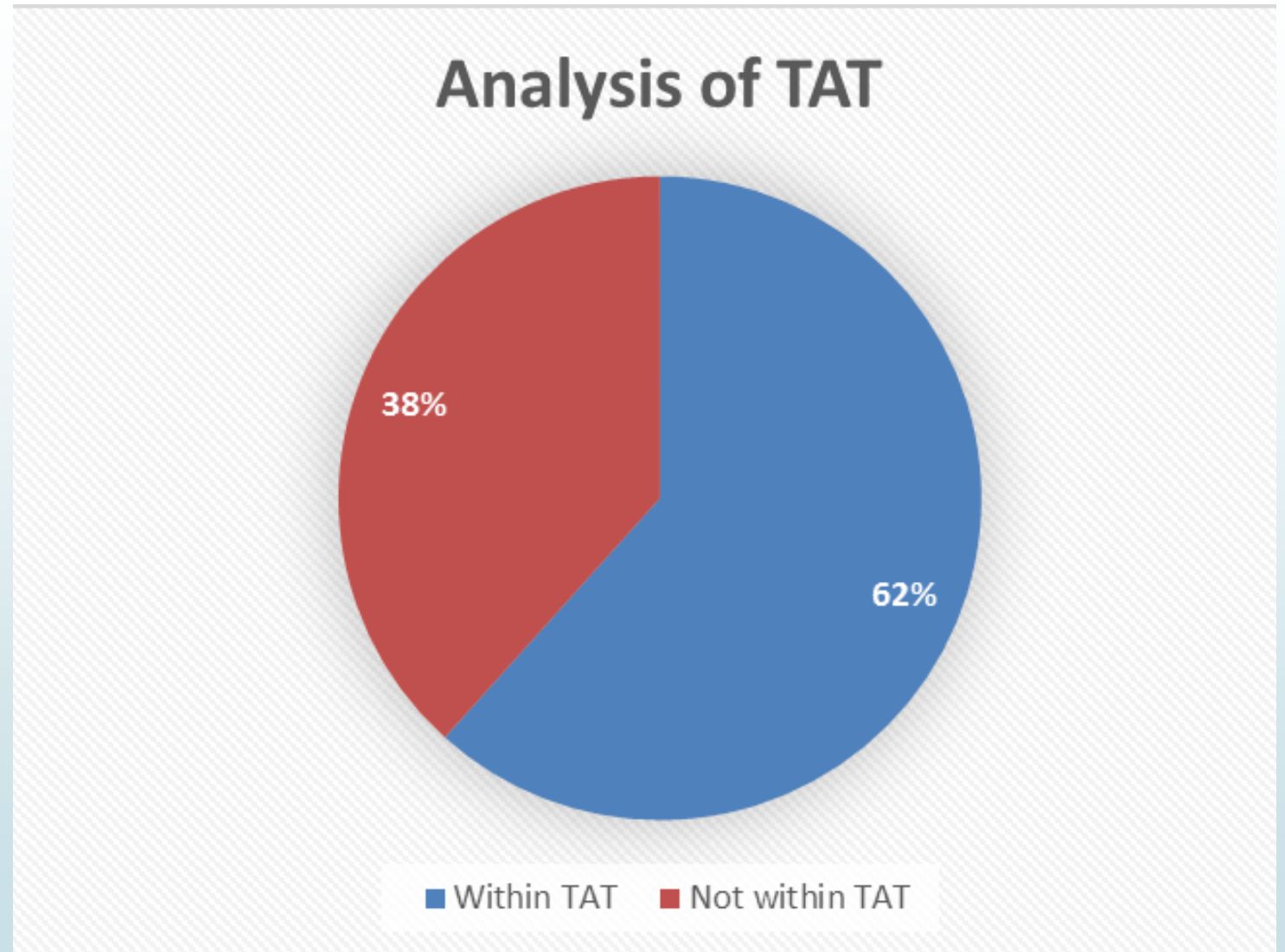
- 8:40am- patient entry
- 9:00am – op registration done
- 9:15am-sent for blood sample collection and given water bottle for drinking for the test of ultrasonography
- 9:30-ECG
- 9:40-x-ray **PATIENT WAITED FOR 25 MIN TO FEEL THE BLADDER FULL**
- 10:05-patient went for Sonography
- 10:30-Sonography done and patient sent for breakfast

