Internship Training

At

## Vianam HealthTech Pvt Ltd. (HexaHealth)

On

**Retrospective Study on Analyzing Unit Economics** of Proctology Surgeries for Different Modalities

by

Name - Zain Malik

Enroll No. PG/021/132

Under the guidance of

Vishesh Madaan

Associate Director - Operations Vianam Health Tech Pvt. Ltd (HexaHealth)

PGDM (Hospital & Health Management) 2021-23



**International Institute of Health Management Research** 

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Under the guidance of

Dr. Himanshu Tolani

Assistant Professor, IIHMR Delhi

PGDM (Hospital & Health Management) 2021-23



**International Institute of Health Management Research** 

The certificate is awarded to

## Zain Malik

in recognition of having successfully completed his internship in the department of

## **OPERATIONS**

and has successfully completed his Project on

Date- 15<sup>th</sup> February and 15<sup>th</sup> May 2023

**Retrospective Study on Analyzing Unit Economics** of Proctology Surgeries for Different Modalities

> Organization: Vianam Health Tech Pvt. Ltd (HexaHealth)

He comes across as a committed, sincere & diligent person. Who has a strong drive & zeal for learning. We wish him all the best for future endeavors.

ISHESH MADAAR

**Training & Development** 

Vishesh Madaan

Associate Director-Operations

Vianam HealthTech Pvt Ltd. (HexaHealth)

alão

Zonal Head- Human Resources

Vandana Gautam

Assistant Manager HR

Vianam HealthTech Pvt Ltd.

#### TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Zain Malik** student of PGDM (Hospital & Health Management) from International Institute of Health Management Research, New Delhi has undergone internship training at Vianam HealthTech Pvt Ltd. (HexaHealth) from 15<sup>th</sup> February to 15<sup>th</sup> May\_2023.

The Candidate has successfully carried out the study designated to him during internship training and his approach to the study has been sincere, scientific, and analytical.

The Internship is in fulfillment of the course requirements. I wish him all success in all his future endeavors.

Dr. Sumesh Kumar

Associate Dean Academic and Student Affairs

IIHMR, Delhi

Himanshu Tolani

Dr. Himanshu Tolani

Associate Professor

IIHMR Delhi (Mentor)

## **Certificate of Approval**

The following dissertation titled "A Retrospective Study on Analyzing Unit Economics of Proctology Surgeries for Different Modalities" is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **PGDM** (Hospital & Health Management) for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed, or conclusion draw therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name

DR. PANKAS TALREST

Dr. Samelh 1 Cima

Signaty

### **Certificate from Dissertation Advisory Committee**

This is to certify that Zain Malik, a graduate student of the PGDM (Hospital & Health Management) has worked under our guidance and supervision. He is submitting this dissertation titled "Retrospective Study on Analyzing Unit Economics of Proctology Surgeries for Different Modalities" at "Vianam HealthTech Pvt Ltd. (HexaHealth)" in partial fulfillment of the requirements for the award of the PGDM (Hospital & Health Management).

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report, or book.

I'SHESH I'

Dr. Sumesh Kumar Dean Academics and Student Affair

IIHMR, Delhi

Vishesh Madaan Associate Director- Operations Vianam HealthTech Pvt Ltd. (HexaHealth)

# INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH, NEW DELHI

#### **CERTIFICATE BY SCHOLAR**

This is to certify that the dissertation titled Retrospective Study on Analyzing Unit Economics of Proctology Surgeries for Different Modalities and submitted by Zain Malik Enrollment No. PG/021/132 under the supervision of Dr. Himanshu Tolani for award of PGDM (Hospital & Health Management) of the Institute carried out during the period from 15<sup>th</sup> February to 15<sup>th</sup> May 2023.

embodies my original work and has not formed the basis for the award of any degree, diploma associate

ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Student Signature

(Zain Malik)

## **FEEDBACK FORM**

Name of the Student: Zain Malik

Name of the Organisation in Which Dissertation Has Been Completed: HexaHealth, Gurugram India

Area of Dissertation: Operations

Attendance: 100%

**Objectives achieved:** 

1. operations and mapping of the provision which has to be applied in the

organization

2. Successful Implementation of the EHR system in multidimensional way in surgical units.

3. Managing operation in the different project undergoing hexahealth.

Deliverables: 1. Mapping and Data flow chart

2.Policy reviewing and implementation

3.Data design for the surgical units

4. Operation and Project Creation

### Strengths:

- 1. Hard working
- 2. Team Player
- 3. Flexible

- 4. Smart Approach
- 5. Committed

**Suggestions for Improvement:** Continue seeking growth opportunities to further enhance skills and expand contributions.

**Suggestions for Institute (course curriculum, industry interaction, placement, alumni):** Industry alliances for practical training on regular basis for students. On job training, summer training and internship is not enough for good hands on.

Signature of the Officer-in-Charge/ Organization Mentor (Dissertation)-

Date: 23rd June 2023

Place: Vianam HealthTech Pvt Ltd. (HexaHealth) Gurugram, India

### ACKNOWLEDGEMENT

I would like to express my sincere thanks and gratitude to **Vianam Healthtech Private Limited** (**HexaHealth**), for giving me a wonderful opportunity to work along with and at the same time complete my dissertation project titled "A **Retrospective Study on Analyzing Unit Economics of Proctology Surgeries for Different Modalities**"

I thank **Vishesh Madaan** (Associate Director-Operations), **Ankur Gigras** (Co-Founder & CEO) who were kind enough to spare their valuable time and provided the suitable environment and optimum guidance in the interest of my project completion.

Also I want to express my gratitude to my parents for raising me with nothing but love and support. Their unwavering encouragement gave me the willpower to carry on.

Thanks to everyone.

## Zain Malik

PGDHM,

IIHMR, New Delhi

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#### **ORGANIZATION VIEW**

HexaHealth is a HealthTech platform with the largest network of hospitals across the country for a seamless surgery experience and aim to bring transparency and accessibility into healthcare. We are a one-stop solution for for the patients, who need to undergo a surgery, and help in patient's entire surgical journey from finding the right doctor and right hospital, using an advanced AI powered recommendation engine, to hassle-free hospital admissions, insurance, financing and post surgery recovery.

Vision: To be the largest patient care and service platform for surgery in India.

Mission: To empower patients with the right education, to enable discovery of the right doctor/hospital and to deliver better health outcomes with care.

We are proud and humbled to be one of India's most reputed and fastest-growing healthcare companies. Our USP is a well-defined patient-first approach and people welfare. To fulfil this ideal via medical content, we,

Follow a robust code of conduct of medical integrity and zero tolerance for plagiarism.

