IIHMR UNIVERSITY

DISSERTATION PRESENTATION

Study to identify bottlenecks and inefficiencies along patient pathway to improve patient waiting time at Vasan Eye care Hospital

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Contents

About Hospital

- Vasan Healthcare Group (established in 1947) - the healthcare company having its business across different domains –
  - Eye Care Hospitals: with 170+ hospitals pan India and abroad,
  - Vasan Dental Care: large Dental Care Network with 30+ hospitals
  - Vasan Medical Hall: a network of 50 pharmacy outlets across Tamil Nadu
  - Vasan Medical Centers: 7 specialty labs & day care diagnostics centres

Vasan Eye Care

- Vasan Eye Care network has been handling 6 million patients every year. It has over 170 eye care hospitals in India
- With more than 750 Ophthalmologists and over 7500 service staff, Vasan Eye Care is now the world's largest eye care network. Vasan has been certified as the "World's Largest Eye Care provider with the maximum number of stand-alone surgical centres" in 2011 by Frost & Sullivan
- On an average 30,000 patients walk in every day, so far over 20 million patients have been treated at Vasan Eye Care hospitals across the country and over 5 million procedures have been completed

Introduction

A key aspect of the patient's encounter at a hospital is how long he or she has to wait. As wait time increases, patient satisfaction drops.

Vasan Eye Care needed visibility on the challenges faced by both clients and staff at the eye care hospital (based in Gurgaon). Hospital is facing downtimes to improve the patient experience by eliminating waiting in hospital and bolstering data to target bottlenecks.

Problem Statement

One of the key challenge was:

- Excessive waiting time during the various stages of process faced by patients resulting in large number of unsatisfied customers.

Research Questions

- What are the key bottlenecks/ inefficiencies that are impacting the overall process of outpatient department at Vasan Eye Care hospital?
- How can the existing bottlenecks/ inefficiencies be removed from the system?

Aim

- To identify bottlenecks and inefficiencies along patient pathway to improve patient waiting time at vasan eye care hospital.

Objectives

- To know the bottlenecks in the Out-Patient Department.
- Measure the turnaround time of process.
- To provide suggestions for reducing wait time and inefficiencies along patient pathway.

Research Methodology

- **Type of study**: It is a Descriptive study completed in 3 months duration
- **Location of study**: Vasan Eye Care Hospital, Gurgaon
- **Study subjects**: Patients, patient care staff and other support staff of OPD .
- **Sampling process**- Convenience sampling
- **Sample Size**- 250 patients
- **Data (information) collection**:
  - **Primary data** collected in the form of observations, standard format/checklist for Turnaround time and informal interviews with patients and employees and patient feedback form.
  - **Secondary data** including Health object records of out-patients, data on medical records etc.
- **Data collection tools**: Qualitative (interviews and questionnaire, observations) and quantitative (Hospital records)

- **STUDY METHOD:**

  A Observational study was carried out in out patient department to identify bottlenecks and inefficiencies along patient pathway to improve patient waiting time and their subsequent outcome. Tools used were patient feedback form, turnaround track sheet, standard checklist, secondary data from hospital. The analysis was done with the help of Microsoft Excel.

Ethical Consideration

- Rights of the respondents and informed consent was ensured
- Rights of the institution where the study is conducted was ensured
- Scientific Honesty was maintained
- No sensitive issues were explored before building a good relationship with the informant and making him/ her comfortable
- Privacy & confidentiality of data obtained was ensured