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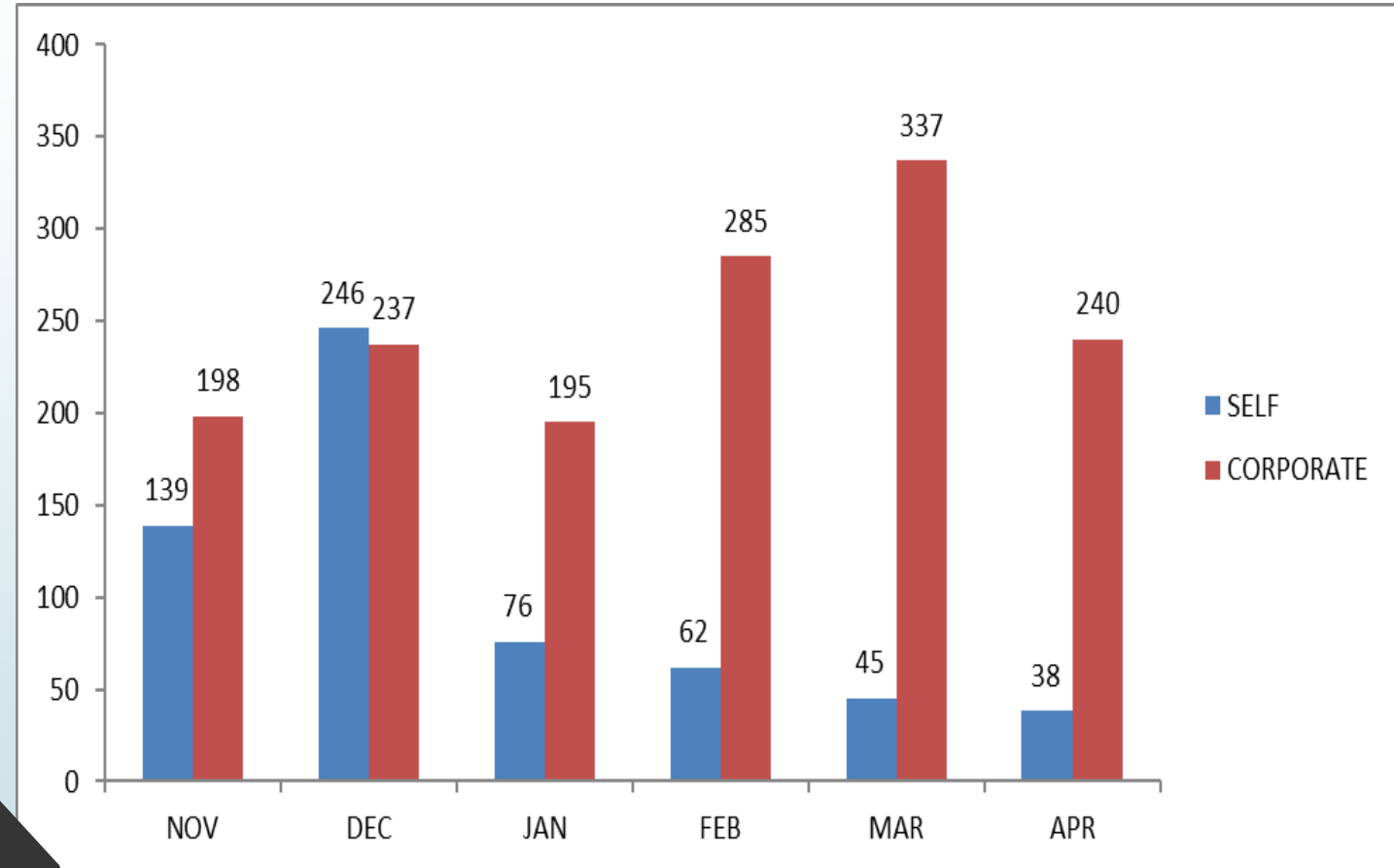
- 11:00-PATIENT SENT FOR CONSULTATION EVENTHOUGH THERE ARE 3 PATIENTS IN QUEUE.
- 11:25-consultation done
- 11:30 to 11:50-Echo done and sent for BMD.BUT HE IS THE FIRST PATIENT IN BMD
- 12:00-BMD done
- 12:00to 1:10-dental, Opthomology, Dermatology consultation done
- 2:15-patient came after lunch for getting consultation with reference doctors and waited till 3:00 as **THERE IS NOBODY TO INFORM HIM WHERE TO GO FOR THE NEXT DEPARTMENT. FROM PATIENT ENTRY TO THE TIME THEY HAVE GIVEN WATER BOTTLE IT TOOK AROUND 35MIN.BUT IF THEY HAVE GIVEN WATER BOTTLE ON THE TIME OF PATIENT ENTRY THE WAITING PERIOD OF 25MIN CAN BE AVOIDED.IF THE PATIENT IS SENT FOR BMD RATHER THAN FOR CONSULTATION, 25 MIN OF WAITING PERIOD CAN BE AVOIDED AS HE IS THE FIRST PATIENT IN BMD.**
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RESULTS