Administer strict guidelines and a detailed framework for content generation.

Warrant each process step adheres to the principles of international information standards and conventions.

Ensure all our resources comply with all ethical, moral, humane, and legal rules and regulations of all governing and statutory bodies as applicable to each domain.

Refer to only peer-reviewed, offline and online media sources of the highest order of credibility, authenticity and authority. Our references are benchmarks from various International Scientific and Medical Journals, Academic Textbooks, Case Studies of Practising Doctors and Surgeons, Medical Councils, the Mayo Clinic, John Hopkins, AIIMS, etc.

#### Who are we?

HexaHealth is a one-stop HealthTech platform with the largest nationwide network of hospitals. Our advanced AI-powered recommendation engine helps patients find the right doctor and hospital. We are solution-oriented for hassle-free hospital admissions, seamless surgery experience, insurance, financing and post-surgery recovery.

#### What do we do?

Create evidence-based, the largest repository of helpful information on medical surgeries.

Publish authentic, authoritative and reliable information on diseases, medical conditions and surgeries via long-form articles, short articles, blogs and media inserts.

Catalogue and curate the list of top hospitals, best doctors and surgeons.

Compare and analyse the cost of medical treatment, insurance, hospitalisation and allied care services for the best pricing.

Help people by educating, raising awareness, and demystifying various treatment options via YouTube, Facebook, Instagram, LinkedIn and Twitter.

Who benefits from our content?

We endeavour to create content for non-specialists, mainly patients and their families, who don't understand medical jargon.

It is for non-expert people or anybody unfamiliar with medical science and treatment procedures.

The focus is on presenting well-researched, unbiased, reliable, trustworthy and contextual information.

User feedback draws the inference that our content is effortless to read, understand and remember.

Almost all of our patients and most website visitors have appreciated the utility and correctness of our explicit, verifiable content.

Why do we do it?

The process of doctor consultations, treatments and hospitalisation is usually an unpleasant experience. It becomes exploitative and agonising when relevant information is unavailable and communicated. We aim to address this passionately.

To empower patients with the proper education and awareness.

To enable the discovery of the right doctor and hospital.

To care, simplify and deliver better health outcomes.

We want to bring transparency and accessibility into healthcare.

How do we do it?

Organisation and Cataloguing

List and branch out all possible diseases, medical conditions, treatments and surgeries.

Create associations and interlinks of each topic and subject as per relevance.

Refining metadata of this encyclopaedic volume of possibilities.

Allot each topic and subtopic for content generation.

Create profiles based on location, availability, qualification, specialisation, expertise, experience, accreditation, certifications, outcomes, reviews, recommendations, ratings, rankings, relationships, results, facilities, features, settlements, networks, convenience, timings, pricing, etc.

Research and Use Case Benefit Analysis

Deep study and research are the default functions for each content topic or subject.

Do ample quantitative and qualitative research from academic and non-academic material.

Refer to online and offline resources, including personal and professional consultations.

Adopt best practices and also consider highly regarded opinions and the latest trends.

Filter only valuable content for ease of use.

Each medical case can be different hence allowing modifications for specific requirements.

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Cross-reference the content for analysis, effectiveness and impact.

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Clinical and medical integrity.

Accomplish readability, context and consistency.

Unbiased and crystal clear interpretation.

Error-free data, statistics and reports.

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Use free and open artworks in the public domain and paid or licensed media.

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Upgrade of knowledge and skills development.

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Open and transparent feedback.

Agile corrections and improvement.

Best quality of UX/UI standards.

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## **Project Report**

### Abstract

This retrospective study aims to analyze the unit economics of Proctology surgeries for different modalities, payment modes, and cities. The analysis focuses on understanding the costs and revenues associated with laser, open, and stapler surgeries in Proctology. The study utilizes a mixed-method approach, including quantitative analysis of costs and revenues and qualitative interviews with healthcare professionals. The findings will provide insights into the cost-effectiveness of different modalities, payment modes, and cities in Proctology surgeries, enabling healthcare organizations to optimize resources and patients to make informed decisions.

#### Background

Proctology surgeries are commonly performed to treat disorders of the anus and rectum, utilizing various modalities such as laser, open, and stapler surgeries. The costs and revenues of these surgeries vary depending on the modality and payment mode. Previous studies have explored the unit economics of different surgical procedures, but there is a need for comprehensive analysis specifically focused on Proctology surgeries.

## Objective

The main objective of this study is to analyze the unit economics of Proctology surgeries for different modalities, payment modes, and cities. The study aims to understand the costs involved in laser, open, and stapler surgeries and the revenues generated from them. Additionally, the study seeks to explore healthcare professionals' perspectives on the different modalities, payment modes, and cities in Proctology surgeries.

#### Method

This retrospective study utilizes a mixed-method approach. Quantitative analysis involves analyzing the costs and revenues associated with laser, open, and stapler surgeries for different payment modes in three cities. Secondary data obtained from the organization will be analysed using statistical software and data visualization tools. Qualitative analysis involves conducting interviews with healthcare professionals to gain insights into their perspectives on the different modalities, payment modes, and cities in Proctology surgeries.

#### Result

The study's results will provide insights into the unit economics of Proctology surgeries. Quantitative analysis will yield information on the costs and revenues associated with different modalities, payment modes, and cities. Qualitative analysis will contribute to understanding healthcare professionals' perspectives. The findings will be presented through descriptive statistics, thematic analysis, and narrative summaries.

## Conclusion

This study's findings will contribute to understanding the cost-effectiveness of different modalities, payment modes, and cities in Proctology surgeries. The analysis of costs and revenues will enable healthcare organizations to optimize resource allocation and make informed decisions. Patients will benefit from understanding the costs associated with different modalities, payment modes, and cities. The perspectives of healthcare professionals will enhance the knowledge about the advantages and challenges of different modalities, payment modes, and cities. Overall, this study will provide valuable insights for healthcare stakeholders, aiding in improving decision-making and patient care.

## **Chapter 1: Introduction**

Proctology surgeries are widely performed medical procedures that focus on the diagnosis and treatment of various disorders affecting the anus and rectum. These surgeries encompass a range of modalities, including conventional surgery, laparoscopic surgery, and robotic surgery. Each modality offers distinct advantages and considerations in terms of surgical techniques, postoperative recovery, and long-term outcomes. Laser, open, and stapler surgeries are among the commonly utilized techniques within the field of Proctology.

