A STUDY ON ANALYTICAL STUDY ON TAT IN MEDICLAIM

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Abstract: Insurance sector in India has undergone a sea-change, specifically after liberalization. In India, before opening up of the insurance sector, public sector general insurance companies alone offered health insurance products and thereby enjoyed the monopoly status in the country. After liberalization, a greater number of private players with foreign alliances have entered into the Indian health insurance market and offers variety of policies, which results in increased competition. As a result, public players are slowly losing their market share to private insurers in the country. In this backdrop, it is imperative to find out the variables that determine the policyholder satisfaction on service quality of public general insurers. An attempt has been made in this paper to ascertain the variables that determine policyholder satisfaction on service quality of public sector general insurers in Coimbatore District. Step-wise regression analysis, used to ascertain the prominent variables that contribute for the piling up of service quality satisfaction, shows that, Awareness on Mediclaim Insurance”, „Premium Amount”, „Period of Awareness”, „Gender”, „Sources of Awareness on Mediclaim Policy”, „Occupation – Professional” and „Level of Education – Illiterate” are the prominent variables that determine policyholder satisfaction. The results of the study reveal that Public Sector General Insurers have to concentrate more on spreading awareness as high level of satisfaction is associated with awareness on Mediclaim insurance.

KEY WORDS: Insurance, Health, Private and Public Company, Market Sector

I. INTRODUCTION

Mumbai is the hub for top-notch healthcare in South Asia as well as all of India. a city with a long history in medicine. The Bombay Hospital and Medical Research Centre, India's largest city's medical Centre, is located in South Mumbai. The Bombay Hospital was founded in 1952 as a result of the immense generosity shown by Shri Rameshwar Das Birla, the founding chairman of the Bombay Hospital Trust. It started as a 440-bed hospital with the mission of “rendering the same level of service to the poor that the rich would get in a good hospital,” in the words of its founder.

The hospital now includes over 830 beds, some of the most cutting-edge diagnostic and surgical tools in the nation, and other modern amenities.

The Bombay Hospital is currently regarded as one of the best tertiary level multi-specialty hospitals in the nation. Modern tools are available to the internationally acclaimed team of physicians and experts in each area of competence, supported by a skilled and knowledgeable nursing staff. So, it should come as no surprise that patients from all social classes visit the Bombay Hospital. Whether it's a factory worker from a rural area of India, a high-flying CEO from a multinational corporation, or someone like the previous Maharashtra governor and prime minister.

In October 2003, Indore saw the opening of Bombay Hospital - Indore, a super-specialty tertiary care referral facility with 600 beds and top-notch medical resources all under one roof. The hospital is equipped with cutting-edge, complex technologies and world-class infrastructure. Additionally, it offers top-notch medical facilities.

The number of insurance patients availing health care services has increased in the last decade. Still, currently, only 18 percent of the Indian population is covered under various health insurance schemes. Out of this, only 2.3 percent is served by commercial health insurance providers (1). Clearly, private hospitals are now witnessing an increased patient load of individuals enrolled under commercial insurance policies. This category of patients has high expectations regarding quality of services, but low tolerance towards inferior quality services(2). One of the parameters to judge efficiency and quality of a hospital is the discharge process turnaround time (TAT).

A patient’s discharge from hospital can be defined as release of a hospitalized patient from the hospital by the attending physician after providing necessary medical care for a period deemed necessary (3). Delayed discharge causes physical and psychological hardship, not only to the patient concerned but also to the attending relative.
2. LITERATURE REVIEWS

Retrospective investigation of 519 live and 4 cadaver recipients of renal allografts between May 1988 and May 2003. The prevalence of various vascular problems, the clinical characteristics of these patients, the chosen diagnostic and treatment approach, and their prognosis were studied. Azithromycin was given to 490 individuals, mycophenolate to 33, and IL-2 receptor antibodies to 17 patients as induction immunosuppression. Prednisolone and cyclosporine were also given to all patients.