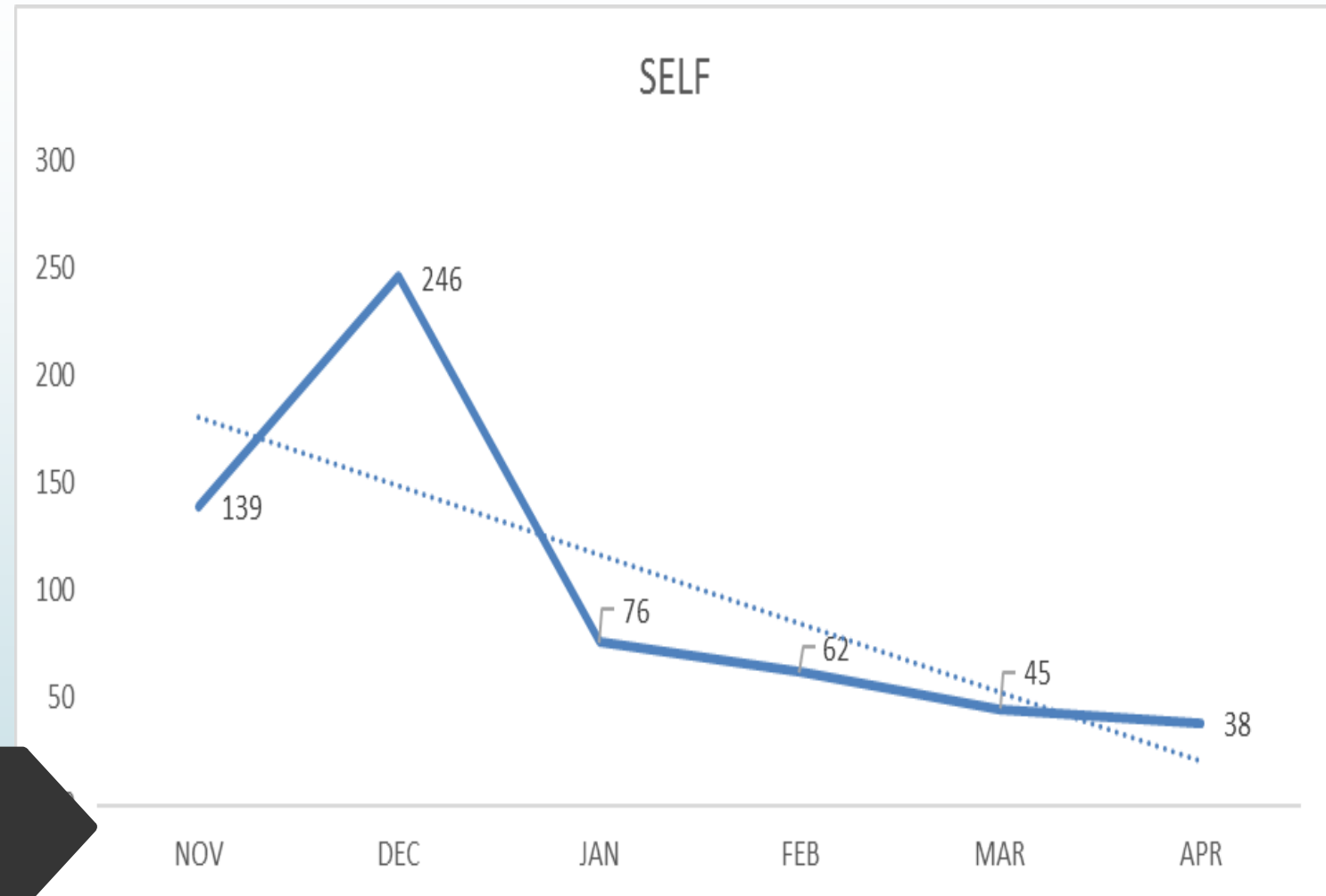
- 62% of patients from the whole sample have completed their investigations of Preventive Health Check-up within TAT.
- 38% of patients from the whole sample didn't completed their investigations of Preventive Health Check-up within TAT.