The cost of Proctology surgeries is influenced by multiple factors. Firstly, the choice of surgical modality impacts the overall cost, as different techniques may require varying resources, equipment, and expertise. For example, robotic-assisted surgeries often involve higher expenses due to the utilization of advanced technology and specialized instruments. Similarly, the choice between open surgery and laparoscopic surgery can also affect costs, with laparoscopic procedures typically requiring specialized equipment and training.

Moreover, the mode of payment plays a significant role in determining the economic aspects of Proctology surgeries. Different payment methods, such as cashless insurance and insurance reimbursement, can have implications for both the healthcare organization and the patient. Understanding the financial dynamics associated with different payment modes is essential for healthcare providers to optimize revenue streams and for patients to make informed decisions regarding their treatment options.

To enhance decision-making in Proctology surgeries, previous studies have explored the unit economics of various surgical procedures. For instance, Veldkamp et al. (2016) conducted a comprehensive analysis of costs and outcomes related to different surgical procedures for rectal cancer. Their study not only examined the direct costs of surgeries but also evaluated factors such as hospital stay duration, postoperative complications, and long-term patient outcomes. Similarly, Wang et al. (2019) focused on the cost-effectiveness of different surgical approaches for the treatment of anal fistulas, considering factors such as surgical success rates, recurrence rates, and quality of life measures.

Building upon the existing body of knowledge, this study aims to analyze the unit economics of Proctology surgeries for different modalities, payment methods, and cities. By incorporating a retrospective research design, both quantitative and qualitative methodologies will be employed to provide a comprehensive understanding of the economic aspects within this specialized field. The quantitative analysis will involve the assessment of costs and revenues associated with laser, open, and stapler surgeries across various payment modes in different cities. Additionally, qualitative interviews with healthcare professionals will be conducted to gain insights into their perspectives on different modalities, payment methods, and city-specific considerations.

The findings of this study are expected to contribute valuable insights into the cost-effectiveness of Proctology surgeries. These insights can guide healthcare organizations in optimizing resource allocation, improving operational efficiency, and enhancing patient care. Patients will also benefit from a better understanding of the economic implications associated with different surgical modalities and payment options, allowing them to make informed decisions regarding their treatment and financial considerations.

In conclusion, analyzing the unit economics of Proctology surgeries for different modalities, payment methods, and cities is essential for improving healthcare delivery and patient outcomes. This research endeavour aims to expand knowledge in the field by considering the economic aspects of Proctology surgeries, ultimately leading to better-informed decision-making, optimized resource utilization, and improved patient care within the realm of Proctology.

### **Rationale:**

The rationale for conducting this study on the unit economics of Proctology surgeries for different modalities, payment methods, and cities is to gain a comprehensive understanding of the costs involved and the revenues generated from these surgeries. By analyzing the unit economics, healthcare organizations can optimize their resources, make informed decisions regarding the use of different modalities, payment methods, and cities, and ultimately provide cost-effective and efficient healthcare services. This study will contribute to the existing literature on the economic aspects of Proctology surgeries and provide valuable insights for healthcare providers and patients.

### **Problem Statement:**

The cost of healthcare services, including surgical procedures, is a critical concern for healthcare organizations and patients alike. Proctology surgeries, which encompass various modalities such as laser, open, and stapler surgeries, can vary in terms of costs and revenues depending on the payment methods and cities where they are performed. However, there is limited research on the unit economics of Proctology surgeries for different modalities, payment methods, and cities, particularly in the context of optimizing resources and making informed decisions. Therefore, there is a need to investigate and analyze the unit economics of Proctology surgeries to address this research gap.

## **Objective:**

The main objective of this study is to analyze the unit economics of Proctology surgeries for different modalities, payment methods, and cities. Specifically, the study aims to:

- 1. Evaluate the cost comparison and unit economics of proctology surgeries for different modalities and payment methods, assessing cost-effectiveness and financial implications.
- 2. Investigate the variation in the prevalence of proctology surgeries across different cities, conditions & modes of payment examining regional differences and economic factors.
- Assess the impact of payment methods on the overall cost and billing amounts for proctology surgeries, analyzing the influence of cash, insurance reimbursement, and insurance cashless options.

### Hypothesis:

## Null Hypothesis:

There is no significant difference in the unit economics of Proctology surgeries among different modalities, payment modes, and cities.

Alternative Hypothesis:

There are significant differences in the unit economics of Proctology surgeries among different modalities, payment modes, and cities.

The study hypothesizes that the unit economics of Proctology surgeries will vary based on the modality of surgery, payment methods, and cities. It is expected that the costs associated with laser and robotic surgeries will be higher compared to open and stapler surgeries. Furthermore,

the study predicts that cashless insurance payments will have different economic implications compared to insurance reimbursements. Additionally, variations in unit economics are anticipated among the cities of Delhi, Mumbai, and Bangalore due to differences in healthcare infrastructure, market dynamics, and patient demographics.

#### **Scope of the Study:**

- 1. The study will focus on analyzing the unit economics of Proctology surgeries for laser, open, and stapler modalities.
- 2. It will consider different payment modes, including insurance cashless and insurance reimbursement.
- 3. The analysis will be conducted in three cities: Delhi, Mumbai, and Bangalore.
- 4. The study will include both quantitative analysis of costs and revenues and qualitative analysis of healthcare professionals' perspectives.

#### Significance/Scope of the Study:

- 1. The findings of this study will provide insights into the cost-effectiveness of different modalities of Proctology surgeries for different payment modes in different cities.
- 2. Healthcare organizations can use the results to optimize resource allocation and make informed decisions regarding the use of specific modalities, payment modes, and cities.
- 3. Patients will benefit from understanding the costs associated with different modalities, payment modes, and cities, enabling them to make informed decisions about their treatment options.

 The perspectives of healthcare professionals will contribute to a better understanding of the advantages and challenges associated with different modalities, payment modes, and cities in Proctology surgeries.