Key Terminologies

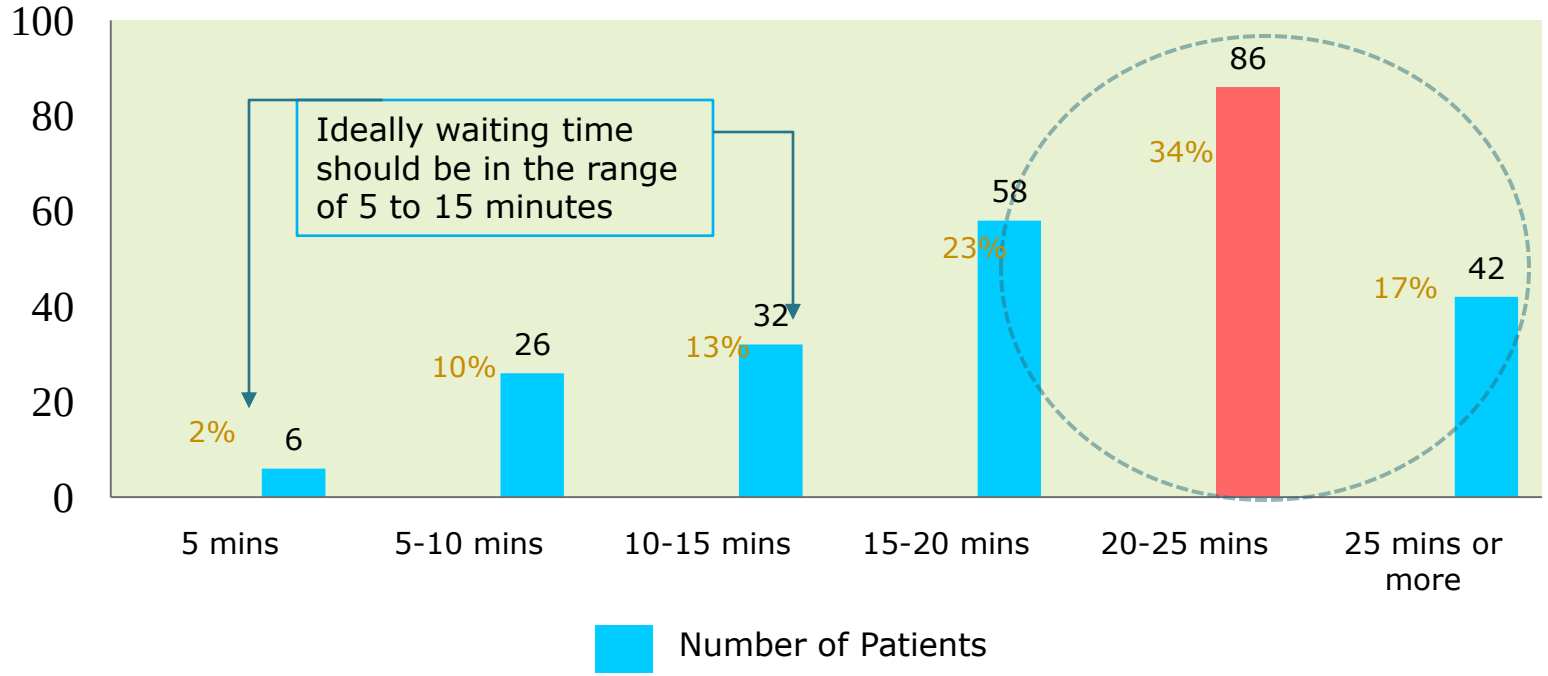
Key aspect covered during research was the Turn-Around-Time* for the main activities –

- **Refraction**- It is an eye exam that measures a person prescription for eye glasses or contact lenses.
- **Dilation**-It is an important part of a comprehensive eye exam because it enables your eye care professional to view the inside of the eye. Drops placed in each eye widen the pupil, which is the opening in the center of the iris (the colored part of the eye). Once dilated, each eye is examined using a special magnifying lens that provides a clear view of important tissues at the back of the eye.
- **Turnaround Time** - Turnaround time may simply deal with the total time it takes for a process from the start till the end to provide the required output to patient

- **Consultation**- A meeting with an expert such as medical doctor, in order to seek advice.
- **Counseling**- Advice and support that is given to people to help them deal with problems, make important decisions, etc.
- **Physical Movement-** It is a last step of the process when patient finally leaves the hospital after completion of treatment/process.
- **Bottleneck** literally refers to the top narrow part of a bottle. It refers to a phenomenon where the performance or capacity of an entire system is limited by a single or small number of components or resources.

