Revolutionizing Hospital Management: Introducing Amrita OT Scheduler

Amrita OT Scheduler is a cutting-edge solution designed to optimize operating theater scheduling, monitoring, and resource allocation. This innovative platform aims to enhance efficiency, reduce delays, and improve the overall flow of surgical operations. By streamlining hospital management, Amrita OT Scheduler seeks to transform the way hospitals manage their operating theaters, ultimately leading to better patient care.

The Challenges Faced by Operating Theatres

Operating theaters in hospitals often face numerous inefficiencies, including manual scheduling systems, underutilization of resources, prolonged surgeries, and increased patient waiting times. Handling unforeseen emergencies is another significant challenge. These inefficiencies can lead to decreased productivity, increased costs, and a lower quality of care.

Introducing the Amrita OT Scheduler

The Amrita OT Scheduler is designed to address these challenges head-on. This platform provides a range of features, including real-time surgery time monitoring, adjustable schedules, operational dashboards, intelligent allocation, and conflict resolution. By leveraging AI-driven scheduling, the Amrita OT Scheduler optimizes operating theater usage, automates detection and resolution of scheduling conflicts, and ensures efficient resource allocation.

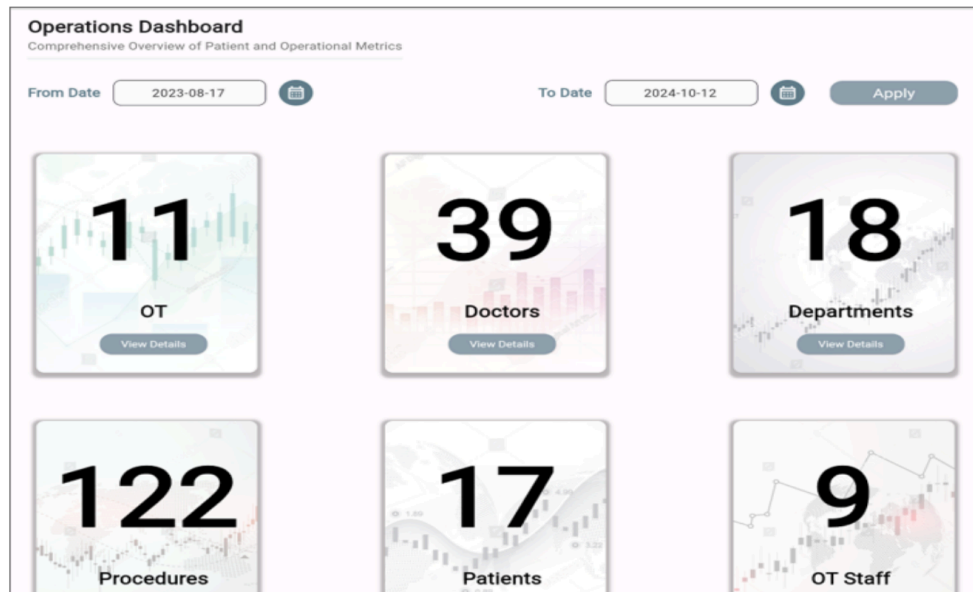**"Optimizing OT scheduling, monitoring, and resource allocation"**

Figure 1: Amrita OT Scheduler App

The Amrita OT Scheduler app provides a user-friendly interface for hospital staff to manage operating theater schedules, monitor surgeries in real-time, and allocate resources efficiently.

Key Functionalities of Amrita OT Scheduler

The Amrita OT Scheduler offers several key functionalities that enable hospitals to optimize their operating theater management. These include automotive scheduling, optimal resource utilization, real-time monitoring, handling unforeseen emergencies, and data-driven insights. By leveraging these functionalities, hospitals can reduce delays, improve efficiency, and enhance patient care.