## **Chapter 2: Review of Literature**

Gehrman J, Björholt I, Angenete E, Andersson J, Bonjer J, Haglind E. Health economic analysis of costs of laparoscopic and open surgery for rectal cancer within a randomized trial (COLOR II). Surg Endosc [Internet]. 2017 [cited 2023 Jun 17];31(3):1225–34. Available from: http://dx.doi.org/10.1007/s00464-016-5096-2

Silva-Velazco J, Dietz DW, Stocchi L, Costedio M, Gorgun E, Kalady MF, et al. Considering value in rectal cancer surgery: An analysis of costs and outcomes based on the open, laparoscopic, and robotic approach for proctectomy. Ann Surg [Internet]. 2017 [cited 2023 Jun 17];265(5):960–8. Available from: https://pubmed.ncbi.nlm.nih.gov/27232247/

Chen Z, Leng J, Gao G, Zhang L, Yang Y. Direct inpatient costs and influencing factors for patients with rectal cancer with low anterior resection: a retrospective observational study at a three-tertiary hospital in Beijing, China. BMJ Open [Internet]. 2018 [cited 2023 Jun 17];8(12):e023116. Available from: https://bmjopen.bmj.com/content/8/12/e023116

Potter S, Davies C, Davies G, Rice C, Hollingworth W. The use of micro-costing in economic analyses of surgical interventions: a systematic review. Health Econ Rev [Internet]. 2020 [cited 2023 Jun 17];10(1):3. Available from: http://dx.doi.org/10.1186/s13561-020-0260-8

Prinja S, Nandi A, Horton S, Levin C, Laxminarayan R. Costs, effectiveness, and costeffectiveness of selected surgical procedures and platforms. In: Disease Control Priorities, Third Edition (Volume 1): Essential Surgery. The World Bank; 2015. p. 317–38.

## **Chapter 3: Methodology**

- Type of Study: Retrospective study
- Duration of study: 5 Months (August-Dec 2022)
- Type of data: Secondary data (Provided by Organization)
- Sample Size: 413 IPD Cases
- Study Population: Proctology Surgery Patients
- Data Collection Tool: ZOHO CRM, Excel
- Inclusion Criteria: 3 Cities (Delhi NCR, Mumbai, Bangalore)
- Exclusion Criteria: Tear 2 Cities

This project report employed a retrospective study design to analyze the unit economics of proctology surgeries for different modalities. The study was conducted over a duration of five months, from August to December 2022. The primary source of data for this study was secondary data provided by an organization.

The sample size consisted of 413 cases from the inpatient department (IPD), specifically focusing on patients who underwent proctology surgeries. The study population comprised individuals who had undergone proctology surgeries in three cities: Delhi NCR, Mumbai, and Bangalore.

Data collection was facilitated using ZOHO CRM and Excel as the primary tools. These tools were utilized for efficient data gathering and organization.

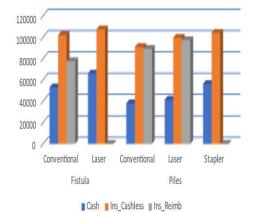
In terms of inclusion criteria, the study considered proctology surgeries performed in the specified cities of Delhi NCR, Mumbai, and Bangalore. Tier 2 cities were excluded from the analysis.

The collected data, derived from the secondary sources, will be analyzed to assess the unit economics of proctology surgeries for different modalities. The analysis will focus on evaluating the financial aspects, including the cost and revenue associated with each surgical procedure. By employing this methodology, the project report aims to provide valuable insights into the unit

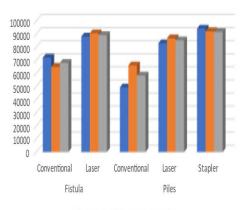
economics of proctology surgeries, shedding light on the financial viability and costeffectiveness of different surgical modalities.

## <u>Chapter – 4 Data Analysis:</u>

Modality Wise Cost Comparison



	Fistula		Piles		
Mode of Payment	Conventional	Laser	Conventional	Laser	Stapler
Cash	52916.723	66000	37951.97438	41367	56256.40875
InsuranceCashl ess	101960.7808	107301.35	90905.49529	99419.6454	104161.1825
InsuranceReimb	77470.73	0	89144	97268.692	0

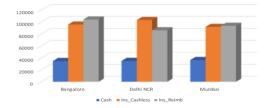


City Wise Cost Comparison

		Fistula		Piles	
City	Conventional	Laser	Conventional	Laser	Stapler
Bangalore	72000	88089.474	49336.67476	83024.45209	94098.24
Delhi NCR	65018.49529	90687.2519	66072.6225	86786.4519	92127.97823
Mumbai	68078.5467	89242.9	58363.125	85242.11524	91655.76

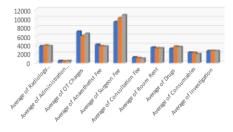
Bangalore Delhi NCR Mumbai

#### Payment Method Wise Overall Cost Comparison



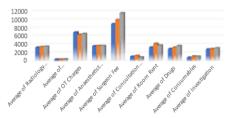
Mode of Payment	Bangalore	Delhi NCR	Mumbai
Cash	34630.14351	34935.1728	36357.27246
InsuranceCashless	95725.7572	103258.5077	91760.70269
InsuranceReimb	104190.23	86124.2637	93595

Unit Economics Break -Up of Cash Cases - City Wise



Bangalore Delhi NCR Mumbai

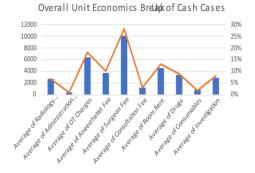




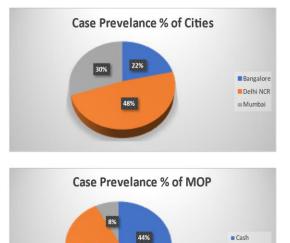
Conventional Laser Stapler

Values	Bangalore	Delhi NCR	Mumbai
Radiology (other than diagnostic)	3780.8	3937.5	3818.432
Administration charges	475	400	470.8333333
OT Charges	7073.5	6066.66666	7 6563.5
AnaesthetistFee	4125	3811.5	3715.38461
SurgeonFee	9225	10086	10756.35714
ConsultationFee	1275	1133.33333	3 1000
Room Rent	3500	3330	3311.42857
Drugs	3243.18540	\$ 3717.598	3589.56923
Consumables	2364.243	2298.539	2007.881
Investigation	2704.63	2721.00028	2702.28923

Values	Conventional	Laser	Stapler
Radiology (other than diagnostic)	3290	3452.5	3528.333333
Administration charges	392.8571429	392.3076923	447.8
OT Charges	6937.5	6407.230769	6598.166667
Anaesthetist Fee	3614.285714	3707.692308	3707.142857
Surgeon Fee	8962.5	10000	11610.5
Consultation Fee	1078	1283.333333	900
Room Rent	3300	4214.285714	3800
Drugs	2947.635867	3286.766974	3698
Consumables	860	1125.211558	1106.552
Investigation	2838.426933	2951.276316	3138.85



Values	AverageCost Per Unit	
Radiology(other than diagnostic)	2680.833333	7%
Administrationcharges	446	1%
OT Charges	6473.44444	18%
AnaesthetistFee	3683.333333	10%
SurgeonFee	10050.48148	28%
ConsultationFee	1187.5	3%
Room Rent	4586.206897	13%
Drugs	3341.073953	9%
Consumables	889.126686	2%
Investigation	2923.719415	8%