FINDINGS

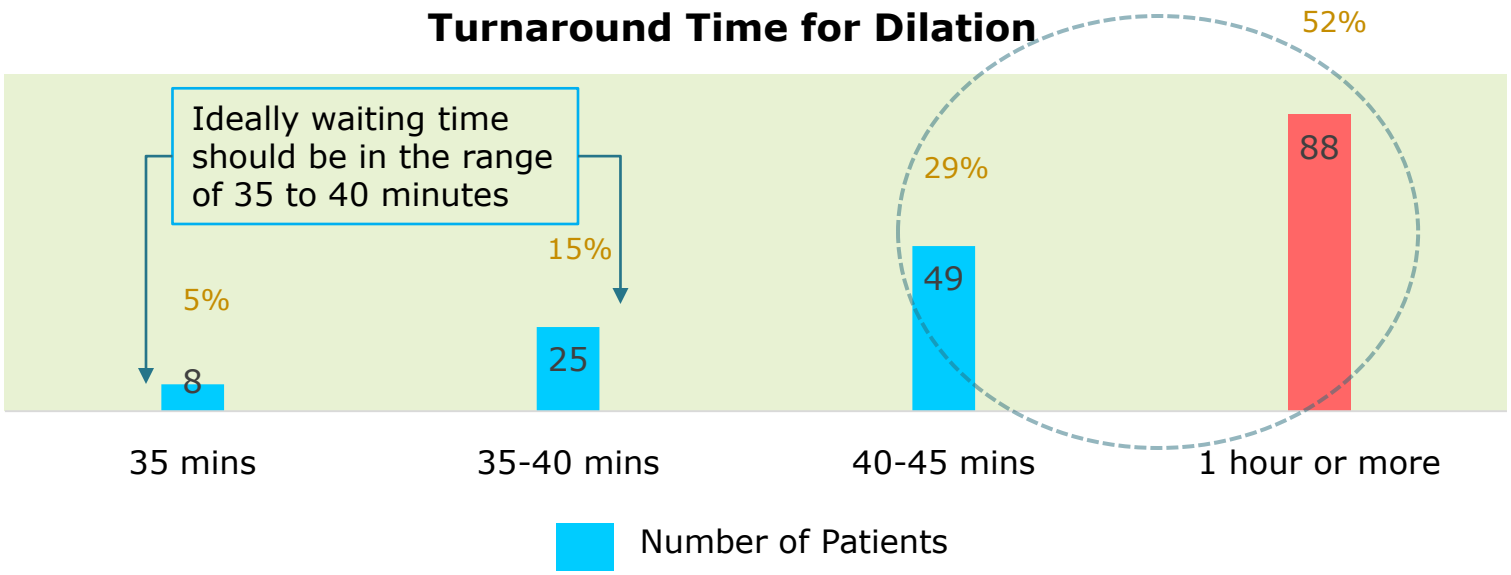
Figure I: **Turnaround Time for Refraction**



Key Output	▪ Out of total number of patients (250), almost 75% patients are waiting for more than average time of 15 minutes
Key Issues (for high TAT of Refraction)	▪ Shortage of optometrist and chamber for examination. ▪ In case of PMT(Post myderial test) patients, files are not available on time as MRD is not maintained

The chart provided above is based on a survey, which was conducted with a total of 250 patients.