Anand K Shah: Research on cochlear implants is no longer being done. It is now a component of our surgical toolbox for treating extreme deafness. Our failure to provide the patients with this alternative is frequently caused by misunderstandings among our colleagues. Giving every potential candidate and their family all the information they need to make an informed decision is crucial. Today's medical field is based on the educated choices made by patients and their loved ones. We are unable to make decisions for them; we can only make suggestions.

The initial goal is to ensure that there is a strong likelihood that an implant will improve hearing and, more crucially, that there is little possibility that the patient will experience negative side effects.

Deepak Bhenki, Daksha Bhangui, Nitin Paidhugat, S Goel, PB Paidhungat: A benign germ cell tumour called a dermoid cyst is present in 15% to 20% of benign ovarian tumours. Dermoids that are bilateral account for 15 to 20% of all cases. In this case, a laparoscopic method was used to remove both large dermoids with the preservation of a portion of the ovary, with a smooth post-operative recovery. A 26-year-old female P1L1A0 who had been complaining of lower stomach pain intermittently for two months and a normal menstrual cycle was hospitalised.

When examined, the vital signs were stable, the PA was soft, the PV was above-average in size, and the A/V had two mobile, bilateral masses.

CT scan: bilateral cysts, E/O Right measuring 6.4 x 4.9 cm and left 5.1 x 4.0 cm, both of which are dermoid-suggestive. In order to preserve a portion of the ovary in case of future pregnancy, a therapeutic laparoscopy was performed with b/l dermoid excision.

Ruta Deshpande, Prashant Nyat, Sadhana Desai, prema Kania: It is extremely uncommon for a pregnancy to spontaneously rupture at 32 weeks. Around 32 weeks into a prior pregnancy, our patient experienced a spontaneous uterine rupture. This conception at 32 weeks of pregnancy with good antenatal care and ideal prompt intervention in the form of caesarean section yielded a successful outcome. A 1570-gram healthy foetus was delivered, and thanks to outstanding neonatal care, it was able to make it home safely.

Nootan Kumar Sharma, Keki E Turel, Joy Varghese, Shashank Joshi: During the course of eight years, we investigated 200 consecutive cases of lumbar canal stenosis treated by microsurgical internal decompression (MIDSS) (1991-1998).

Back pain (85%), root pain (76%) and neurogenic claudication (72%) were the most prevalent complaints. Additional symptoms included cauda equina syndrome (4%), and paraesthesiae (30%).

According on the clinical and imaging results, these individuals received single or several stages of microsurgical decompression of the central and/or lateral canal. 32 of the individuals additionally exhibited substantial disc protrusions in addition to the stenosis (68%).

The typical findings include the following: 1) hypertrophic facet joints, 2) extremely reduced interlaminar space caused by telescoping of the superior edge of the inferior laminar under the interior edge of the preceding one, 3) reduced interpedicular distance (or "kissing" joints), 4) hypertrophic ligamentum flavum, 5) engorged paraspinal veins, and 7) reduced interpedicular distance.

3. OBJECTIVES

1. To identify the determinants of Mediclaim policyholder satisfaction and
2. To offer suggestions to enhance service quality of public sector general insurers
3. To analyse the progress of health insurance in India in terms of no. of polices issued no. of members covered and number of claims settled issued
4. To analyse the growth pattern of premium paid, claims paid and claims paid ratio.
5. To analyse the sustainability of the growth in Indian health insurance sector
There is a prevailing perception among insured patients and healthcare executives that the average TAT of discharge of insured patients is within the range of 4-6 hours. However, research carried out to identify the TAT for insured patients and to find out the controllable factors so as to reduce it is very limited. Additionally, during the stay of patients in the hospital, the inhouse Third Party Administrator department (TPA) has to answer and furnish many documents asked by the external Third-Party Administrator. These questions in day-to-day terminology are called as “query” or queries. One of the most important responsibilities of in-house TPA department executives is to answer these queries on timely basis and efficiently, as the approval of the treatment amount significantly depends on the replies sent by these executives. Third Party Administrators (TPAs) are the companies licensed by Insurance Regulatory and Development Authority (IRDA) and they function as Business Process Outsourcing (BPO) in Health Insurance(6). However, this study is carried out with two primary objectives.