DATE OF SURGERY	AGE/SEX	SURGERY	SURGEON	SPECIALITY	Name of the Patient	Special Request	Mrd Number
18-07-2024	28Yrs/F	DJ Stenting	Dr. Priya Gupta	Urology	Mr Vikram Singh	C ARM (Simans)	1201
18-07-2024	47Yrs/F	Hemorrhoidectomy	Dr. Amit Patel	Gen Surgery	Ms Anjali Patel		1202
18-07-2024	2Yrs/M	EMERGENCY LSCS	Dr. Anjali Gupta	OBG	Ms Poonam Sharma	Cusa (Soring)	1203
18-07-2024	6Yrs/M	Bioplar Hemiarthroplasty	Dr. Rahul Singh	ORTHO	Mr Rakesh Kumar		1204
18-07-2024	66Yrs/F	RIGHT Eye Pterygium Surgery	Dr. Priya Sharma	Ophthalmology	Mr Saleem Khan		1205
18-07-2024	69Yrs/F	LSCS	Dr. Rahul Singh	OBG	Ms Anita Sharma		1206
18-07-2024	78Yrs/F	Lap Cholecystectomy	Dr. Ritu kumari	Gen Surgery	Ms Madhuri Devi		1207
18-07-2024	23Yrs/M	Examination Under GA	Dr. Sanjay Kumar	Gen Surgery	Mr Gopal Das		1208
18-07-2024	30Yrs/F	TURP	Dr. Vikram rathod	Urology	Ms Kavita Devi	Cusa (Soring)	1209
18-07-2024	39Yrs/F	Leep	Dr. Anjali kumari	Oncogyne	Mr Ravi Shankar		1210
18-07-2024	55Yrs/M	EUA	Dr. Amit kapor	Oncogyne	Mr Vikas		1211
18-07-2024	3Yrs/M	Vaginal Tag Excision	Dr. Amit Gupta	Oncogyne	Mr Mahesh Chandra Singh		1212
18-07-2024	7Yrs/M	Hysteroscopic Endometrial Biopsy	Dr. Amit kumar	Oncogyne	Mr Deepak Kumar	Robot (Divanchi)	1213
18-07-2024	64Yrs/M	Excision OF Breast Lump	Dr. Meenakshi Sahai	Breast Surgery	Mr Ajay Kumar Singh		1214
18-07-2024	36Yrs/F	Breast Abscess Right	Dr. Priya gupta	Breast Surgery	Ms Neelam Devi		1215
18-07-2024	51Yrs/F	RIGHT Eye Cataract Implantation	Dr. Anjali Patel	Ophthalmology	Mr Amit Kumar Singh	C ARM (Simans)	1216
18-07-2024	60Yrs/F	RIGHT Eye Pterygium Surgery	Dr. Mohan yadav	Ophthalmology	Ms Jyoti Devi		1217
18-07-2024	8Yrs/M	Cataract	Dr. Vikram Singh	Ophthalmology	Ms Kiran Devi		1218

Table 1: Input Sheet for Surgery Scheduling

Module 1: Scheduler

The scheduler module allows hospital staff to upload input sheets containing surgery, patient, and doctor details. The module then generates a scheduled output, taking into account various constraints and preferences.
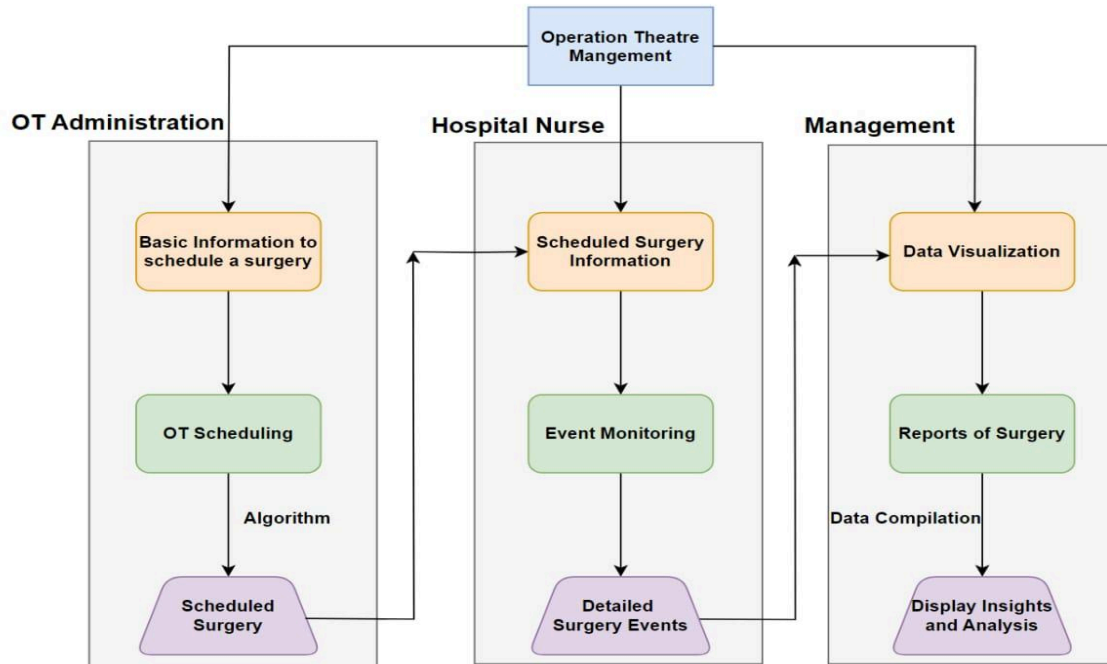
Figure 2: Flow Chart of OT Management