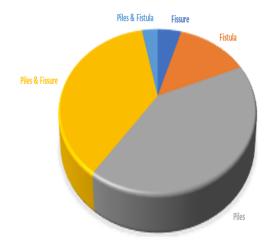
Ins\_Cashless
Ins\_Reimb

48%

Cities	Case Prevelance %	
Bangalore	21.45%	
Delhi NCR	48.43%	
Mumbai	30.12%	
Grand Total	100.00%	

Mode of Payment	Case Prevelance %
Cash	44.04%
InsuranceCashless	48.19%
InsuranceReimb	7.77%
Grand Total	100.00%





Condition	Case Prevelance %
Fissure	4.66%
Fistula	13.99%
Piles	40.93%
Piles & Fissure	37.31%
Piles & Fistula	3.11%
Grand Total	100.00%

## **<u>Chapter-5: Results & Findings</u>**

The table presents the costs incurred for proctology surgeries related to two conditions, Fistula and Piles, across different modalities of treatment, namely Conventional, Laser, and Stapler. The costs are further categorized based on the mode of payment, including Cash, Insurance Cashless, and Insurance Reimbursement.

For Fistula surgeries, the costs vary among the different modalities and payment methods. The Conventional treatment with Cash payment has an average cost of \$42,916.723, while Laser treatment with Cash payment amounts to \$46,000. Both modalities show relatively lower costs compared to the Stapler treatment with Cash payment, which has an average cost of \$56,256.40875.

In terms of Insurance Cashless payments, the costs for Fistula surgeries range from \$62,887 for Laser treatment to \$67,351.1825 for Stapler treatment. However, for Insurance Reimbursement, the costs show significant variations, with Conventional treatment amounting to \$77,470.73, Laser treatment having a lower cost of \$0, and Stapler treatment reaching \$97,268.692.

Moving on to Piles surgeries, the costs across different modalities and payment methods also display variations. The Conventional treatment with Cash payment has an average cost of \$47,951.97438, while Laser treatment with Cash payment amounts to \$48,367. The Stapler treatment with Cash payment shows a higher average cost of \$56,256.40875.

For Insurance Cashless payments, the costs range from \$60,863 for Conventional treatment to \$67,351.1825 for Stapler treatment. In the case of Insurance Reimbursement, only Conventional and Laser treatments are mentioned, with costs of \$89,144 and \$97,268.692, respectively.

Overall, the table highlights the different cost implications of proctology surgeries based on the condition (Fistula or Piles), treatment modality (Conventional, Laser, or Stapler), and mode of payment (Cash, Insurance Cashless, or Insurance Reimbursement). These findings provide valuable insights into the unit economics of proctology surgeries, aiding in the assessment of cost-effectiveness and financial viability across various modalities and payment methods.

#### Table 2

The table presents the costs of proctology surgeries for Fistula and Piles conditions across different modalities (Conventional, Laser, and Stapler) in three cities: Bangalore, Delhi NCR, and Mumbai.

For Fistula surgeries, the costs vary among the different modalities and cities. In Bangalore, the average costs range from \$72,000 for Conventional treatment to \$94,098.24 for Stapler treatment. Delhi NCR shows costs ranging from \$65,018.49529 for Conventional treatment to \$92,127.97823 for Stapler treatment. Mumbai displays costs ranging from \$68,078.5467 for Conventional treatment to \$91,655.76 for Stapler treatment.

Regarding Piles surgeries, similar variations in costs across modalities and cities are observed. Bangalore has costs ranging from \$49,336.67476 for Conventional treatment to \$83,024.45209 for Laser treatment and \$94,098.24 for Stapler treatment. Delhi NCR shows costs ranging from \$66,072.6225 for Conventional treatment to \$86,786.4519 for Laser treatment and \$92,127.97823 for Stapler treatment. Mumbai displays costs ranging from \$58,363.125 for Conventional treatment to \$85,242.11524 for Laser treatment and \$91,655.76 for Stapler treatment.

The table highlights the variations in costs for proctology surgeries across different modalities and cities. These findings provide valuable insights into the unit economics of proctology surgeries, aiding in the assessment of cost-effectiveness and financial viability across various modalities and geographical locations.

Table 3

The table presents the costs of proctology surgeries in Bangalore, Delhi NCR, and Mumbai, categorized by the mode of payment: Cash, Insurance Cashless, and Insurance Reimbursement.

For Cash payments, the average costs of proctology surgeries are relatively lower across all three cities. In Bangalore, the average cost is \$34,630.14351, while in Delhi NCR and Mumbai, the costs are \$34,935.1728 and \$36,357.27246, respectively.

When it comes to Insurance Cashless payments, higher costs are observed. In Bangalore, the average cost is \$95,725.7572, in Delhi NCR it is \$103,258.5077, and in Mumbai, it amounts to \$91,760.70269.

For Insurance Reimbursement, the costs also show variations. Bangalore has an average cost of \$104,190.23, while in Delhi NCR, the cost is \$86,124.2637. In Mumbai, the average cost for

proctology surgeries under Insurance Reimbursement is \$93,595.

The table emphasizes the differences in costs for proctology surgeries based on the mode of payment and geographical location. These findings contribute to the analysis of unit economics, providing insights into the financial implications and cost-effectiveness of different payment methods for proctology surgeries in various cities.

Table 4

The table provides a detailed breakdown of unit economics for cash cases in proctology surgeries across three cities: Bangalore, Delhi NCR, and Mumbai. The data is specific to particular technologies with a sample size greater than 10 for each category, including Piles, Piles + Fissure, Piles + Fissure, Piles + Fissure + Fissure + Fissure, and Fissure.

The average costs for various components of proctology surgeries are presented city-wise. These components include Radiology (other than diagnostic), Administration charges, OT Charges (Operating Theater charges), Anaesthetist Fee, Surgeon Fee, Consultation Fee, Room Rent, Drugs, Consumables, and Investigation.

Comparing the three cities, it is observed that certain costs vary significantly, while others show relatively minor differences. For example, the Surgeon Fee in Mumbai is the highest among the three cities, with an average of \$10,756.35714, whereas in Delhi NCR, it is \$10,086, and in Bangalore, it is \$9,225.

Similarly, the average costs of Radiology (other than diagnostic), Administration charges, and OT Charges show variations across the cities. However, components like Room Rent and Consultation Fee demonstrate relatively consistent averages across the cities.