The first objective is to calculate the TAT of overall discharge process of insured patients and to find out the bottlenecks in the sub process. The second one is to collect and analyse the queries sent by external TPA for a period of three months so as to suggest measures that are needed to be taken to reduce the number of queries,- which would result insaving of time and efforts of in-house executives.

**GROWTH OF THE COMPANY**

Bombay Hospital & Medical Research Centre has been awarded The International Diamond Price for Excellence in Quality by European Society for Quality Research (ESQR), on 09th December 2015 at The Park Hotel, Schonbrunn in Austria, Vienna.

Bombay Hospital & Medical Research Centre has been awarded the World Quality Commitment (WQC) Award in the Platinum Category in Paris adjudged by Business Initiative Director (BID). The World Quality Commitment Convention - Paris 2015 was held on 25th October 2015 at Escape Etoile Palais des Congress Convention Hall, Paris.

Bombay Hospital Trust - Mumbai has been awarded as ”Asia's fastest growing Health Care Brand” 2014-2015 by World Consulting and Research Corporation on 21st May 2015 at Mandarin Orchard, Singapore.

Bombay Hospital & Medical Research Centre has been selected to receive the World Quality Commitment (WQC) Award in London, Great Britain. The International WQC Convention was held on 30th November, 2014 at the Guoman Tower Hotel, London, Great Britain.

Awarded as the Best Multi Specialty Tertiary Care Hospital in Mumbai in the Global Healthcare Excellence Awards 2013, organized by Prime-Time Media Services on 11th Aug 2013 at New Delhi.

Awarded as the Best Multi Specialty Tertiary Care Hospital in Mumbai in Leadership & Service Excellence Awards 2014, by Brands Academy Pvt. Ltd. on 31st May 2014 at Mumbai.

**PRODUCT PROFILE**

Bombay Hospital and Research Centre Private Limited is an unlisted private company incorporated on 06 February, 2019. It is classified as a private limited company and is located in Nainital, Uttarakhand. Its authorized share capital is INR 1.00 lac and the total paid-up capital is INR 1.00 lac.

The current status of Bombay Hospital and Research Centre Private Limited is - Active.

The last reported AGM (Annual General Meeting) of Bombay Hospital and Research Centre Private Limited, per our records, was held on 30 September, 2020. Also, as per our records, its last balance sheet was prepared for the period ending on 31 March, 2020.

Bombay Hospital and Research Centre Private Limited has two directors - Shailendra Kumar Mishra and Suniti Misra.

The Corporate Identification Number (CIN) of Bombay Hospital and Research Centre Private Limited is U85120UR2019PTC009480. The registered office of Bombay Hospital and Research Centre Private Limited is at C/O DR. S. K MISHRA, BOMBAY HOSPITAL, G.B.PANT ROAD, SUBHASHNAGAR, HALDWANI, NAINITAL, Nainital, Uttarakhand.

A quick glance at Bombay Hospital and Medical Research Centre-

- 4 buildings with 5,00,000 sq. ft. Built up area
- Total number of beds: 725
- Critical care and recovery area: 141 beds
- 24 operation theatres
- 2500 full-time employees
A patient being treated in one of the many Deluxe Rooms of the Hospital

R D Birla International Cardiac Centre-
- The country’s latest Coronary Artery Bypass Grafting Complex
- 20 recovery rooms
- 4 dedicated operation theatres
- Two cath labs & angiographies
- 1200 surgeries and 4000 angioplasties & angiographies conducted every year

Department of Neurosurgery and Neurology-
- Capable of treating all types of brain tumors’ and spinal surgeries
- 4 dedicated operation theatres
- 18 post-operative beds in the recovery room
- Equipped with Neuron navigation system, operating microscopes, CUSA