The flow chart illustrates the workflow of the Amrita OT Scheduler, from uploading surgery details to generating scheduled outputs and making .

Module 2: Real-Time Monitoring

The real-time monitoring module enables hospital staff to track surgery progress in real-time, making it easier to manage operating theater resources and allocate staff efficiently.
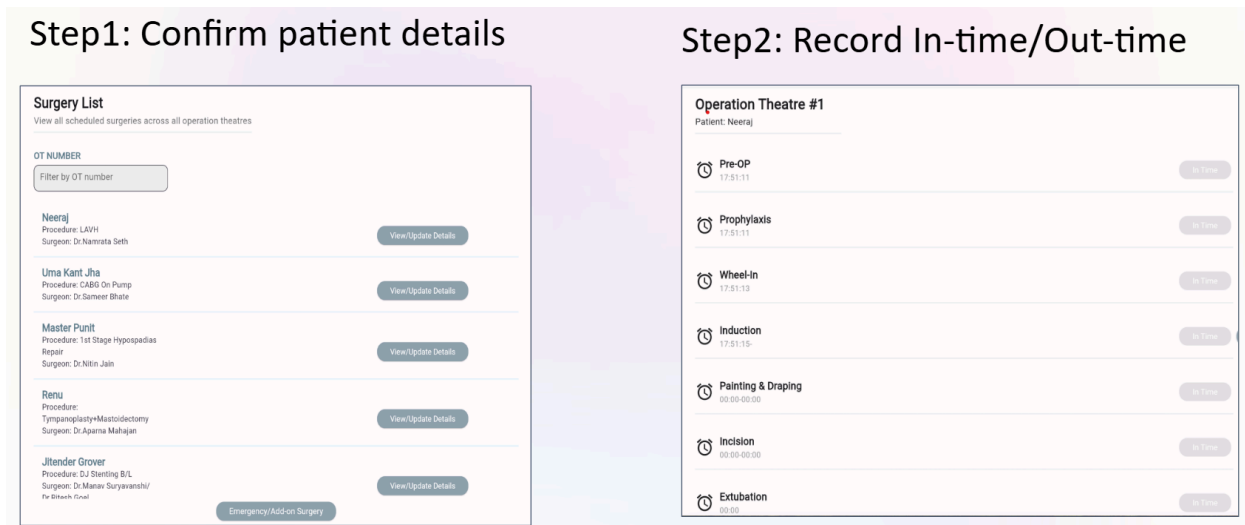

Figure 3: Event Monitoring Workflow

The event monitoring workflow illustrates the steps involved in tracking surgery progress, from confirming patient details to recording in-time and out-time.