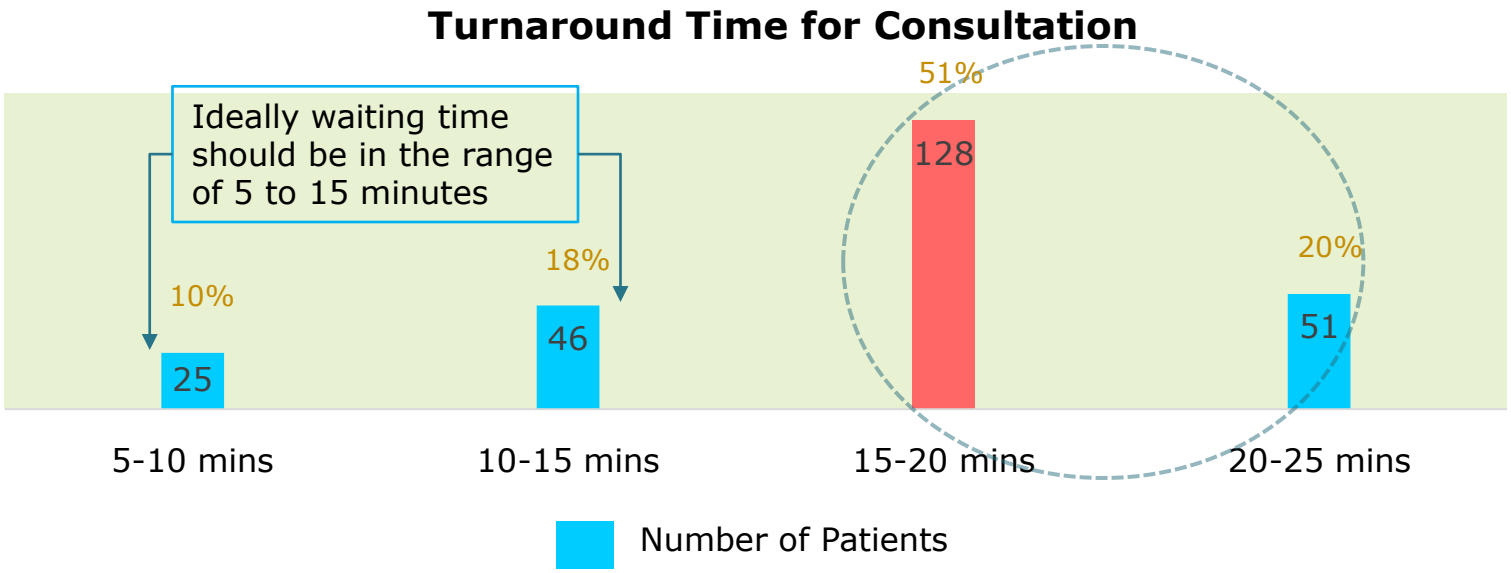
Figure II: **Turnaround Time for Dilation**



Key Output	▪ As seen in graph Out of total number of patients dilated (170), almost 81% patients are waiting for more than average time of 35-40 minutes
Key Issues (for high TAT of Dilation)	▪ Lack of clinical attendants i.e. maximum time only one assistant is handling everything. ▪ Patients are not seen on time and not given proper instructions required for dilation that delays the process.

The chart provided above is based on a survey, which was conducted with a total of 170 patients.

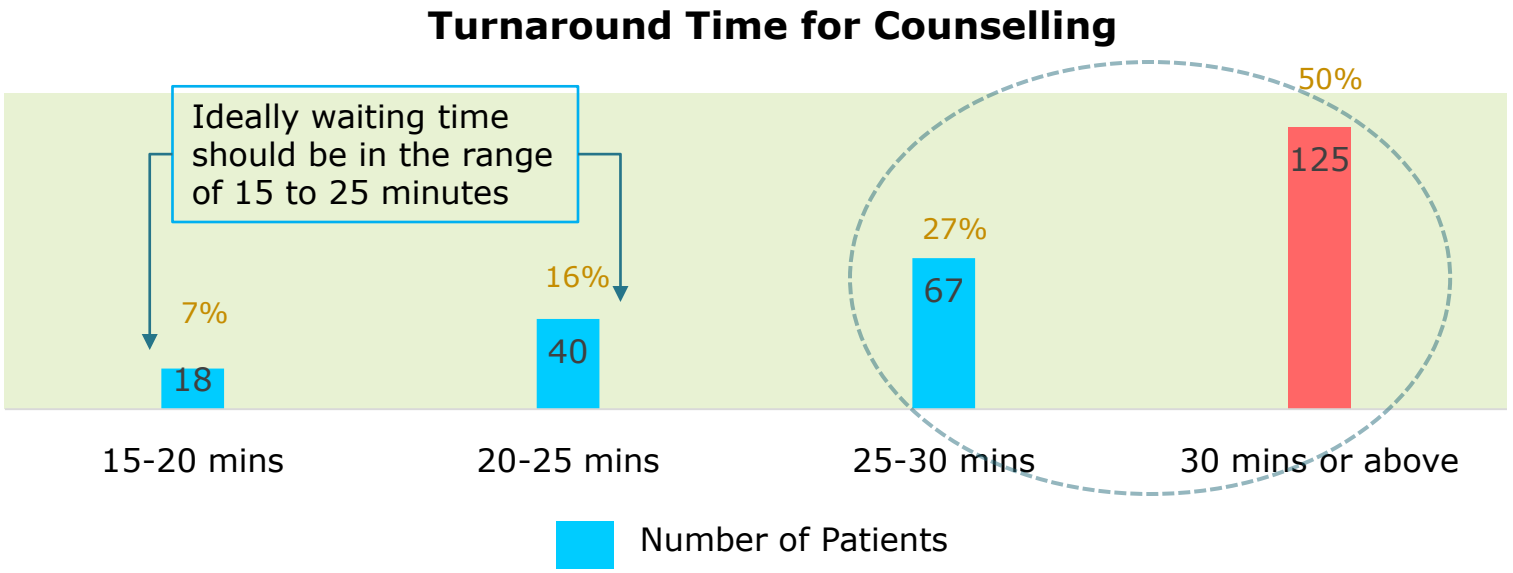
Figure III: **Turnaround Time for Consultation**