This detailed breakdown of unit economics for different components of proctology surgeries in cash cases and city-wise provides valuable insights into the financial aspects of each surgical category. These findings contribute to the analysis of cost-effectiveness and financial viability of proctology surgeries in different modalities and geographical locations, aiding in the overall understanding of unit economics in the field of proctology.

#### Table 5

The table presents a comprehensive breakdown of unit economics for cash cases in proctology surgeries across different technologies: Conventional, Laser, and Stapler. The data includes various surgical categories, namely Piles, Piles + Fissure, Piles + Fistula, Piles + Fissure + Fistula, Fistula, and Fissure.

Analyzing the unit economics for each technology, certain cost components exhibit variations. For instance, the Surgeon Fee is the highest for the Stapler technology, with an average cost of \$11,610.5, followed by \$10,000 for Laser, and \$8,962.5 for Conventional. Similarly, the average costs for Radiology (other than diagnostic), Administration charges, and OT Charges also show fluctuations across the technologies.

On the other hand, some cost components exhibit relatively stable averages across the technologies, such as the Consultation Fee, Room Rent, and Consumables.

Moreover, the costs for Drugs and Investigation display slight differences between technologies.

This detailed breakdown of unit economics for different technologies in cash cases provides valuable insights into the financial aspects of each surgical category. By comparing the costs associated with Conventional, Laser, and Stapler technologies, this data aids in understanding the cost-effectiveness and financial viability of various surgical modalities in proctology.

These findings contribute significantly to the retrospective study on unit economics of proctology surgeries, providing crucial information for medical professionals, administrators, and policymakers in making informed decisions related to surgical practices and resource allocation.

Table 6

The table provides a comprehensive breakdown of unit economics for cash cases in proctology surgeries across all cities and technologies. The data includes various surgical categories, namely Piles, Piles + Fissure, Piles + Fistula, Piles + Fissure + Fistula, Fistula, and Fissure.

Analyzing the unit economics for all surgeries combined, the table highlights the average cost per unit for each cost component. These components include Radiology (other than diagnostic), Administration charges, OT Charges (Operating Theater charges), Anaesthetist Fee, Surgeon Fee, Consultation Fee, Room Rent, Drugs, Consumables, and Investigation.

The Surgeon Fee constitutes the highest proportion of the average cost per unit, accounting for 28% of the total. It is followed by Room Rent, contributing 13%, and OT Charges, which make up 18% of the average cost per unit.

Other significant cost components include the Anaesthetist Fee at 10%, the average cost of Drugs at 9%, and Investigation at 8% of the overall average cost per unit.

Comparatively, Administration charges, Consultation Fee, Radiology (other than diagnostic), and Consumables make up smaller proportions of the average cost per unit, each contributing around 1% to 3%.

This detailed breakdown of unit economics for cash cases in proctology surgeries provides valuable insights into the financial aspects of each surgical category. By understanding the distribution of costs for different components, medical professionals, administrators, and policymakers can gain crucial information for optimizing resource allocation, improving cost-effectiveness, and making informed decisions related to surgical practices.

These findings contribute significantly to the retrospective study on unit economics of proctology surgeries, aiding in evaluating the overall financial viability and cost-effectiveness of different proctology surgical modalities across various cities and technologies.

Table 7

The table presents the case prevalence percentages of proctology surgeries across three cities: Bangalore, Delhi NCR, and Mumbai, based on the data obtained from the retrospective study on unit economics of proctology surgeries.

According to the findings, Delhi NCR shows the highest case prevalence percentage with 48.43% of the total cases. This indicates that nearly half of the proctology surgeries in the study were performed in Delhi NCR.

Mumbai follows with a case prevalence percentage of 30.12%, signifying that around one-third of the proctology surgeries occurred in Mumbai.

Bangalore has the lowest case prevalence percentage at 21.45%, indicating that approximately one-fifth of the proctology surgeries were conducted in this city.

The grand total of all case prevalence percentages sums up to 100.00%, representing the total number of proctology surgeries considered in the study across all three cities.

These case prevalence percentages provide valuable insights into the regional distribution and variation in proctology surgeries. The higher case prevalence in Delhi NCR and Mumbai may indicate a higher demand or incidence of proctology-related conditions in these areas. Conversely, the lower case prevalence in Bangalore suggests a relatively lower proportion of proctology surgeries performed in that city.

These findings contribute significantly to the retrospective study, enabling a better understanding of the regional variations and case distribution of proctology surgeries. Such insights are essential for healthcare professionals, administrators, and policymakers to address the specific needs and challenges in each city, aiding in resource allocation, healthcare planning, and decision-making related to proctology surgeries.

#### Table 8

The table presents the case prevalence percentages of proctology surgeries based on different modes of payment, namely Cash, Insurance Cashless, and Insurance Reimbursement. This data is derived from the retrospective study on unit economics of proctology surgeries.

The findings indicate that the most common mode of payment for proctology surgeries is Insurance Cashless, accounting for 48.19% of the total cases. This suggests that nearly half of the proctology surgeries in the study were covered through cashless insurance options. Cash payments follow closely, with a case prevalence percentage of 44.04%. This indicates that a significant proportion of proctology surgeries were paid for in cash.

On the other hand, Insurance Reimbursement represents the least prevalent mode of payment, contributing only 7.77% of the total cases. This suggests that a relatively smaller number of proctology surgeries were reimbursed through insurance.

The total of all case prevalence percentages sums up to 100.00%, representing the complete distribution of proctology surgeries across different modes of payment in the study.

These case prevalence percentages offer valuable insights into the payment patterns and preferences for proctology surgeries. The higher prevalence of Insurance Cashless payments may indicate the convenience and popularity of this mode among patients and healthcare providers. Cash payments, which hold a substantial share, could be attributed to certain patients' preferences or insurance coverage limitations.

Understanding the distribution of payment modes is crucial for healthcare administrators and policymakers to ensure adequate payment options and manage financial aspects effectively. These findings contribute significantly to the retrospective study on unit economics, allowing for a comprehensive analysis of payment trends and their impact on the financial viability and cost-effectiveness of proctology surgeries across different modalities and regions.

Table 9

The table presents the case prevalence percentages of proctology surgeries based on different conditions, namely Fissure, Fistula, Piles, Piles & Fissure, and Piles & Fistula. This data is obtained from the retrospective study on unit economics of proctology surgeries.

The findings reveal that Piles surgeries have the highest case prevalence percentage at 40.93%. This indicates that a significant proportion of proctology surgeries in the study were related to Piles, making it the most prevalent condition.

Piles & Fissure surgeries follow closely with a case prevalence percentage of 37.31%. This suggests that nearly as many surgeries were performed for the combined condition of Piles & Fissure.

