

INTERNSHIP
at
Crystal Diagnostic Centre, Thane

Submitted to



The IIHMR University, Jaipur

for the partial fulfillment for the award of the degree

of Master of Business Administration

(MBA) in

Healthcare Analytics

by

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Under the Supervision and Guidance of

Dr Ritu Vashistha

2026

INTERNSHIP REPORT

Title: Operational Analytics and MIS-Based Decision Making for Improving Diagnostic Service Efficiency: A Case Study of Crystal Diagnostic Centre, Thane

Name: Yanagandul Badrinath Murli

Enrolment Number: IIMMR-U/18/2024-26/0030

Program: MBA in Healthcare Analytics (2024–2026)

Internship Organization: Crystal Diagnostic Centre, Thane, Maharashtra

Industry Mentor: Dr. Devendra Patil

Internship Period: 02 March 2026 to 31 May 2026

Faculty Guide: Dr Ritu Vashistha

1. INTRODUCTION

Healthcare organizations create vast amounts of operational and financial information as part of their daily activities, such as patient registration, diagnostic investigations, billing, and report generation. The capacity to coordinate and analyze these data is becoming more essential for enhancing the efficiency of operations and in making management decisions.

Healthcare Management Information Systems (MIS) is a vital component of healthcare that gathers and processes operational information in a structured manner. The data produced by MIS are used to track the performance of health care systems, assess service usage, analyse revenue patterns and offer performance enhancement opportunities.

Crystal Diagnostic Centre, Thane is a diagnostic healthcare centre offering a variety of diagnostic services such as sonography, Doppler studies, X-ray, pathology studies and other imaging techniques. The centre has systems and records for its day-to-day activities and performance monitoring.

The internship was conducted in the period 02 March 2026 to 31 May 2026 with the aim of gaining knowledge of the role of operational analytics and MIS in the context of healthcare management. My role at the time was to update operational records, review MIS reports, analyse patient volume and revenue trends and create summaries based on the dashboard using Microsoft Excel.

The internship offered hands-on experience of applying healthcare analytics concepts including KPI monitoring, dashboard reporting, descriptive analysis and operational performance evaluation. It also deepened my knowledge of the application of data-driven methods in healthcare organisations to inform decision making and service provision.

2. OBJECTIVES OF THE INTERNSHIP

The objectives of the internship are outlined below. The internship objectives are as follows:

- To gain an insight into the workflow and MIS reporting process of Crystal Diagnostic Centre.
- To learn about the use of Management Information Systems to maintain information relating to patients, billing and services.
- To review operational information for patient volume, revenue, collection and use of services.
- To be aware of the use of Key Performance Indicators (KPIs) in performance monitoring.
- To create reports that analyze trends of operations using a dashboard.
- To find patterns and insights that can help decision making in managing.
- To provide hands-on experience in healthcare analytics in a diagnostic healthcare environment.

- To increase analytical, communication and problem solving abilities through practice.
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3. ORGANIZATION PROFILE

About Crystal Diagnostic Centre

About Crystal Diagnostic Centre Crystal Diagnostic Centre, Thane is a diagnostic healthcare center which offers patients comprehensive diagnostic and imaging facilities. The centre provides services including sonography, colour Doppler study, x-ray investigation, pathology test and other diagnostic tests.

The centre provides walk-in care and is referred care, and centers on delivering accurate, timely and patient-centred care services. Management Information Systems keep patient records and billing information, diagnostic service details, and performance reports to support operational activities.

Structured operational data facilitates the management's decision-making process, financial analysis, and the monitoring of medical services utilization, while also supporting effective MIS reporting and healthcare analytics practices.

4. ACTIVITIES UNDERTAKEN DURING THE INTERNSHIP

• Internship Activities and Key Contributions

4.1 Understanding MIS and Operational Workflow

During the internship, I learned the working procedure of the diagnostic centre, and how various tasks like patient registration, appointment booking, billing, diagnostic services, etc. are interlinked with one another using a MIS system.

4.2 Data Collection and Data Preparation

Supported the maintenance of operational records and organization of data regarding patient visits, use of services, billing and payment status. Data was checked for completeness and consistency prior to analysis and reporting.

4.3 KPI Analysis and Performance Monitoring

Performed an analysis of important indicators of patient volume, revenues generated, collection rates, and utilization of diagnostic services. The analysis facilitated understanding of the operational patterns and assigned managerial focus.

4.4 Dashboard Development and Reporting

I created reports in Microsoft Excel that included charts and summary indicators for patient visits, revenue, payment patterns, and service utilization through dashboard reporting. These dashboards were used to present operational information in a visual and easily understandable manner.

4.5 Operational Analytics and Findings

Internship was a hands-on experience with healthcare analytics. I noticed that the operational data was regularly monitored, which enabled management to assess the performance of the services, discern patterns, and make decisions about the use of resources and about how work processes could be improved.

5. KEY LEARNINGS

- Developed practical understanding of healthcare Management Information Systems.
 - Learned how operational data can be transformed into meaningful insights for decision-making.
 - Improved skills in Microsoft Excel, dashboard development, KPI monitoring, and data interpretation.
 - Gained exposure to patient flow management, billing processes, and healthcare documentation.
 - Understood the importance of analytics in improving operational efficiency and healthcare service delivery.
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6. CHALLENGES OBSERVED

The following operational challenges were observed:

1. Managing and organising data from various operational reports.
 2. Consistency and accuracy in data preparation.
 3. Analysis and interpretation of trends based on a small number of historical data.
 4. Transforming operational data into valuable analytical reports.
 5. Balancing normal operational duties and analysis.
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7. RECOMMENDATIONS

1. Improve their current practice of KPI monitoring.
 2. Improve dashboard-based reporting with quick decision making.
 3. Enhance data standardization in reporting systems.
 4. Broaden application of healthcare analytics in operations planning.
 5. Create real time MIS dashboards to aid management in timely information.
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8. CONCLUSION

Internship at Crystal Diagnostic Centre, Thane was an enriching experience that gave me hands-on experience in healthcare operations, operational analytics, and Management Information Systems.