Module 3: Reports of Surgeries

The reports module provides hospital staff with valuable insights into operating theater usage, turnaround times, and performance metrics. This data can be used to optimize operating theater management, reduce delays, and improve patient care.
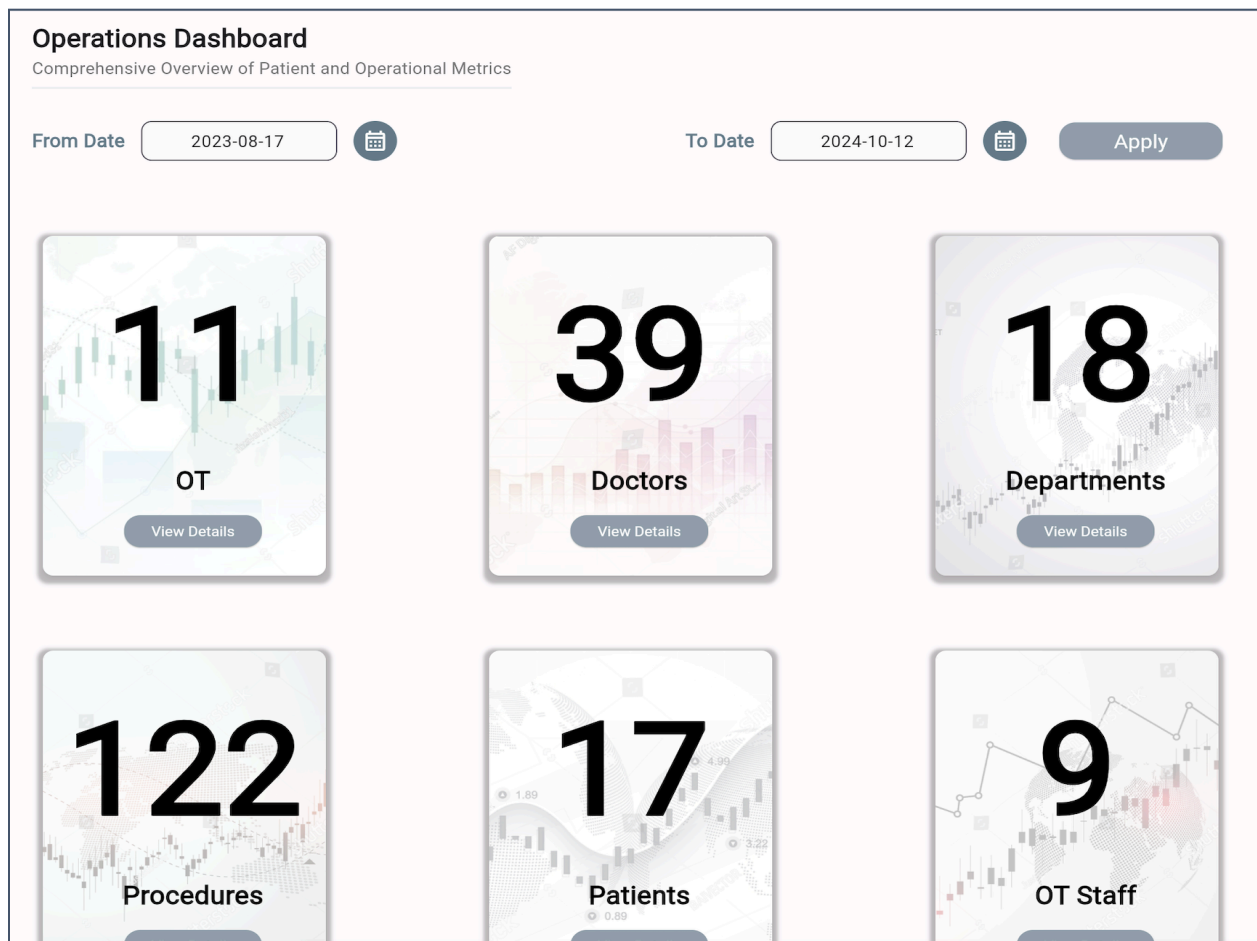

Figure 4: Dashboard Web Application Screenshot

The dashboard web application screenshot illustrates the user-friendly interface of the Amrita OT Scheduler, providing hospital staff with easy access to operating theater schedules, surgery procedures, department details, and resource information.

A Seamless Solution for OT Management

Amrita OT Scheduler is designed to streamline the complexities of managing operating theatre schedules. With real-time monitoring, AI-driven conflict resolution, and optimized resource allocation, hospitals can enhance operational efficiency, reduce delays, and improve the quality of care for patients. This innovative solution not only addresses current challenges but also sets the stage for a more effective, data-driven approach to healthcare management.

By leveraging the Amrita OT Scheduler, hospitals can revolutionize their operating theater management, leading to improved efficiency, reduced delays, and enhanced patient care.