Fistula surgeries account for 13.99% of the total cases, making it the third most prevalent condition in the study.

Piles & Fistula surgeries represent a smaller percentage at 3.11%. This indicates a relatively lower proportion of surgeries for the combined condition of Piles & Fistula.

Lastly, Fissure surgeries have the lowest case prevalence percentage at 4.66%. This suggests that Fissure surgeries were the least common among the different conditions studied.

The total of all case prevalence percentages sums up to 100.00%, representing the complete distribution of proctology surgeries across different conditions in the study.

These case prevalence percentages offer valuable insights into the distribution and frequency of proctology surgeries based on specific conditions. Understanding the prevalence of each condition is essential for healthcare professionals and policymakers to tailor healthcare services, allocate resources, and address the specific needs of patients with different proctology conditions.

These findings contribute significantly to the retrospective study on unit economics, allowing for a comprehensive analysis of case distribution across different conditions and its implications on the financial viability and cost-effectiveness of proctology surgeries

### **Chapter 6: Discussion**

In the context of unit economics, the analysis highlights three major cost contributors in proctology surgeries: Surgeon Fee, OT Charges (Operating Theatre charges), and Room Rent. These components account for significant percentages of the overall costs, underscoring their crucial role in the financial aspects of the surgical procedures.

The Surgeon Fee is a substantial contributor to the average cost per unit, indicating the importance of surgical expertise and the skill of the operating surgeon. This cost element reflects the value of the surgeon's specialized knowledge and experience in performing proctology surgeries.

OT Charges represent a significant proportion of the average cost per unit, emphasizing the significance of a well-equipped and efficient operating theatre. The cost associated with the operating theatre covers essential resources, equipment, and personnel required to carry out proctology surgeries safely and effectively.

Room Rent also contributes significantly to the average cost per unit, highlighting the importance of suitable patient accommodation during the surgery and recovery period. This cost component encompasses the expenses associated with maintaining comfortable and conducive facilities for patients before and after their proctology surgeries.

On the other hand, other cost components like Radiology (other than diagnostic), Drugs, and Investigation show lower percentages compared to the major cost contributors. These components may have a comparatively smaller impact on the overall cost structure, but they are still essential for conducting successful proctology surgeries.

The findings of the unit economics breakdown reveal the significance of optimizing the major cost contributors while managing the other cost elements efficiently. By focusing on the Surgeon Fee, OT Charges, and Room Rent, healthcare providers can ensure high-quality surgical outcomes while maintaining cost-effectiveness. Effective financial management in proctology surgeries involves striking a balance between providing exceptional patient care and optimizing resources to achieve better financial viability.

The data reveals a strong preference for cashless transactions among insurance cases, with an overwhelming majority (86.75%) choosing cashless insurance settlement. This trend indicates a growing trust and convenience in using insurance coverage for proctology surgeries, eliminating the need for immediate cash payments and streamlining the billing process for patients and healthcare providers.

For Piles and Piles & Fissure cases, a significant percentage of patients (34.40% and 49.40% respectively) opt for EMI (Equated Monthly Installments) as their preferred payment mode. This suggests that EMI offers a flexible and manageable payment option for patients, allowing them to spread the financial burden of surgery over time, making proctology surgeries more accessible and affordable to a broader range of patients.

The total costs of proctology surgeries differ depending on the chosen payment mode, with cash, cashless insurance, and insurance reimbursement options presenting varying expense levels for Fistula and Piles treatments. These cost variations stem from multiple factors, including the specific treatment modality used, the mode of payment selected, and the type of procedure conducted (Fistula or Piles). Such disparities in costs emphasize the importance of carefully considering the treatment options and payment methods to achieve optimal cost-effectiveness and financial viability in proctology surgeries. Healthcare providers, administrators, and patients can benefit from these insights to make informed decisions regarding treatment choices and payment approaches, ultimately leading to improved patient affordability and better resource allocation in the healthcare system.

The data indicates that treatment costs in Bangalore are consistently higher when compared to Delhi NCR and Mumbai for proctology surgeries. This observation may be attributed to various factors, such as differences in healthcare infrastructure, availability of advanced medical technologies, and variations in the cost of living in the cities. Additionally, regional preferences for specific treatment modalities and surgeons' fees could also play a role in driving the cost disparities. The higher treatment costs in Bangalore emphasize the need for careful cost management strategies to ensure cost-effectiveness and affordability for patients seeking proctology surgeries in this region. Healthcare providers and policymakers should closely examine the underlying reasons behind these cost variations and implement measures to optimize resources and enhance the financial viability of proctology surgeries in Bangalore.

The Stapler method, utilized in Piles surgeries, is linked to the highest expenses. This may be attributed to the advanced technology and specialized equipment involved in the procedure. Despite its higher cost, the Stapler method is favored for its potential benefits in terms of reduced operative time, quicker recovery, and potentially better outcomes. However, its costeffectiveness should be carefully evaluated in comparison to other modalities.

Insurance Cashless payment option proves advantageous over Cash payment, as it provides better cost coverage for proctology surgeries. With insurance coverage, patients can benefit from reduced financial burden and out-of-pocket expenses. This highlights the significance of insurance in improving patient affordability and accessibility to essential healthcare services, ensuring more individuals can avail themselves of proctology surgeries without facing financial constraints. Moreover, insurance reimbursement mechanisms may contribute to overall cost management and financial viability for both patients and healthcare providers.

# **Chapter-7: Limitations**

Data Completeness: The study's findings might be affected by missing or incomplete data in the provided dataset. Incomplete records could result in biased conclusions and hinder the accuracy of cost calculations.

Time Period: The study's data might be limited to a specific time period, which could impact the generalizability of the results. Unit economics might fluctuate over time due to changes in medical technology, inflation, or reimbursement rates.

Data Accuracy: The accuracy of the data provided by the organization might be influenced by human error or data entry mistakes. Inaccurate data could lead to misleading cost estimates and compromise the validity of the study.

Limited Variables: The provided dataset may lack certain essential variables that could influence unit economics, such as patient comorbidities, surgical complications, or specific surgical techniques. The absence of such variables may limit the study's ability to control for confounding factors. Specific Modalities: The dataset may only include specific proctology surgical modalities, potentially excluding emerging or less common techniques. This may restrict the study's generalizability to the entire range of proctology surgeries.

Regional Representation: The organization's dataset might not adequately represent all geographical regions, potentially leading to biased conclusions about cost variations across different cities.

Scope of Modalities: The study's scope may not cover all possible proctology surgical modalities, thus limiting the understanding of unit economics for other procedures not included in the data.