Key Output	▪ As seen in graph ideal time for consultation per patient is 5-15 mins according to hospital norms but around 51% cases were seen more than the ideal time
Key Issues (for high TAT of Consultation)	▪ Shortage of doctor and chamber for examination. ▪ Doctor takes more time to counsel surgery cases so as to convert them for surgery as there is no counselor in center ▪ Instruments not available on time at the time of minor procedures ▪ Mismanagement of patient files by OPD assistant

The chart provided above is based on a survey, which was conducted with a total of 250 patients.

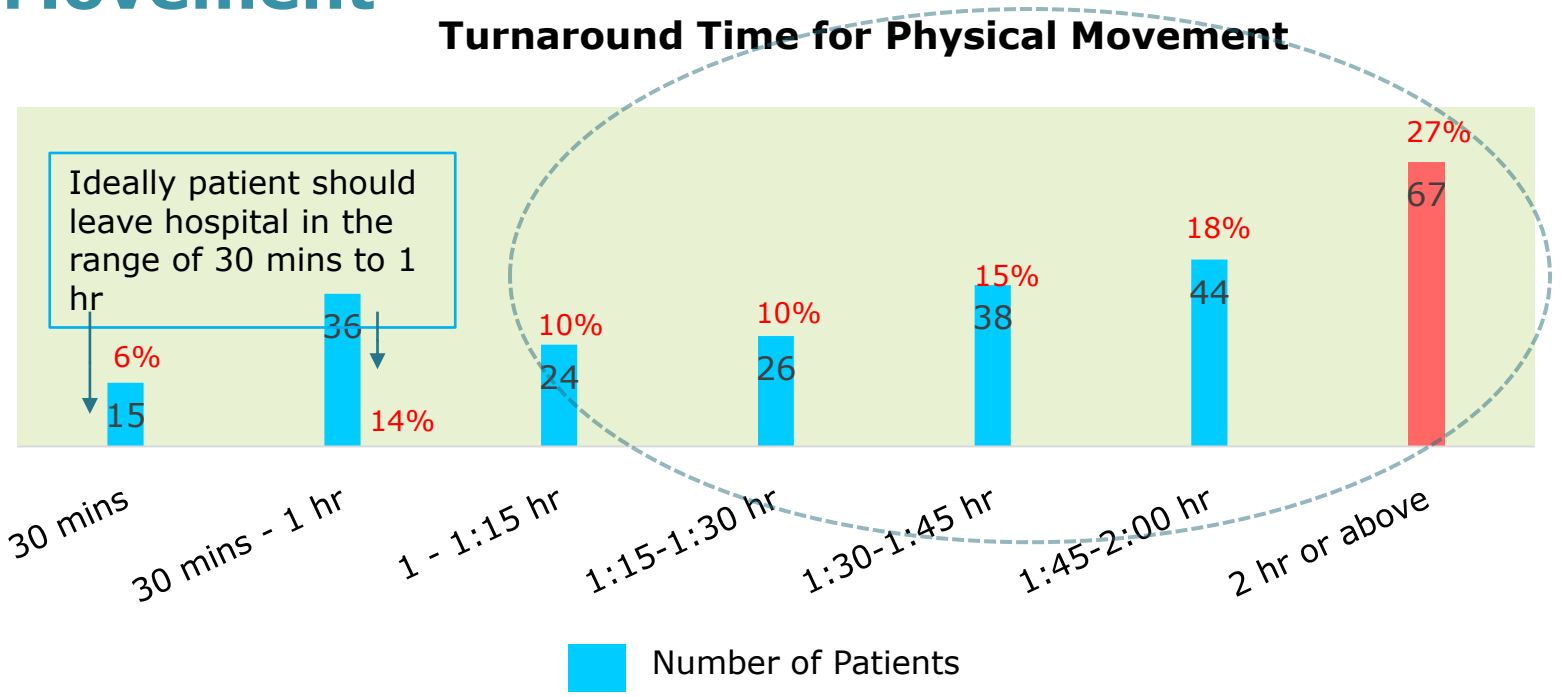
Figure IV: **Turnaround Time for Counselling**



