International Journal in Management and Social Science
Volume 6 Issue 09, September 2018 ISSN: 2321-1784 Impact Factor: 6.178
Journal Homepage: http://ijmr.net.in, Email: irjmss@gmail.com
Double-Blind Peer Reviewed Refereed Open Access International Journal

A STUDY OF REVENUE CYCLE MANAGEMENT OFTHE HOSPITAL

Dr.Babasaheb R Jadhav*
Ms. Devi Krishna**

*Dr. BabasahebR. Jadhav, Professor at MIT-WPU, Faculty of Management
**Devi Krishna, MBA II Finance and Hospital Management Student, MIT-WPU, Faculty of Management

Abstract:

This Report contains "A Study of Revenue Cycle Management of the Hospital". Objective of this study were to understand the Accounts Receivables Management of theHospital and find out the different sources of revenue generation along with performing the comparative study of the top three listed hospitals in India.
Revenue cycle management in healthcare is the process of managing claims process, Payments, and revenue generation. It helps a medical practice to increase the revenue by proper claim management. If the claims are paid partly or if it is paid after a long period of time, then resources from the accounts receivable and collection department need to be utilized in order to get the claim settled.
The delay in claim payment and consecutive follow-up from the accounts receivables and collection department would have a negative effect on the revenue cycle.
We have presented our learning in the form of analyzing the current revenue cycle model of Hospital, starting from patient registration until post-discharge procedure and we have undertaken the comparative study of top three-listed hospital in India by taking ratio analysis as a tool for analysis. Below listed ratios were analyzed;

- *Debtors Turnover ratio*
- *Daily Sales*
- *Days in Accounts Receivables.*
- *Inventory Turnover Ratio*

Keywords: Revenue Cycle Management, Claim Settlement, Ratio Analysis, Comparative Study

1.Introduction

Hospital revenue cycle management is defined as the practices a hospital designs and implements to maximize both the amount of patient revenue and the speed of patient revenue collection. Due to the complex interrelations among patients, providers, payers, and regulators that characterize the Indian health care system, the way hospitals manage patient revenues and accounts receivable differs substantially from that in firms in most other industries. Hospitals differ from other firms in terms of managing their revenues. Unlike the prices charged of customers by most firms, the prices hospitals bill for services are generally not the prices that patients and third-party payers end up paying. Instead, hospitals bill for services based on the price information listed in their charge masters but then grant third-party payers substantial discounts in the form of contractual allowances. An average hospital may have several hundred different contractual relationships with third-party payers, each of which specifies a different set of payment rates for specific services. Hospitals also generally provide some amount of free care to indigent patients in the form of charity care, for which they decide to forgo revenue altogether. As a result, the net patient revenues — defined as gross charges minus the sum of contractual allowances and charity care — that hospitals earn are much lower than the charges billed. Moreover, hospitals frequently incur additional revenue write-offs in the form of bad debt expenses whenever patients, in particular self-pay patients and patient enrolled in high-deductible health plans, are able but unwilling to pay their bills.

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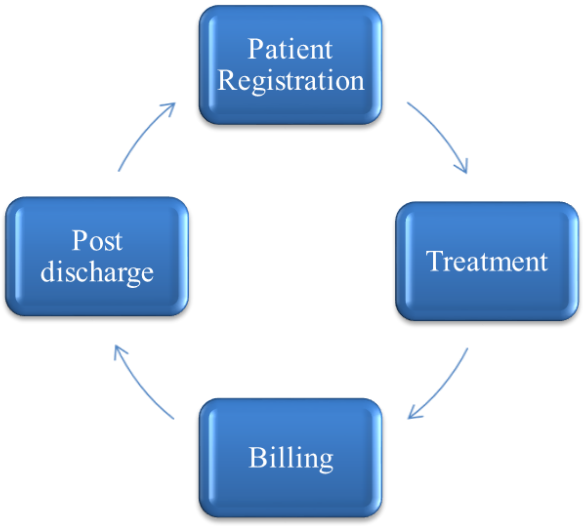
REVENUE CYCLE OF THE HOSPITAL



Stage-1:

Patient Registration

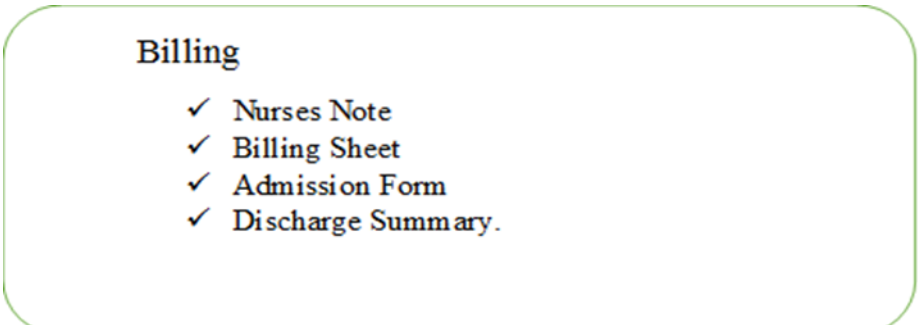
- ✓ ADT window of CAREWORK
- ✓ Assigning code:(Series:3000)
- ✓ Demographic Details.
- ✓ Introduction to Arogya Vishwa Card.
- ✓ Collection of security amount.

Stage-2:

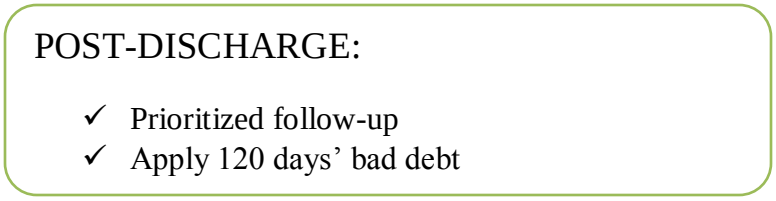
Treatment

- ✓ Medical Record
- ✓ Doctor's note

Stage-3:



Stage-4:



SOURCES OF REVENUE OF THE HOSPITAL

1. CashPatients:

The "cash only" term means simply that patients pay at the time of service. They may pay with a credit or debit card, cheque or cash. The key is that no third-party payers are involved to complicate the transaction or the relationship. In its purest form, cash-only practice means not participating with any insurer. This arrangement generally enables much lower overhead because claims processing, patient billing and countless hassles related to managed care can be eliminated. In some cases, physicians will contract with a limited number of better-paying health plans and submit claims to them while requiring that other patients pay at the time of service. This limits reductions in overhead but may be necessary to ensure that the patient panel is big enough to generate sufficient revenue for the practice, at least in the short term.

The newest variation on cash-only practice is concierge or membership practice in which physicians have a small panel of patients who can afford to pay high out-of-pocket costs for their health care. Patients usually pay a combination of an annual retainer fee and fee-for-service in exchange for value-added services, such as 24/7 access to the physician and house calls.

2. TPA's:

A third-party administrator (TPA) is an organization that processes insurance claims. It is also a term used to define organizations within the insurance industry which administer other services such as underwriting, customer service. This can be viewed as outsourcing the administration of the claims processing, since the TPA is performing a task traditionally handled by the company providing the insurance or the company itself. Often, in the case of insurance claims, a TPA handles the claims processing for an employer that self-insures its employees. Thus, the employer is acting as an insurance company and underwrites the risk. The risk of loss remains with the employer, and not with the TPA. An insurance company may also use a TPA to manage its claims processing, provider networks, utilization review, or membership functions. While some third-party administrators may operate as units of insurance companies, they are often independent.

3. Referral Patients:

Referral means the transfer of care for a patient from one clinician or clinic to another by request. Tertiary care is usually done by referral from primary or secondary medical care personnel. This is because of non-availability of specialized doctors, treatment or equipment in primary and medical health care. The medical history is carried forward and remaining treatment is done at tertiary care hospital. As the hospital issituated near to Loni village, it tends to get many such cases, which ultimately contributes, to the revenue generation.

4. Corporate Tie-up:

Business from corporate tie-ups is what every service-based business provider is targeting at, discounts, freebies, promotional schemes and much more. This go a long way for industry players to broadened their horizons to target specific consumer trends. Long-term partnership, large consumer base and revenue stability have prompted service-based business brands to add more corporate clients on its roll. The growing appetite for corporate tie-ups in service-based industry is evident from the growth of revenue increase in the industry.