Department of Orthopedics-
- Complete hip/knee/shoulder/elbow replacements done
- 5 dedicated operation theatres
- Spinal corrective surgeries performed
- Trauma care centre
- Equipped with Ortho navigation system and C-Arm

Department of Cancer-
- Surgical treatment
- Radiation therapy
- Chemotherapy
- Comprehensive cancer care

Department of Nephrology and Urology-
- Artificial dialysis unit
- Tissue typing laboratory
- Kidney transplant centre

Department of Imaging-
- PET-Scan
- CT scan
- MRI
- Linear accelerator
Other areas of specialization-

- Plastic Surgery
- Pediatrics’
- Medical oncology
- Dental Care
- Diabetology
- Gastro-enterology

Supportive Facilities-

- Bombay Hospital Institute of Medical Sciences Post-Graduate Training Institute – only one of its kind in the private sector
- M P Birla Library
- Museum
- S P Jain Auditorium
- Birla Matoshree Sabhaghar
- Nurses Training Institute
- Pharmacy
- Executive Health Scheme

**PROBLEM STATEMENT ON TAT**

As high gains are at stake for each player in the health insurance industry, there are bound to be lapses, if not outright fraud. Here are the ways in which players misuse health plans and measures to curb them.

The most important problem associated with them is the long turnaround time (TAT). The TAT for the payment of an insured patient’s treatment in an affiliated hospital is 20 days for cashless treatment. Most TPAs fail to meet the deadline even if the insurance company has made the payment to them. This is due to the logistics involved in handling numerous hospitals and claims. Some hospitals become disenchanted with the delay and do not offer cashless treatment facilities. Also, some TPAs do not work on Saturdays, whereas most insurers do. This delays the processing of claims.

**VISION**

To render the same level of service to the poor that the rich will get in a good hospital.

**MISSION**

Bombay Hospital shall provide the best possible medical treatment, delivered most efficiently, in the shortest possible time, at minimum cost to all sections of the society, irrespective of cast, creed or religion.

**MOTTO**

A patient is the most important person in our hospital. He is not an interruption to our work. He is the purpose of it. He is not an outsider in our hospital, he is part of it. We are not doing him a favor by serving him, he is doing us a favor by giving us an opportunity to do so.

Bombay Hospital Indore is recognized by the following Govt. Insurance Companies (GIPSA) for cashless –

- New India Assurance Co.Ltd.
- Oriental Insurance Co.Ltd.
- National Insurance Co.Ltd.
- United India Insurance Co.Ltd.

Kindly confirm with your policy copy or agent, as to which TPA would be processing your cashless.
5. HYPOTHESES

Turnaround time (TAT) is an important performance indicator of a laboratory’s efficiency in delivering patient results. In the South African National Health Laboratory Services, ad hoc mean TAT reports were previously produced for laboratory managers. These TAT reports assessed performance based on the National Health Laboratory Service global annual performance plan (APP) TAT cutoffs specific to individual tests. Reports were provided intermittently in a static form that assessed central tendency only (i.e., the tail size was not reported) and did not allow for drilling down to access additional, more detailed information to direct meaningful corrective action (i.e., laboratory or sample-level TAT breakdown). To improve on these TAT reporting systems, Coetzee et al. used three additional measures to assess TAT efficiency: (1) median TAT, (2) 75th percentile TAT (tail size), and (3) percentage of within cutoff TAT. These measures accurately assessed outliers as tail size and could be used by laboratories to address workflow issues and identify testing delays for intervention. "Tail size" refers to the volume of samples in a positively skewed data distribution that has a long tail to the right. These samples often have a much higher TAT value than the central tendency (median) for this data distribution. Tail size can be measured as the percentage of samples that exceed a defined TAT cutoff in hours, or as a percentile.

There has been a significant growth in the no. of polices during the period 2003-2010. It has grown from 2265451 to 6884687 witnessing 203.9% increase during the last seven years. This proves that health insurance sector in India has grown significantly over the years.
5.1 RESEARCH METHODOLOGY

Research is an art of scientific investigation. The logic behind taking research methodology into consideration is that one can have knowledge about the method and procedure adopted for achievement of objectives of the project.