Key Output	▪ As seen in graph ideal time for counseling according to hospital norms is 15-25 mines per patient but maximum patients i.e. 77% are counseled 30 minutes and above
Key Issues (for high TAT of Counselling)	▪ Long waiting queue outside the counseling chamber ▪ Counseling is done by process executive as counselor is not there ▪ Not aware about the updated packages and corporate tie ups ▪ Lack of communication skills and training

The chart provided above is based on a survey, which was conducted with a total of 250 patients.

Figure V: **Turnaround Time for Physical Movement**



Key Output	▪ As seen in graph ideally patient should leave hospital with in 30 minutes (without dilation) to 1 hour duration (with dilation) but maximum patients i.e. 80% are leaving beyond the ideal time
Key Issues (for high TAT of Physical Movement)	▪ Shortage of staff ▪ Delay in dilation and refraction ▪ Doctors takes more time for consultation ▪ Mismanagement of files that leads to delay in overall process

The chart provided above is based on a survey, which was conducted with a total of 250 patients.

Table 1: **Manpower Analysis**

Department	Current Status	Required
Doctor	1	2
Optometrist	1	2
Counselor	0	2
Operation Executive	2	2
Clinical Assistants	2	3
Front Office	2	2
Store Keeper	1	1
MRD	0	1
Others	4	7
TOTAL	**13**	**22**

Shortage of 9 staff members

Survey Results (Key Output)

From the data collection tool i.e. questionnaire only 5 questions were taken relevant for the study which shows that maximum number of patients were dissatisfied from the services provided that affects brand image and decrease footfall .