Various corporates Tie-up with hospitals for availing the medical service to its employees and their dependents at a discounted cost which makes it more feasible to employees. However, after the retirement no benefit is extended to its employees.

PATIENT CREDIT POLICY OF THE HOSPITAL:

1. Self-Pay

a) The billing department HMIS will automatically be referred to the unique patient ID upon reaching final bill amount. This initial bill will be sent to the patient or the party responsible for the patient's personal financial obligations.

b) Marking out the monthly Bad-Debts amount by the accountant and which is to be shown to the Assistant Manager of Finance.

c) If bad debts not paid within 120 days, then notice for the same isissued to the concerned person.

2. TPA's (Third Party Administrator) as per MOUs

a) The insured patients' billing will depend on the documentation submission, claim approval or denial.

b) Once, the claim is approved the Insurance companies take maximum 45 to 90 days to pay the bill amount and if the claim is denied then the patient has to make immediate out of pocket payment and the rule of self-payment applies.

c) In case of Co-Payment, the patient has to pay the 20% of the expected bill amount immediately and rest 80% sum assured will be paid by the insurance company

3. Staff Patient

a) If the staff couldn't able to pay on discharge, then:

Sr.No.	Bill Amount	Duration of recovery
1.	10000/- or less	3 instalments
2.	10001/- to 20000/-	5 instalments
3.	20001/- to 50000	6 instalments

b) Recovery of amount more than 20000/- and if salary of staff is less, then the approval from Executive Director is mandatory.

c) Consent from staff and signature of HOD of Billing Department must be there on the discount sheet issued.

2.Review of Literature

1. Study representing the hospitals' profitability that include single measures of revenue cycle management performance as explanatory variables, such as average collection periods and mark-up ratios.
2. One way for hospital financial managers to reduce the average collection period is to write off outstanding patient accounts more quickly. This results in smaller balances of net accounts receivable and thus lower days in net accounts receivable.
3. This paper examines the link between regulatory reporting and statutory health care reimbursement formulas. I find strong evidence that hospitals have used aggressive regulatory reporting to extract approximately $60 million per year from Medicare's Disproportionate Share Hospital (DSH) program — a program designed to ease the burden on hospitals treating low income populations. Similarities between the DSH program and current payment reforms are discussed along with policy implications. Overall, evidence suggests that noneconomic metrics can be unreliable when threshold based incentives are present, especially when the reporting party is also the program beneficiary; and current penalties for filing inaccurate regulatory reports are ineffective at curbing reporting manipulations around thresholds.
4. User-fee programs have been introduced at health care facilities in many developing countries. Difficulties have been encountered, however, especially at public hospitals. This report describes the effects of user fees Introduced in April 1997 at a public hospital, the National Maternal and Child Health Centre (NMCHC) of Cambodia, on patient utilization, revenue and expenditure, quality of hospital services, provider attitudes, low-income patients, and the government, by reviewing hospital data, patient and provider surveys, and provider focus group discussions. Before the Introduction of user fees, the revenue from patients was taken directly by Individual staff as their private Income to compensate their low Income. After the Introduction of user fees, however, revenue was retained by the hospital, and used to improve the quality of hospital services. Consequently, the patient satisfaction rate for the user-fee system showed 92.7%, and the number of outpatients doubled. The average monthly number

of delivery of babies Increased significantly from 319 before Introduction of the system to 585 IN the third year after the user-fee Introduction, and the bed occupancy rate also Increased from 50.6% to 69.7% during the same period. As patient utilization Increased, hospital revenue increased. The generated revenue was used to accelerate quality improvement further, to provide staff with additional fee Incentives that compensated their low government salaries, and to expand hospital services. Thus, the revenue obtained user fees created a benign cycle for sustainability at NMCHC. Through this process, the user-fee revenue offered payment exemption to low-income users, supported the government financially through user-fee contributions, and reduced financial support from donors. Although the staff satisfaction rate remained at 41.2% due to low salary compensation IN the third year of user-fee implementation, staff's work attitude shifted from salary-oriented to patient-oriented--with more attention to low-income users.