Engaging in MIS reporting, operational data analysis, KPI monitoring, and dashboard development provided me with a deeper insight into the data applications of an organization in the healthcare sector for performance monitoring and decision-making.

The internship was helpful in translating learning to practice. It enhanced my analytical and communication skills, understanding of healthcare operations, and reinforced the significance of data-driven approaches in modern healthcare management.

ANNEXURES

Annexure A

Internship Offer Letter



**CRYSTAL DIAGNOSTIC
CENTRE**

ISO 9001:2015

Sonography • Colour Doppler • X-Ray • Intervention Procedures • Pathology • 2D Echo

Date: 27/02/2026

INTERNSHIP OFFER LETTER

To,
Mr. Yanagandul Badrinath Murli

Subject: Internship Offer in Operational Management

Dear Mr. Yanagandul Badrinath Murli,

We are pleased to offer you an internship opportunity in **Operational Management** at **Crystal Diagnostic Centre**.

Your internship tenure will commence from **02/03/2026** and continue till **31/05/2026**.

During the internship period, you will be provided practical exposure and training in the day-to-day operational activities of the diagnostic centre. Your areas of involvement may include:

- Patient flow and operational coordination
 - Front desk and appointment management
 - Diagnostic centre workflow monitoring
 - Coordination with technicians, doctors, and support staff
 - Record maintenance and documentation
 - Reporting and operational support activities
 - Understanding healthcare service standards and patient management
 - Assisting in improving operational efficiency and process management
- You are expected to maintain professionalism, punctuality, discipline, and confidentiality throughout the internship period and comply with the rules and regulations of the organization. Upon successful completion of the internship, an **Internship/Experience Certificate** will be issued by **Crystal Diagnostic Centre**.

We welcome you to our organization and wish you a valuable learning experience during your internship tenure.

For Crystal Diagnostic Centre

Dr. DEVENDRA PATIL

MD (Radiologist)

Reg. No. 2013/02/0165

Authorized Signatory

Name: Dr. Devendra patil

Designation: director

Contact: 8828393955

(Official Seal & Signature)

Annexure B

Internship Completion / Experience Certificate



ISO 9001:2015

Sonography • Colour Doppler • X-Ray • Intervention Procedures • Pathology • 2D Echo

Date: 01/06/2026

EXPERIENCE CERTIFICATE

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. Yanagandul Badrinath Murli** has successfully completed an internship in **Operational Management** at **Crystal Diagnostic Centre** from **02/03/2026** to **31/05/2026**.

During the internship period, the candidate was actively involved in the day-to-day operational activities of the diagnostic centre and demonstrated a sincere approach towards learning and professional responsibilities. The Intern gained practical exposure in the following areas:

- Patient flow and operational coordination
- Front desk and appointment management
- Diagnostic centre workflow monitoring
- Coordination with technicians, doctors, and support staff
- Record maintenance and documentation
- Reporting and operational support activities
- Understanding healthcare service standards and patient management
- Assisting in improving operational efficiency and process management

Throughout the internship tenure, **Yanagandul Badrinath** displayed good communication skills, professionalism, punctuality, and the ability to work effectively in a team environment. The candidate was hardworking, disciplined, and showed a positive attitude towards assigned responsibilities.

We found the performance of **Yanagandul Badrinath** to be satisfactory and appreciate the dedication and commitment shown during the internship period.

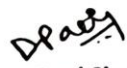
We wish him all the very best for future academic and professional endeavours.

For Crystal Diagnostic Centre

Dr. DEVENDRA PATIL

MD (Radiologist)

Reg. No. 2013/02/0165


Authorized Signatory

Name: Dr. Devendra patil

Designation: director

Contact: 8828393955

Seal & Signature

Annexure C

Sample Sonography MIS Format

Include the Excel-based MIS format used during the internship containing details of Date, Patient ID, Doctor, Study, Category, Payment Mode, Bill Amount, Payment Status, Paid Amount, and Remarks.

SR. NO	DATE	PATIENT ID	DOCTOR	STUDY	CATEGORY	PAYMENT MODE	BILL AMOUNT	PAYMENT STATUS	PAID AMOUNT	REMARK
1	01-04-2026	1002	DR DEVEN DRA PATIL	USG A+P	CASH	CASH	1800	PAID	1800	NOT APPLICABLE
2	01-04-2026	1003	DR DEVEN DRA PATIL	BILATERAL ARTERIAL DOPPLER	CASH	UPI	3200	PAID	3200	NOT APPLICABLE
3	01-04-2026	1004	DR DEVEN DRA PATIL	USG A+P	CASH	UPI	1800	PAID	1800	NOT APPLICABLE
4	01-04-2026	1005	DR DEVEN DRA PATIL	USG A+P	CASH	UPI	1800	PAID	1800	NOT APPLICABLE
5	01-04-2026	1006	DR DEVEN DRA PATIL	USG A+P	CASH	CASH	1800	PAID	1800	NOT APPLICABLE
6	02-04-2026	1020	DR DEVEN DRA PATIL	USG A+P	CASH	BALANCE	1800	BALANCE	0	PRO REFERENCE
7	03-04-2026	1034	DR DEVEN DRA PATIL	USG A+P	CASH	CASH	1800	PAID	1800	NOT APPLICABLE
8	03-04-2026	1035	DR DEVEN DRA PATIL	USG A+P	CASH	FREE	1800	FREE	0	PRO REFERENCE