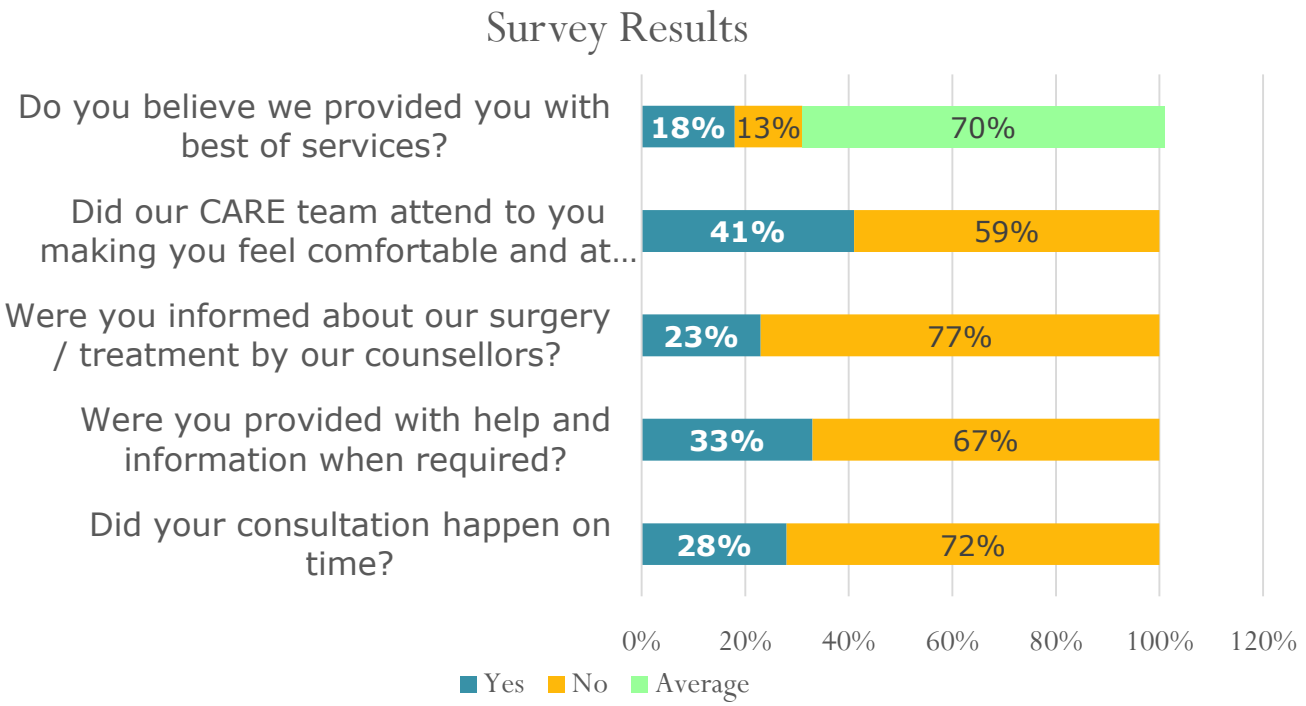
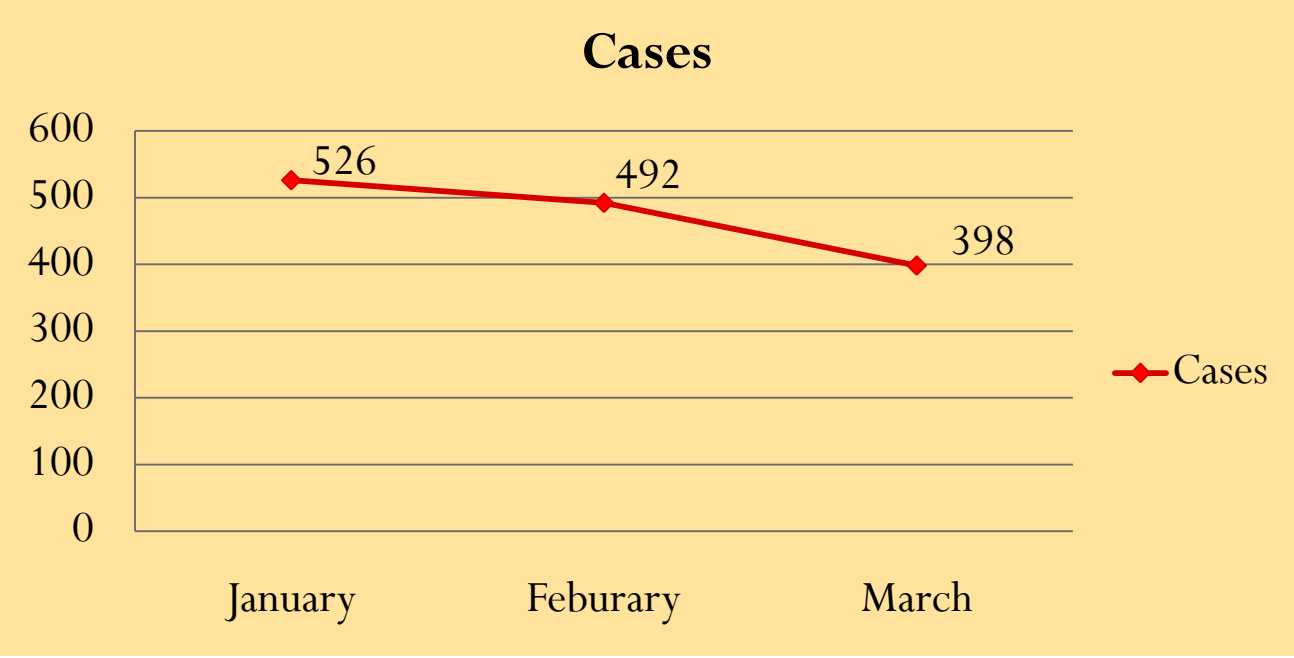