3.Research Methodology

A research method is a systematic plan for conducting research. Sociologists draw on a variety of both qualitative and quantitative research methods, including experiments, survey research, participant observation, and secondary data. Quantitative methods aim to classify features, count them, and create statistical models to test hypotheses and explain observations. Qualitative methods aim for a complete, detailed description of observations, including the context of events

A. Topic of Research:

A study of Revenue Cycle Management of theHospital.

B. Objectives

1. To study and understand the Accounts Receivables Management.
2. To find out the different sources of revenue generation.
3. To study the Patient's credit policy of the hospital.
4. To do comparative analysis of top three listed hospitals in India.

C. Scope of Research

1. This study covers the receivables management cycle with respect to VishwaRaj Hospital.
2. As VishwaRaj Hospital is in its initial stage, only 1.5 years. Data is taken under study.
3. The debtor's ratio analysis for top three listed hospitals is undertaken for study based on standalone statement.

D. Data Collection

a) Types of Data

Secondary Data- The secondary data is undertaken for the study.

b) Sources of Data

- Annual Report of the hospitals (Listed Hospitals)
- Library search
- Websites of hospitals

E. Tools for Data Analysis

Comparative study tool is adopted to do the data analysis.

4.Data Analysis and Interpretation

- **Suggested revenue cycle model for the Hospital:**

STAGE: 1 PRE-SCHEDULING

- ✓ Chat bot assistance.
- ✓ Online patient appointment
- ✓ To verify the Insurance coverage details.
- ✓ Provision of smart medical card.
- ✓ Providing an estimated cost of treatment.

STAGE: 2 REGESTRTION

- ✓ Appointment remainder
- ✓ Different codes for pre-registered patient.
- ✓ Financial Counselling.

SATGE: 3TREATMENT

- ✓ Case Paper maintenance.
- ✓ Timely documentation on HMIS.
- ✓ Update possible delay on HMIS.

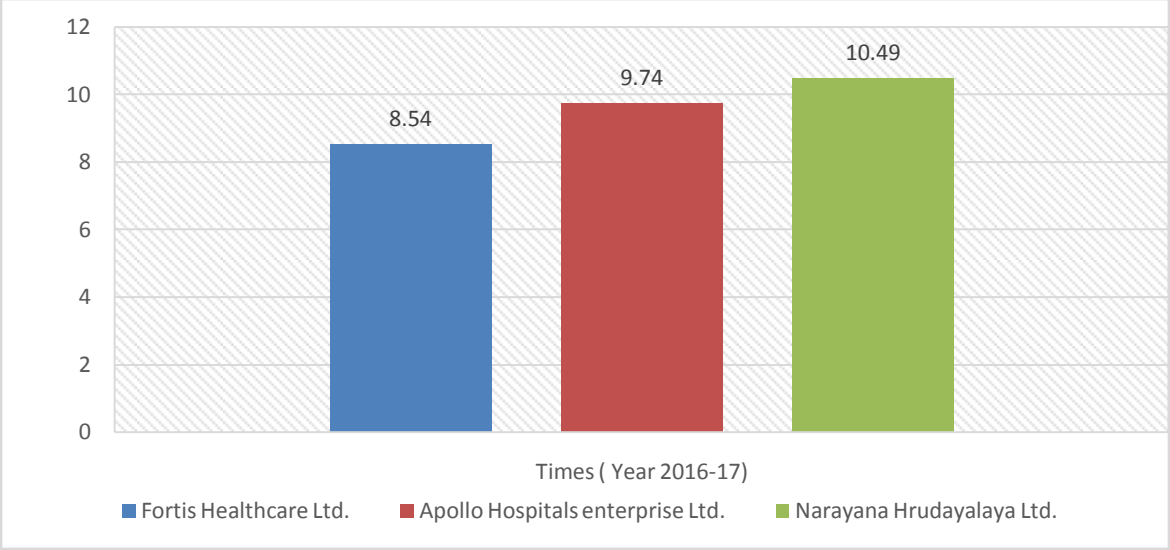
STAGE: 4 BILLING

- ✓ Provision of various payment options.
- ✓ Claim approval report updating.
- ✓ Post contractual adjustment at the time of final bill settlement.