DURATION OF STUDY- The period of this study will cover last 3 years of the financial data- 2018-19, 2019-20, and 2020-21.

DATA COLLECTION PROCEDURE- Secondary Data will be used in this study to compare the financial statements of the last three years.

DATA COLLECTION METHODS- Data has been collected through Ratio Analysis.

5.2 RESEARCH DESIGN

One of the most crucial performance measures in healthcare is turnaround time. The neurophysiology lab's turnaround time for 90% of cases was lowered by King Faisal Specialist Hospital and Research Center in Jeddah, Saudi Arabia, from more than two weeks to only five working days. FOCUS PDCA was the primary quality improvement methodology employed. The primary causes of the turnaround time delay and suggested improvement strategies were identified using root cause analysis, Pareto analysis, and qualitative survey methods. These strategies included restructuring transcriptionists' daily tasks, reallocating physicians' schedules to make room for new reports, hiring consultants, maintaining consistent coordination, and giving priority to critical reports. In comparison to only 6% before deployment, 92% of reports are now verified within 5 days.

SOURCES OF DATA

When a policyholder files a claim, a health insurance product faces its moment of truth. Thus claims data becomes a crucial factor in evaluating an insurer when customers rate insurance policies. While grading health insurance policies, Mint Secure Now Mediclaim Ratings (MSMR) also considers claims information that is publicly accessible. Insurers are rated by MSMR based on how well they handle claims settlement, how quickly those claims are resolved, and how well they handle complaints connected to claims. While this aids in determining an insurance company's success on a macro level, it may not provide the end users with a clear image for the following two reasons: Group claims skew the data, and the claims settlement rate does not provide clients with a realistic picture.

DATA COLLECTION METHOD

Data was collected by using main two methods primary data and secondary data.

Hospital stay duration and discharge location are crucial outcome indicators for assessing the efficacy and efficiency of healthcare services. Although hospital administrative data are frequently utilized as a data source in health services research, this method has not been compared to other widely used methodologies in any studies.

Prospective observational study comparing the accuracy of data capture and degree of agreement between three data collection methods: inpatient medical record review (gold standard) for hospital length of stay and discharge location; administrative data from an electronic patient management programme (i.PM); and manual data collection from ward-based sources.

PRIMARY DATA

Primary data is the data which is used or collected for first time and it is not used by anyone in the past.

- QUESTIONNAIRE: -This method of data collection is quite popular, particular in case of big enquiries. Here in our research, we set 15 simple questions and request the respondents to answer these questions with correct information.

- RESPONDENTS: -Respondents helps in creation of more accurate idea about our research. We personally meet the respondents inside and outside the banks.

SECONDARY DATA

Secondary data is the data which is available in readymade form and which is already used by people for some purposes. There may be various sources of secondary data such as-newspapers, magazines, journals, books, reports, documents and other published information.
MANUALS AND BROACHERS - We take the help of hospital staff and other people who give us deep information and data which may not be available at anywhere. They give us their full co-operation.

INTERNET: - We also take into consideration the internet facility with which we collect lot of latest information.

TAT 1: Time taken for discharge summary to reach the TPA department from the in-patient areas.

TAT 2: Time taken to compile and send the final bill, along with the discharge summary, to the external TPA, after receiving the discharge summary.

TAT 3: Time taken by the external TPA to give the final approval, after receiving the discharge summary and the bill from the hospital.

TAT 4: Time taken for final bill settlement, after receiving the approval from the external TPA.

TAT 5: Time taken for the overall discharge process, which starts from the doctors’ advice to discharge, with the patient emptying the bed.

PERSONAL DETAIL

AGE
From the above study we find that below 20 age is 11.4% and respondents are between 20-30 age group is 55% and respondents are between 30-40 age group, 12% respondents is between 40-50 age group and 7.9% respondents are between 50-60 age group.

