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IIHMR UNIVERSITY®

Operational & Data-Driven Insights: QMS & MAA Yojana Analysis

Department of Medical Education
Government of Rajasthan
सत्यमेव जयते

Brief history and description about organization

The Medical Education Department of Rajasthan manages all government medical and dental colleges along with their affiliated hospitals, focusing on quality healthcare education and specialized treatment for referred patients across the state. From just one medical college at independence, the state now has 6 government medical colleges, 1 RUHS medical college, 2 central institutions (AIIMS Jodhpur and ESI Alwar), and over 20 new medical colleges established under RajMES since 2018. Additionally, Rajasthan hosts 12 private medical colleges, 1 RUHS dental college, and 14 private dental colleges, significantly expanding access to medical education and advanced care.

Vision & Mission

Vision:-

To strengthen medical and dental education in Rajasthan by expanding quality institutions, developing skilled healthcare professionals, and ensuring advanced treatment for serious and referred patients statewide.

Mission:-

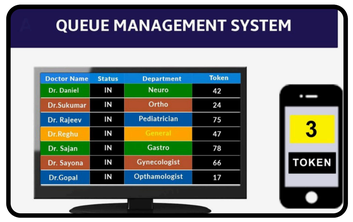
To manage and enhance all Government Medical and Dental Colleges and their hospitals, including 6 government medical colleges, RUHS Medical College Jaipur, Jhalawar Society College, RajMES colleges (since 2018), ESIC Alwar, 9 private medical colleges, 16 dental colleges including RUHS Dental College, and promote research through RUHS Jaipur (est. 2006).

Organization Structure

- Secretary
- Commissioner
- Addl. Director
- Deputy Director
- Principals & Directors of Medical Colleges

Operations — Queue Management System

- 📌QMS is a digital system to streamline OPD patient flow.
- 🧾QR-coded OPD slips enable quick & accurate registration.
- 🟢Color-coded tokens help identify departments easily.
- 🖥️Digital displays show real-time queue status in waiting areas.
- 👨‍⚕️Doctor's prescription go directly into IHMS for faster care.
- 💊Pharmacy & Path lab integrated via QR prescriptions/orders.
- 🔄Reduces waiting time, confusion, and manual errors.
- 🚀Phase 2 upgrades include automated lab & drug counters.



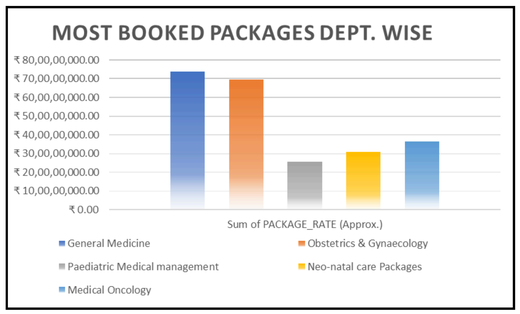
Patient Arrival at OPD
↓
Token Counter (QR-coded Slip is Issued)
↓
Token Generation System
↓
Digital Display + Waiting Area (Token with Color Coding) (Patient Watches Screen for Token)
↓
[Doctor Consultation] Doctor skips the Patient by scanning the QR (Notes Scanned/Entered in IHMS By the Operator)
↓
Pharmacy Counter (Prescription from IHMS) (Medicine Issued) | Path Lab Counter (QR Test Order) Sample Collected
↓
END of Visit

Data Analysis

- MAA Yojana – Package-wise Rejection Analysis
- Goal: Identify rejection trends and enhance claim approvals.
- Approach: Reviewed rejection data from top 10 departments by TID and package rate.

Findings:

1. Highest rejection rates seen in Pediatric Nephrology and Palliative Medicine.
2. Top 5 and bottom 5 hospitals identified.
3. Key gaps: missing documents & wrong package selection.



Highest Rejection

S. No.	Row Labels	Sum of Sum of TID	Sum of Sum of TID3	Sum of Rejection Rate (TID)
1	Paediatric Nephrology	2557	1610	63%
2	PALLIATIVE MEDICINE	84	33	39%

General Medicine (Hospitals with Lowest Rejections)

Hospital	District	Rejected Package	Submitted Package	PACKAGE Percentage
GOVT. R.D.B.P. JAIPURIA HOSPITAL JAIPUR	Jaipur2	227	4325	5%
SHRI.HARI BAX KANWATIA HOSPITAL	Jaipur1	279	4480	6%
STH GANGAPUR BHILWARA	Bhilwara	84	956	9%

General Medicine (Hospitals with Highest Rejections)

Hospital	District	Rejected Package	Submitted Package	PACKAGE Percentage
Acharya Tulsi Regional Cancer Hospital	Bikaner	3771	5172	73%
S.R.GOYAL GOVT HOSPITAL SETHI COLONY JPR	Jaipur1	537	815	66%
Govt Medical College and Hospital Sirohi	Sirohi	4735	7674	62%

REASONS	Count of REASON
Rejection of due to lack of essential documents.	872
Rejection due to wrong package selection.	859

Practical vs. Theoretical Insights

Practical

- Real data collection
- Rejection trend analysis
- System gap identification
- Faculty gap vs. sanctioned seats
- Stakeholder interaction & feedback
- Drafting DFDs & ERDs

Theoretical

- Principles of Management
- Healthcare Delivery System
- Health Economics
- Financial Analytics
- Quantitative Data Analysis
- Organizational Behavior

SWOT Analysis

Strength

- Exposure to real-time hospital systems (QMS, IHMS)
- Hands-on data analysis and reporting
- Improved communication with administrative staff
- Application of classroom learning in field projects

Weakness

- Limited time for in-depth departmental analysis
- Data inconsistency across departments.
- Coordination challenges during data collection.
- Initial unfamiliarity with public hospital workflows.

Opportunity

- Networking with key hospital and govt. officials.
- Learning multiple aspects: clinical, administrative, financial.
- Building confidence through independent field visits and interactions.
- Learning how government schemes are implemented on ground.

Threat

- Frequent system downtimes or technical errors.
- Risk of data gaps affecting analysis accuracy.
- Delays in accessing required records or approvals.
- Limited digital infrastructure in certain areas.

Internship Challenges & Key Learnings

Internship Challenges

- Faced difficulty in collecting consistent data from multiple hospital departments
- Encountered gaps in documentation and unclear processes during claim analysis
- Time constraints limited the depth of field visits and stakeholder interactions
- Initial hesitation from staff in sharing information or discussing internal workflows
- Technical limitations like IHMS system downtime affected data access and accuracy

Key Learnings

- Understood how real-world hospital systems function beyond theoretical models
- Improved my ability to communicate with administrative and clinical staff
- Gained confidence in analyzing large datasets and interpreting rejection trends
- Learned how to identify process gaps and suggest practical, system-level solutions
- Developed a deeper appreciation for the complexity of public healthcare delivery