- **Comparative study of top three listed hospitals in India:**

1**. Debtor's Turnover Ratio**

Sr. No.	Hospital Name	Net Credit Sales (Rs. in lakhs)	Closing Sundry Debtors	Times
1	Fortis Healthcare Ltd.	64,511.50	7,554.31	8.54
2	Apollo Hospitals enterprise Ltd.	644177	66130.2	9.74
3	Narayana Hrudayalaya Ltd.	164591.4	15690	10.49

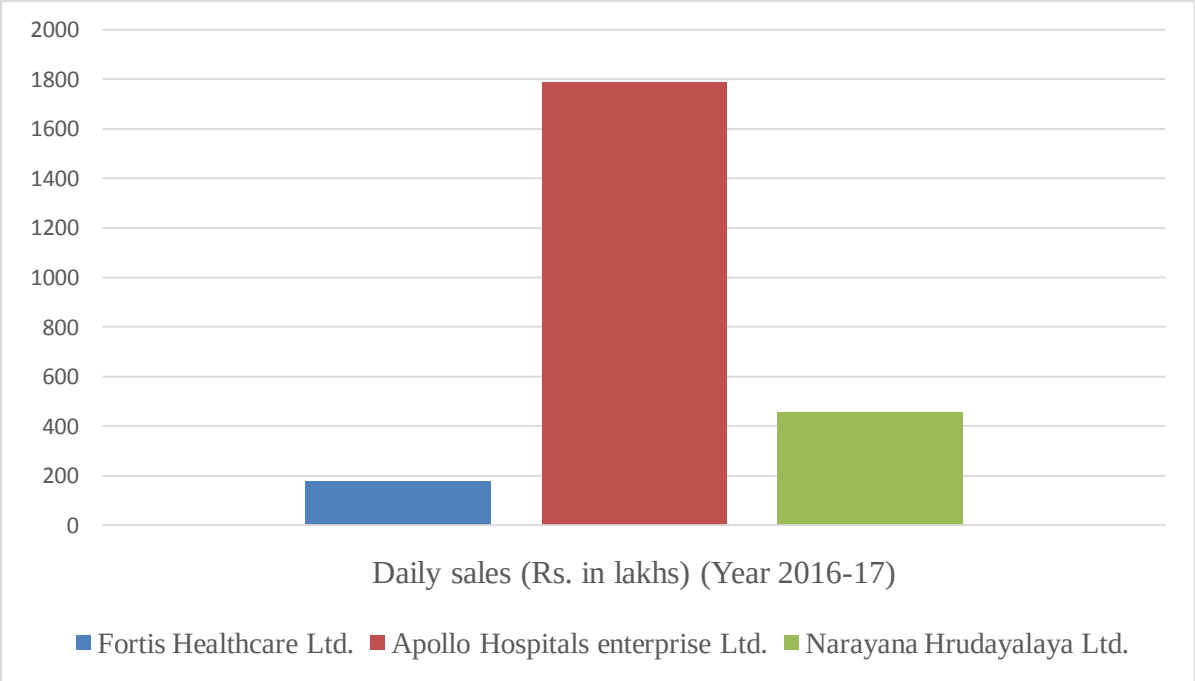


Interpretation:

Debtors' turnover rate indicates how quickly receivables or debtors are converted into cash. The liquidity of debtors, therefore, is measured through the debtors' turnover rate. From the graph shown it can be clearly interpreted that the capacity of recovering from the sundry debtors is higher in Narayana Hrudayalaya Ltd. as compare to Apollo Hospitals and Fortis Healthcare Ltd. This is the result of stringent financial controls and supply chain efficiency managed by Narayana Hrudayalaya Ltd.

2. Daily Sales

Sr. No.	Hospital Name	Daily sales (Rs. in lakhs)
1.	Fortis Healthcare Ltd.	179
2.	Apollo Hospitals enterprise Ltd.	1789
3.	Narayana Hrudayalaya Ltd.	457