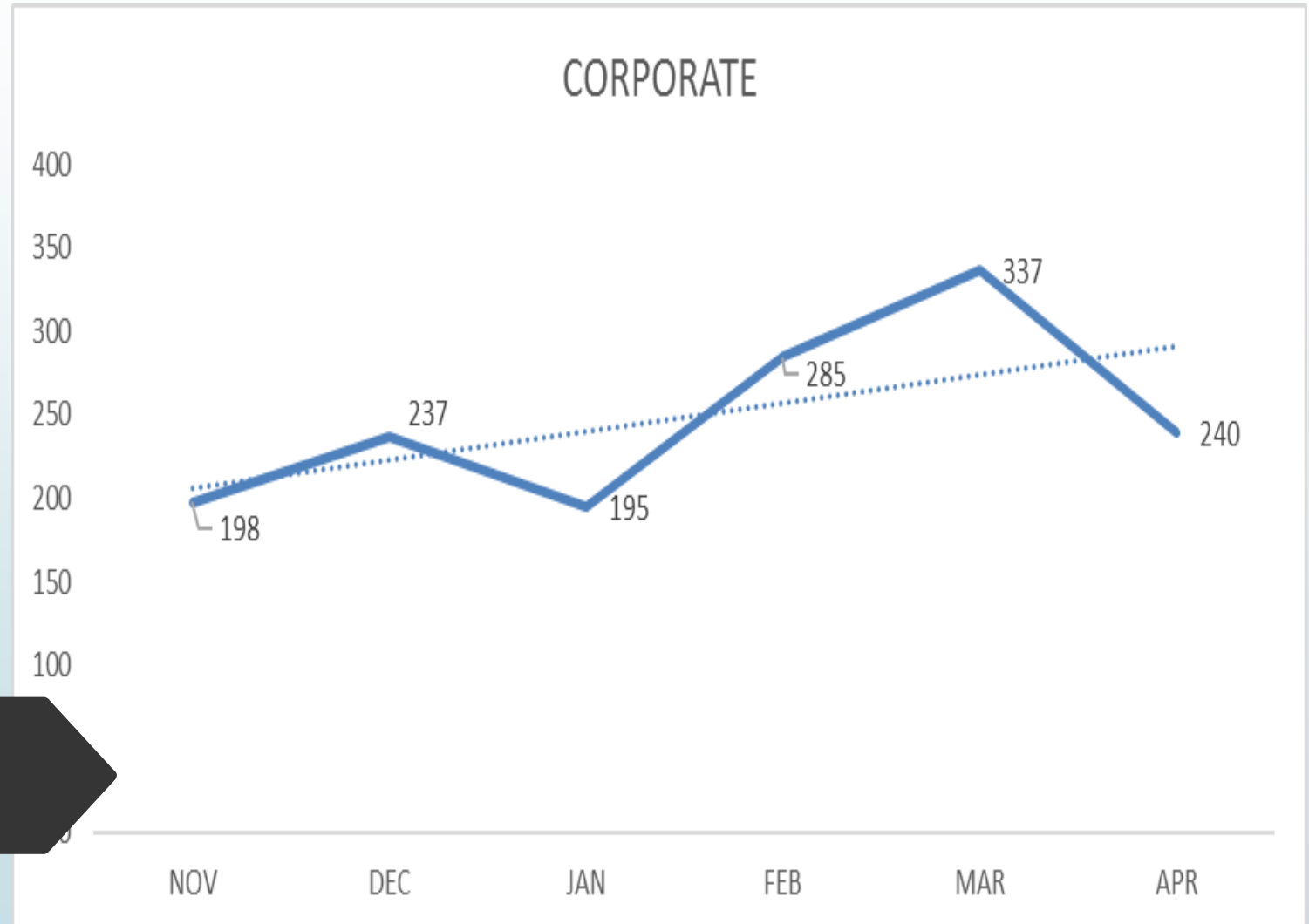
TREND ANALYSIS FROM NOV-16 TO APR-17

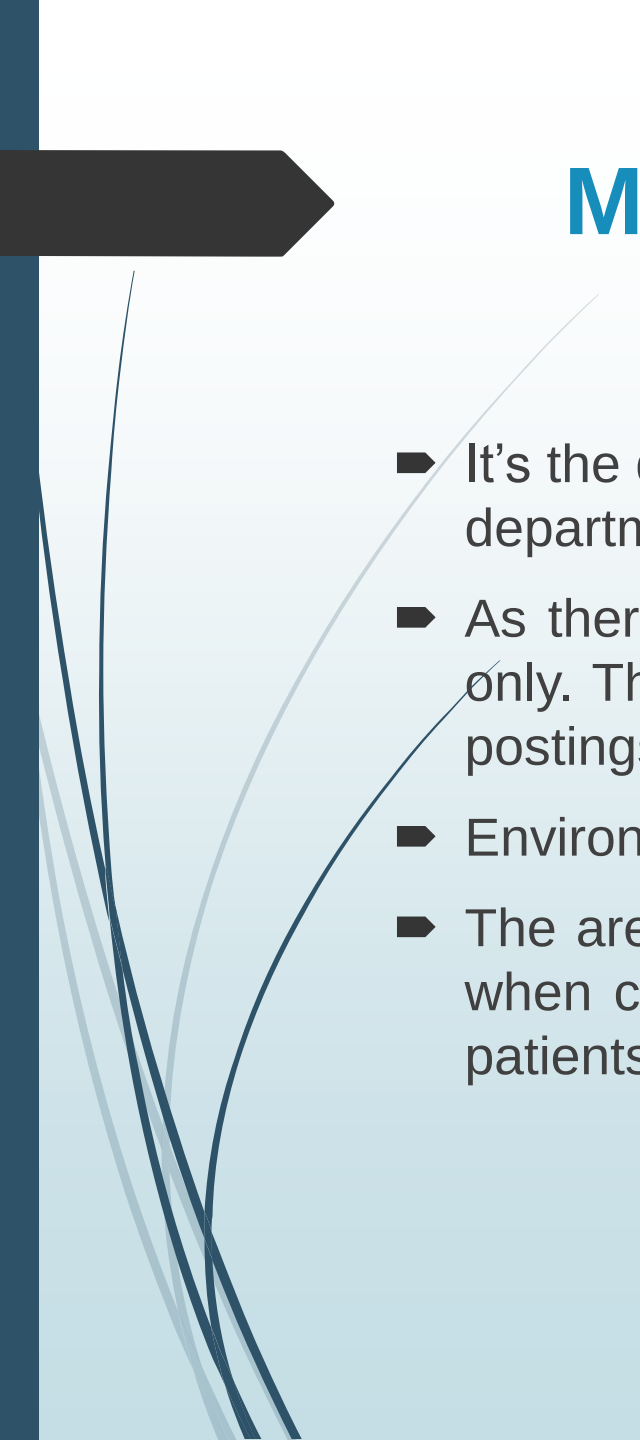


TREND ANALYSIS OF SELF PATIENTS FROM NOV-16 TO APR-17



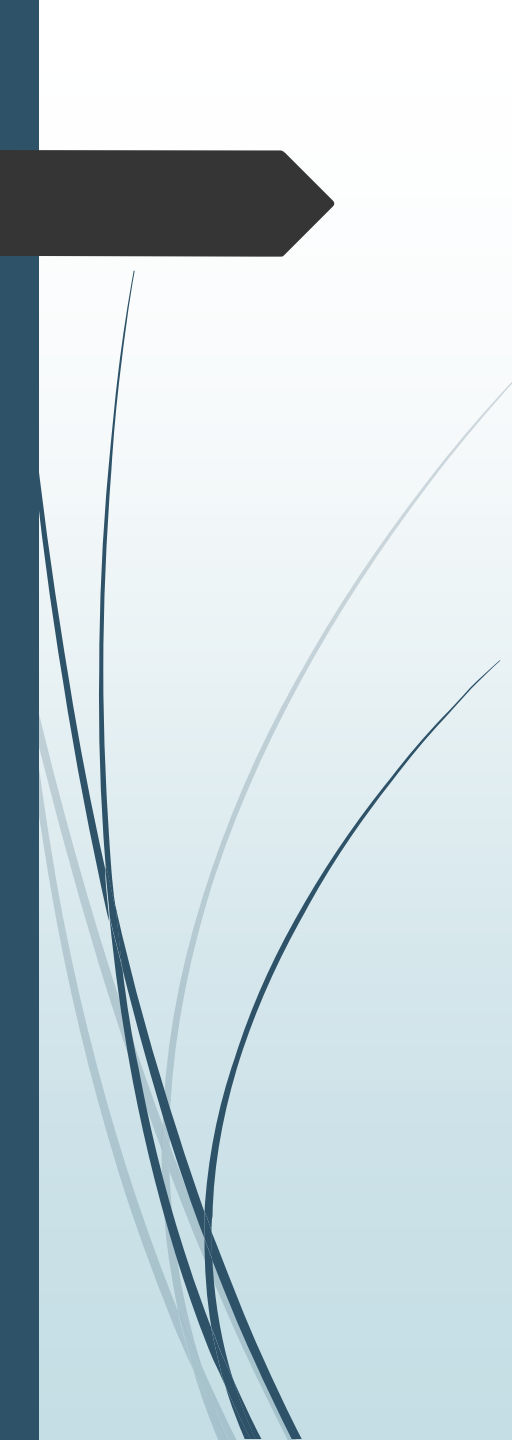
TREND ANALYSIS OF CORPORATE PATIENTS FROM NOV-16 TO APR-17





MANAGERIAL ISSUES

- It's the duty of health checkup department to collect the reports from all the departments. But this process is not going well.
- As there is only one computer, all the work is being done in that system only. This is one main reason for getting the work done late especially for postings and summaries.
- Environment of the health checkup is not impressive.
- The area allotted for health checkup along with other OPDs is very small when compared to the patients flow resulting in a great confusion to the patients.



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- No dashboards like pathology, billing, health checkup, etc.