GENDER
From the survey result we come to know that out of 140, 84 respondents are male and 56 are female which is 67.1% and 29.3% are respectively.

MARITAL STATUS
We find that out of 100%, 7% respondents are married and 93% respondents are unmarried.

HIGHEST EDUCATIONAL QUALIFICATION: -
This analysis shows that the respondent, 58% respondents are graduate & professional, 22% respondents are post graduate, 14% respondents are senior secondary and 6% respondents are of Matric category. All the respondents of our survey are qualified.

OCCUPATION
It is clear that 32% respondents are doing their own business, 28% are employees and 16% respondents belong to other category and 24% of our respondents are students. Most of the respondents of our survey are Businessmen.

4. MAJOR FINDINGS

The two main sub processes explaining the maximum variance in the overall discharge process are the time taken for discharge summary to reach the in-house TPA department, and its approval by the external TPA after submission of the discharge summary, with adjusted R2 .554 and .219 respectively. Additionally, from the Pareto analysis, it was found that out of total 128 categories of queries, 5 categories accounted for 64 percent of total queries.

LIMITATIONS OF THE RESEARCH STUDY

There is no research study without limitations. there are a few limitations in the present study “A STUDY ON ANALYTICAL STUDY ON TAT IN MEDICLAIM”.

In this study, only Time is considered as a measure of efficiency. Similarly, other factors such as nursing, training in discharge, planning and management, role of pharmacists in discharge management and communication within the discharge process are not considered, due to the limitation of time. In a future study, all these factors when clubbed with time as an outcome measure, might give more insightful results.
RECOMMENDATION & SUGGESTIONS

The meaning of “turnaround time” can differ depending on the industry, role, and situation. Let's look at “turnaround time” broadly and dissect various ways you and your business can achieve fast turnaround times for your clients and other work.

In other words, when you start a process, such as a concrete project deliverable like shipping a product, how long does it take you to complete that process? From beginning to end, this duration is “turnaround time.” A fast or short turnaround time is considered far more desirable for most organizations than longer ones.

There may also be multiple measured sub-processes within a process, which we’ll discuss below.

Every industry and department has specific processes that are measured for efficiency and effectiveness. In many cases, the time it takes to complete represents real dollars and can present risk. Fast turnaround time means less money spent on manpower, for instance. If you can achieve short turnaround times without compromising quality, then you should try to do so. Some examples of critical processes that focus on improved turnaround are:

- Healthcare patient turnaround
- New product development
- Consumer loan approvals
- Approval of capital requests
- Laboratory turnaround

In each scenario, the difference between a slow and rapid resolution is significant and can result in poor outcomes and lost opportunities. Not having a quick turnaround time can cost your business real dollars.

Why does a process yield poor turnaround times? There could be several reasons:

- Workflow is undocumented and not transparent.
- Processes are manual and require a great deal of human intervention.
- Task hand-offs are ill-defined or poorly handled.
- Communication during the process is lacking.
- Systems are disconnected and past their prime.
- Efficiency is never measured or mis-measured, hiding the problems.

A process improvement project can reveal these issues and become the start of an effort to reduce process duration, shorten turnaround times, and improve accuracy, productivity, efficiency, and customer/employee experience.

CONCLUSION

This study concludes that the first major cause of delay in the discharge process of insured patients is the time taken for discharge summaries to reach the in-house TPA department, and the time taken by external insurance companies to give the approval after submitting the final bills and discharge summaries.

The second cause is considered as external but up to some extent, it is controllable if the queries are compiled and analyzed, keeping the Pareto principle of “Vital few and trivial many” in mind. Vital information can be revealed, which can be used to develop an improvement tool such as “Check list”. Check lists developed in such a way and properly put into action can significantly reduce the number of queries and also the response time.

REFERENCES:

7. Shukla K. Predictive Modelling for Turn Around Time ( TAT ) of Discharge Process for Insured Patients in a Corporate Hospital
of Pune City. 2018;1–8.