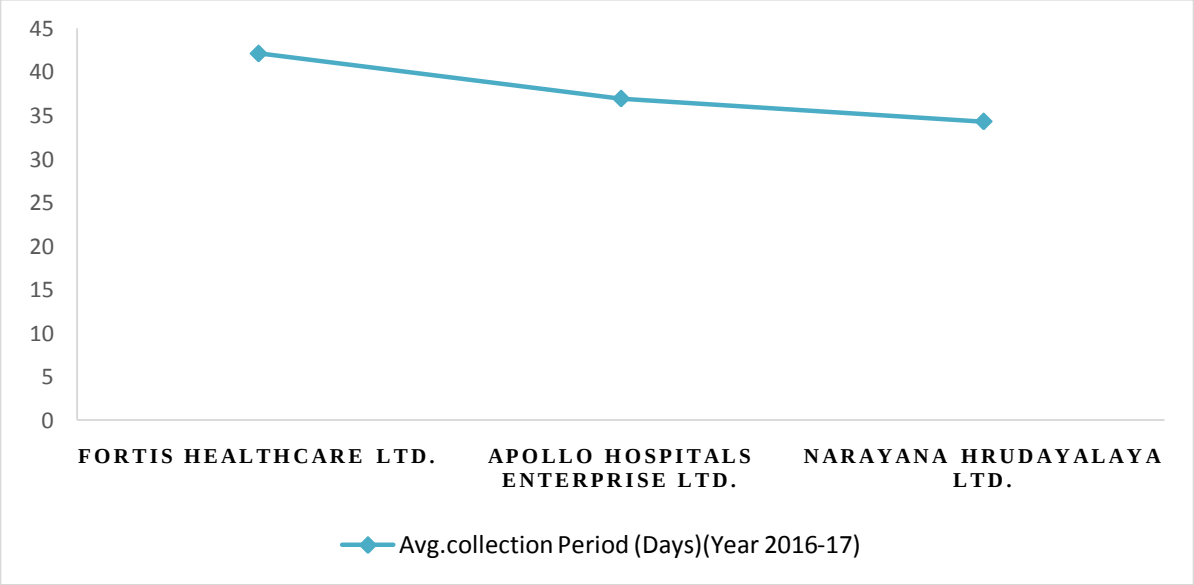


Interpretation:

Among the three, the daily sale of the Apollo is more as compare to Fortis and Narayana Hrudayalaya Ltd. This is because of advance surgery procedure and sale of pharmacy growth of around 24 % than last year and stringent reporting procedure, together have led to growth in sale. And average length of stay has been reduced up to 4 days, which means there is a good infection control.

3. Days in Accounts Receivables

Sr. No.	Hospital Name	Avg.collection Period (Days)
1.	Fortis Healthcare Ltd.	42
2.	Apollo Hospitals enterprise Ltd.	37
3.	Narayana Hrudayalaya Ltd.	34



Interpretation:

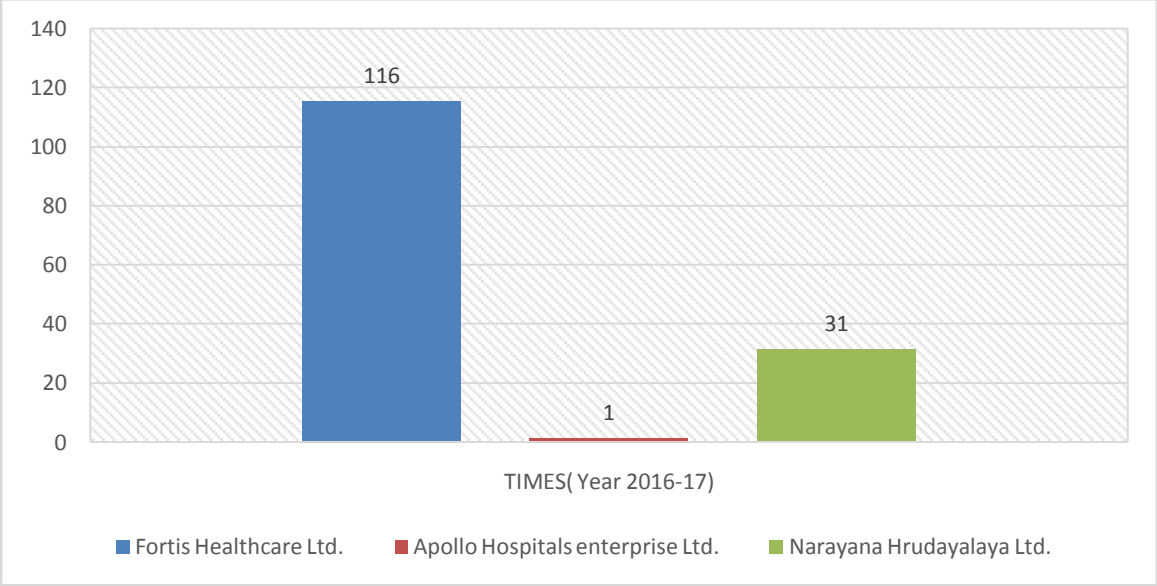
The turnover rate converted into average collection period is a significant measure of the collection activity of debtors. An average collection period is a measure of how long it takes from the time the sales are made to the time the cash is collected from the customers. Lesser the period better the situation for the company.