- There is only one person for compiling the reports into a file. Whenever he takes leave all the work related to this gets pended. In such cases, other executives should take responsibility of this work in such conditions.
- As there is no MT, time taken for typing the summaries is more. Out of 10 ,8 summaries will have blunders as per Physician words .



RECOMMENDATIONS:

- Dedicated health-check area which reduces patient movement with all amenities at single place.
- Developing Appointment systems for patients.
- Proper scheduling of patients.
- All OPD billings can be done at one place.
- Posting should be done first and then the process can be continued.
- Echo test is done first then payment is made. It is due to unavailability of doctors as they have to do posting. If the process is reversed, system will get improved as doctors will be available as it becomes compulsory.

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- If some of the packages has been classified as STANDARD and ADVANCED, rather than including all investigations into a major package can attract self-paying patients in selecting health checkup package of Shalby. For example, prince and princess standard and advance, women health checkup standard and women health checkup advanced. The ratio of price for standard and advanced can be in the ratio of 1:2.
- There should be some standard health package for all kinds of ages.
- There should be some discount rates for self- paying patient if they bring one of their family members for health checkup in the next time as a token of gratitude to customer loyalty.

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- There should be some system which helps patient not to come back to health checkup department after each investigation.
 - ❖ Such as an attender should go along with the patient for guiding to each department.
 - ❖ There should be a systematic sequence in sending the patients to different departments.
- Training should be given regarding posting. Or actions should be taken on the people who do posting wrong frequently because of negligence.
- Reward programs for staff resulting into significant outcomes should be encouraged.



*Thank
you*