Figure VI: **Comparison of footfall**

As shown in figure VI , there is decrease in patient footfall due various reasons as mentioned previously i.e.

- Long waiting time
- Dissatisfied customers



Bottlenecks

The data analysis shows that bottlenecks in the process were at four major steps –

- Waiting Time for Preliminary Examination- Refraction
- Time taken for dilating the pupil
- Waiting Time for Consultation and Counseling
- Long waiting time in OPD

Key Reasons

- Shortage of staff and Chamber for examination
- Long waiting time
- Lack of coordination and communication among the staff
- Not well defined roles and responsibilities of the staff
- Absence of SOP (standard operating procedures) for Medical Record Department(MRD) leading to mismanagement of files.
- Increase workload on staff

Business Impact

- Dissatisfaction amongst patients
- Decrease in footfall
- Lack of motivation in staff
- Brand image of hospital is affected

Suggestions

On Key Areas of Improvement

1. Process:

- Preparation of patient movement sheet to track daily activities
- Preparation of Camp activity sheet in advance and preparation of duty roaster accordingly so that staff can be arranged prior and workload burden can be reduced
- Formulation of medical records department policy is recommended on priority basis.
- Preparation of Monthly Academic Calendar & monthly Audit System

2. Infrastructure:

- Some Architectural suggestions should also be implemented i.e. doctor room and optometrist room should be added

3. Staffing:

- Recruitment of staff as mentioned in table
- Training of staff should be done as per their role and responsibilities with time management

There are also ways to make downtime more palatable for the patient. Some of the immediate changes that can be implemented are as follows:

4. Proactive Communication with Patients

Research shows that patients are much more willing to wait for their care if they know the length or cause of the delay in advance. Some methods to communicate better include:

- **Rounding the reception area**: A staff member should enter reception every 15 to 30 minutes to acknowledge patients, provide updates, ensure the patient's comfort and that the process is in order.
- **Wait-time transparency**: On check-in, staff should let patients know exactly how long it will be, or even post it digitally, to manage expectations and foster accountability among staff.
- **Service recovery**: When patients wait longer than expected, acknowledging and apologizing for the delay can help to diffuse the situation.

5. Improving perceptions of wait time

Providing some sort of valuable services to patients beyond magazines and talk shows can help to improve perceptions of wait times. Some examples:

- Refer to the waiting room as "reception area" or "lobby"
- Furnish the area with comfortable and clean seating
- Create décor to make the room more homelike, including glare-free lighting, soft music, and snacks and beverages
- Supply current magazines.
- Reschedule if the patient prefers not to wait.
- Providing automated SMS with estimated time so as to avoid waiting.

Conclusion

Based on the research analysis and survey conducted with a sample of 250 patients and working staff, the key factors (bottlenecks/ inefficiencies) impacting the business and patient satisfaction were identified in three broad areas – Process, Infrastructure, Staffing.

As per the suggestions provided, hospital need to improve the processes, some infrastructure needs to be developed for doctors and optometrist and specific targeted hiring need to be done so as to improve patient satisfaction regarding waiting time.

Sources

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Thank You