From the above shown Line diagram, we can interpret that Narayana Hrudayalaya Ltd.'s ageing bucket falls around 34 days which shows efficient management of debtors. This is because of stringent credit policy or having a good relationship with the insurance companies whereas,

Apollo Hospital's has highest sale among the three but still it falls in good ageing bucket. But Fortis having low sale, still couldn't able to manage the debtors.

4. Inventory Turnover Ratio

Sr. No.	Hospital Name	Net sales (Rs. in lakhs)	Closing inventory	Times
1	Fortis Healthcare Ltd.	64,511.50	558.06	116
2	Apollo Hospitals enterprise Ltd.	644177	442540.4	1
3	Narayana Hrudayalaya Ltd.	164591.4	5240	31



Interpretation:

The inventory turnover ratio is an efficiency ratio that shows how effectively inventory is managed by comparing cost of goods sold with average inventory for a period.

A high inventory turnover ratio of Fortis Healthcare Ltd. Indicates that the sales turnover is achieved with minimum investment in inventories as medical consumables, drugs, and stores and spares are valued at lower of cost or net releasable value. Whereas low inventory turnover of Apollo is because of over investment on the inventories.

5.Research Findings

1. The current revenue cycle of the Hospital does not include the feature for pre-scheduled appointment in its initial phase, which is a very essential feature in today's hospital.

2. The heavy discount on medical bills is provided to the patients who have been insured by market leaders.

3. The revenue is mainly generated from four sources.

6.Suggestions

1. For the smooth & speedy functioning of revenue, cycle management there should be a chat bot facility on the official website, which will help the patient to fill the demographic details and to suggest the specialized doctors' appointment.

2. The regular updating of case papers on HMIS will help the hospital administrator to analyze the vacant beds.

3. The Hospital should be able to achieve sales turnover with the minimum investment in inventories as medical consumables and drugs as that of Fortis. Which will help to save cost.

7.Conclusion

Revenue cycle contributes to the major growth of the hospital thus the essence lies in the proper management of it, so for this the Hospital should focus more on managing the pre-schedule stage of Revenue Cycle. The staff patient credit policy is being set out wisely and the TPA's credit policy is framed out based on the MOU's signed between the Hospital. The proper allowance of credit must be provided as per the situation of the patient, which will help the accounts receivables department of the Hospital to classify the debtors into different ageing bucket.

Bibliography

Apollo Hospitals. (n.d.). Retrieved from https://www.apollohospitals.com/apollo_pdf/annual-report-2017.pdf.

Barnes, B. G. (2017). Threshold-based Medicare Incentives and Aggressive Patient Reporting in U.S. Hospitals. *Social Service Review.*

Fortis Healthcare. (n.d.). Retrieved from http://cdn.fortishealthcare.com/21st-annual-report-2016-17.PDF.

Inamdar, P. (2009). *Principles of Finance.* Pune: Everest Publishing House.

Narayana Hrudayalaya. (n.d.). Retrieved from https://www.narayanahealth.org/sites/default/files/download/annual-reports/NH-Annual-Report-2016-17.pdf.

Stanciu, A. (2009). *Applications Of Revenue Management in Healthcare.*

Sunil Chopra, J. G. (2006). *Revenue Cycle Management at Evanston Northwestern Healthcare:Using Lean Principle to Improve Performance.* . Evanston, Illinois.

VishwaRaj Hospiral. (n.d.). Retrieved from https://vishwarajhospital.com/.