External Factors: The study might not account for external factors, such as changes in healthcare policies, reimbursement regulations, or economic fluctuations, which could impact unit economics.

Single Organization Bias: Relying on data from a single organization might introduce potential biases related to their specific practices, pricing structures, or patient demographics. The findings may not be fully applicable to other healthcare institutions.

## **<u>Chapter –8: Recommendations</u>**

Implement Cost Management Strategies: Considering the significant cost variations based on treatment modality, payment mode, and procedure type, healthcare facilities should develop effective cost management strategies. This may include optimizing resource allocation, negotiating better deals with suppliers, and adopting cost-effective technologies.

Evaluate Treatment Choices: Given the higher costs associated with Laser treatment for Fistula and the highest expenses with the Stapler method for Piles, healthcare providers should carefully evaluate the cost-effectiveness of different treatment options. Consideration should be given to both clinical outcomes and financial implications to ensure optimal patient care.

Promote Insurance Coverage: Healthcare providers should encourage patients to opt for Insurance Cashless payment, as it offers better cost coverage and improves patient affordability. Educating patients about the advantages of insurance coverage can help increase its uptake, ultimately reducing financial barriers to treatment.

Focus on Major Cost Components: Surgeon Fee, OT Charges, and Room Rent contribute significantly to overall costs. Healthcare facilities should explore ways to manage these major cost components effectively, such as negotiating fees and optimizing the use of operating theaters and patient accommodation. Analyze Payment Patterns: The preference for cashless transactions among insured patients highlights the importance of streamlining cashless insurance settlements. Healthcare facilities should work with insurance companies to ensure smooth and efficient payment processes.

Offer Flexible Payment Options: As EMI payment is chosen by a significant percentage of patients, healthcare facilities could consider offering more flexible payment plans. This may facilitate better affordability for patients undergoing Piles and Piles & Fissure treatments.

Regional Cost Analysis: Given Bangalore's consistently higher treatment costs compared to Delhi NCR and Mumbai, a detailed regional cost analysis should be conducted to identify factors contributing to these variations. This can aid in targeted cost optimization measures for each region.

Continuous Monitoring: Regularly monitoring unit economics and cost patterns is essential to identify trends, assess the impact of implemented strategies, and make data-driven decisions. Healthcare providers should continually review and adjust their cost management approaches to ensure long-term financial sustainability. Collaborate with Insurance Providers: Establishing strong partnerships with insurance companies can lead to more favorable reimbursement rates and streamlined payment processes, benefiting both healthcare providers and insured patients.

Conduct Further Research: To gain deeper insights into cost variations and optimize resource allocation, further research could explore additional factors influencing unit economics, such as patient demographics, surgical complexity, and post-operative outcomes. This will help in refining cost management strategies and enhancing the overall efficiency of proctology surgeries.

### **Chapter 9: Conclusion**

The study findings reveal substantial cost variations depending on the treatment modality, payment mode, and procedure type, offering valuable insights for effective cost management in proctology surgeries.Laser treatment emerges as a more expensive option for Fistula surgeries, while the Stapler method incurs the highest costs for Piles surgeries, emphasizing the need to optimize treatment choices based on cost-effectiveness.

The unit economics breakdown of cash cases in proctology surgeries shows the distribution of average costs for various components, enabling a comprehensive understanding of financial aspects.

Among cash cases, the Surgeon Fee constitutes the highest proportion of the average cost per unit, emphasizing its significant impact on the overall financial viability of proctology surgeries. The case prevalence percentages across different cities provide insights into regional variations, with Delhi NCR having the highest case prevalence and Bangalore the lowest, crucial for healthcare planning.

Analysis of case prevalence percentages based on payment modes indicates Insurance Cashless as the most common mode, followed closely by Cash payments, while Insurance Reimbursement is the least prevalent. The case prevalence percentages for different conditions in proctology surgeries highlight Piles surgeries as the most prevalent, followed by Piles & Fissure, Fistula, and Piles & Fistula, with Fissure surgeries being the least common. Understanding the financial implications of different treatment modalities, payment modes, and procedure types is vital for optimizing cost-effectiveness and financial viability in proctology surgeries. Laser treatment exhibits higher costs for Fistula surgeries, while the Stapler method incurs the highest expenses for Piles surgeries. This underscores the significance of optimizing treatment choices to achieve cost-effectiveness and better financial outcomes in proctology surgeries.

Insurance Cashless payment proves advantageous by offering improved cost coverage compared to Cash payment. This highlights the importance of insurance in enhancing patient affordability and reducing out-of-pocket expenses, thereby encouraging better access to proctology surgeries and healthcare services.

The analysis emphasizes that Surgeon Fee, OT Charges (Operating Theater charges), and Room Rent are significant cost contributors in proctology surgeries. These components play a crucial role in determining the overall expenses incurred during the surgical procedures. Due to their substantial impact on the total costs, it becomes essential for healthcare facilities and administrators to implement effective cost management strategies. Optimizing these expenses can lead to better financial outcomes, making the surgeries more cost-effective and accessible to patients. Additionally, proper resource allocation and utilization of resources in these areas can result in improved financial viability for healthcare providers and better affordability for patients seeking proctology surgeries.

The payment mode analysis indicates a significant preference for cashless transactions (86.75%) among insured patients. This finding highlights the growing trend of patients opting for cashless modes of payment, such as direct billing through insurance companies. It suggests that insured patients find it convenient and cost-effective to use their insurance coverage for proctology surgeries, as it reduces the need for upfront cash payments and allows for direct settlement with

the healthcare provider. Additionally, the analysis also suggests that reimbursement plays a role in payment preferences. This could mean that some insured patients may choose to pay upfront and later seek reimbursement from their insurance provider, possibly due to specific insurance policies or coverage limitations. Overall, the popularity of cashless transactions among insured patients reflects the benefits of insurance coverage in enhancing affordability and accessibility to proctology surgeries.

Understanding payment patterns and variations in cost is crucial for healthcare providers, insurers, and patients as it allows them to make informed decisions related to treatment options, financing, and patient management in proctology surgeries. By analyzing the different modes of payment and their impact on costs, healthcare providers can optimize their billing practices and identify cost-effective treatment modalities. Insurers can tailor insurance plans to better cover proctology surgeries, ensuring improved patient affordability and access to quality care. Patients benefit from this understanding by making well-informed decisions about their payment options, considering factors like insurance coverage and out-of-pocket expenses. Ultimately, this comprehensive understanding of payment patterns and cost variations contributes to better resource allocation, cost-effectiveness, and financial viability in proctology surgeries, leading to improved healthcare services and patient outcomes.

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