

INTERNATIONAL JOURNAL OF RESEARCH SCIENCE & MANAGEMENT

AN EFFECTIVE TIME MOTION STUDY (TMS) ON OPD PATIENTS OF A TERTIARY CARE HOSPITAL IN SEPTEMBER 2015 IN GOA

Pradipti Verma^{1*}, Dr. Risha Saxena² ^{1*2} Goa institute of management, Goa

Correspondence Author: pradiptiverma@gmail.com

Keywords: Waiting Time; Outpatient Department; Quality; Patient Care; Time and motion study(TMS)

Abstract

The paper is based upon the monitoring the waiting time of patient visiting the Outpatient department of a hospital in Goa using the concept of Time and Motion study. The study was conducted by taking a sample size of 300 patient for a duration of 5 days. The waiting time was found appropriate except the time spend with the doctor. These kind of studies should be carried out as frequently as possible as they give ideas about the need of improvement.

Introduction

As healthcare industry is growing rapidly, the principal of Patient Centricity has gained much importance. Apart from the clinical services provided to the patients it also deals with the other non-clinical aspects that effects the patient's satisfaction. Patient Waiting time in hospital is a major issue of concern these days and it is now the aim of every hospital to reduce this time. Among all of the times where a patient has to wait in hospital, the most important is Outpatient waiting time since the first interaction of patient with the hospital takes place here, so it impact a lot on the reputation of the hospital. OPD is also known as "Shop Window" of the hospital.

Methodology

Study period- September 14 to 18 September

Study area- A private hospital in north goa (name undisclosed) with 3 General OPD departments.

Study sample- 300 patient were selected at random with an average of 60 patient per day. The patient which were admitted to the IPD department were excluded from the sample.

Study instrument- A process chart was designed which covered each and every activity which has to be studied and recorded. This chart showed the steps a patient follows from entering the hospital till the time it exits.

Procedure

Waiting time can be defined by two ways "from registration the time a patient spends in a hospital till the start of the consultation" or "from registration the time a patient spends in a hospital till the time it exits the hospital." In this study we would be monitoring using the second definition mentioned. The time would be measured in minutes.

As the patient enters the hospital goes to the registration desk to get their OP Card, then goes to the concerned department and waits for his/her turn. When the patients turn arrives it visits the doctor. The doctor examines the patient if prescribed a test visits the examination department (ECG, X-ray etc) or goes to the pharmacy stands in the queue to wait for his turn and then exits the hospital after taking his medicines. The time taken at each and every step is noted with the help of stop watch from entry to the exit.

The data collection was done by following a patient from the time of entry to the hospital till the time it exit the hospital. Though this method is very intense but helps to study functional accuracy of the hospital.

Result and discussion

The population studied consisted of 300 patient of which gender distribution was 124 males and 176 females. Major part of the sample were taken from people comprising of age group 24-35 years. The average time a patient spend in the hospital in OPD services was around 55±10mins. This shows the quality services of the hospital. But it is very difficult to know if the result is appropriate or not as the there are many factor influencing like the location, population size of patients as well as physicians. So it becomes very difficult to generalise any appropriate time for any hospital especially for OPD services.

The average time consumed at the registration desk was 15 ± 5 min, which was mainly required for filling patient's details and providing the patient with a unique OP Card for ease of further processes. In case of any reappointed patient the time is not consumed in the aforementioned process but the time is required in retrieving the patient's previous record, this time is comparatively less than the procedure required for a new patient. An ineffective Data this process to even 4 to 5 hrs as noted by Mohamad Hanaffu Abullah^[4].

Impact Factor (PIF): 2.138

ISSN: 2349-5197



INTERNATIONAL JOURNAL OF RESEARCH SCIENCE & MANAGEMENT

The average time required to reach various OPD was 3 ± 1 minutes. This time shows the effective designing and planning of hospital in making its registration counter near to OPD as an important concept of patient centricity.

It was observed that average time required to meet the physician was 10 ± 5 minutes and the average time spent with the physician was 10 ± 8 minutes. From this it can be concluded that the time spent in waiting for physician was almost equal to the time spent with the physician. This is not the appropriate practice. It has been proved that a minimum of 20 minutes should be spent with Physician for the proper diagnosis purpose. Further the time spent at the drug counter was 15 ± 5 minutes that includes the waiting time in queue. This shows that the maximum time was taken at the drug counter and not in the physician chamber.

In cases where diagnostic tests were required the maximum time spent was in the laboratory when blood or/urine sample was required of a particular patient. Time spent in sample collection was 5 ± 4 minutes while time spent in waiting for the turn was 20 ± 10 minutes. This again shows the ineffective time and resource management.

Recommendation

- 1. Proper signage should be provided to reduce patient time in searching the department in case of a first time visitor.
- 2. Instructions should be written in local languages as well.
- 3. Drinking water facility and Wash rooms should be provided in the patient waiting area.
- **4.** In peak hours or in peak months of the year number of registration counters can be increased, number of OPD Chambers can also be increased on the basis of availability of Physicians.
- 5. Number of counters in Pharmacy shops should be always more as it has been observed that maximum time is required at this counter
- **6.** Television monitor and Reading material can be provided in the waiting area. These can also be used in patients' Health education.

Conclusion

It has been observed that the time required in Registration Counter can be reduced by effective management and proper resource management.

Time spent with the Physician should be increased as this phase of Patient- Physician phase is the most important phase.

These kind of studies can be done periodically to estimate the proper areas of improvement in a hospital services that will further help in the upliftment the quality services provided by the hospital to the patients.

Limitation

- Small sample size
- Loss of follow up- the patient who went to the restroom and the cafeteria
- Excluding the patient which were send to the IPD after OPD

References

- 1. Sara A.M. Abd Ellal, Yousif A.Ibrahim. The waiting time at Emergency departments at Khartoum state, 2005. Sudanese Journal of Public health, April 2006, vol 1(2), p 122-125
- 2. Renuka Venkatesh, P Siva Prakasam, Bhuvaneshwari J. A Time Motion Study of the Patients Attending the Outpatient Departments of a Tertiary Care Hospital in Kanchipuram, Tamilnadu, Indian Journal of Public Health Research & Development. January-March 2014, Vol. 5, No. 1
- 3. K.S.Prasanna, M.A.Bashith, S.Sucharitha. Consumer satisfaction about Hospital services: A study from the Outpatient department of a private Medical College hospital at Mangalore.
- 4. Indian Journal of Community Medicine, April 2009, vol 34(2), p 156-159 4. Mohamad Hanaffi Abdullah: study on outpatient waiting time in hospital university Kebangsan Malaysia(HUKM) through the six sigma approach. Journal of the department of Statistics 2005, vol 1 p39-53