OT Scheduling through HMIS Software

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Introduction

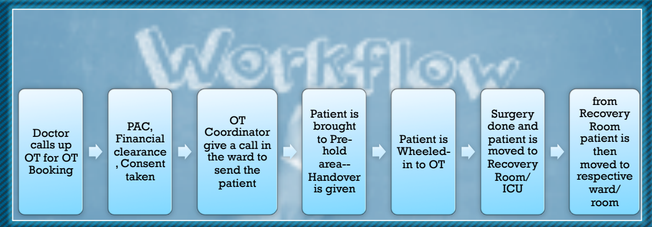
Operation Theatre is the most vital and imperative facility of a hospital. It is the heart of any hospital where all the surgical procedures are performed. Scheduling of Operation Theatre is an important factor contributing to the Operation Theatre efficiency. The scheduling of Operating theatre plays a significant role towards the patient's satisfaction by minimizing his/her total waiting time before undergoing major or minor operations.

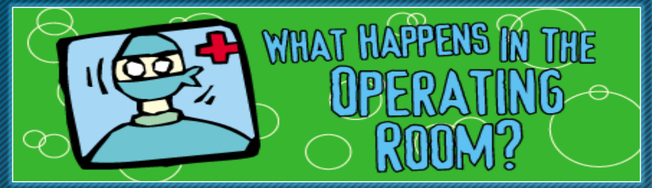
To improvise the Operation Theatre utilization by incorporation and implementation of OT-HMIS module

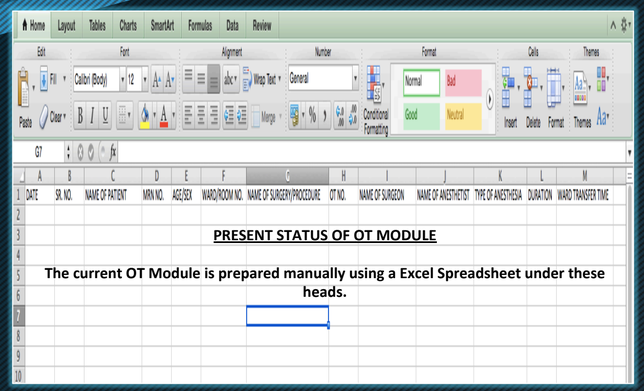
Objectives

- To understand the OT Complex operations.
- To examine the process of scheduling of cases in operation theatre in Narayana Hospital, Jaipur.
- To identify the bottlenecks in the scheduling of cases, in proper and efficient utilization of the Operation Theatres.
- To suggest and implement remedial measures for improving the Operation Theatre Utilization.

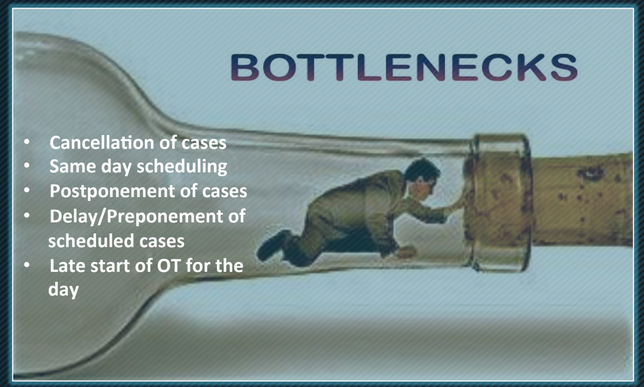
Workflow







	A	B	C	D	E	F	G	H	I	J	K	L	M
1	DATE	SR. NO.	NAME OF PATIENT	MRN NO.	AGE/SEX	WARD/ROOM NO.	NAME OF SURGERY/PROCEDURE	OT NO.	NAME OF SURGEON	NAME OF ANESTHETIST	TYPE OF ANESTHESIA	DURATION	WARD TRANSFER TIME
2													
3			**PRESENT STATUS OF OT MODULE**										
4													
5			**The current OT Module is prepared manually using a Excel Spreadsheet under these heads.**										
6													
7													
8													
9													
10													



- Cancellation of cases
- Same day scheduling
- Postponement of cases
- Delay/Preponement of scheduled cases
- Late start of OT for the day

METHODOLOGY

STUDY SETTING: Narayana Hospital, Jaipur
STUDY PERIOD: April 1st to May 31st 2016
STUDY SAMPLE: Operation Theatre staff and IT Department Staff
STUDY DESIGN: Descriptive, Cross-sectional Prospective Study.
SAMPLING METHOD: Non-Probability Purposive Sampling Technique.

DATA COLLECTION

Primary data: Real time Qualitative data was collected through observation and informal Focus Group Discussion and Key informant Interviews with each stakeholder to identify and understand the problems faced at their level, during the month of April & May 2016

OBSERVATION AND PROCESS MAPPING:

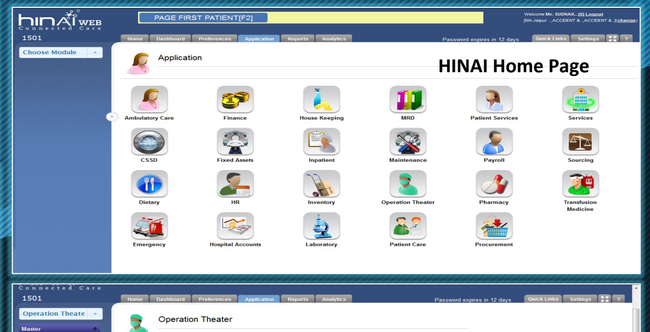
The entire process starting from booking till wheel-in of patient in OT was mapped for the month of April 2016. Moreover the cases in the scheduled list and the updated list were observed to analyze the number of problematic areas. These cases were individually studied and analyzed to identify the cause for the same.

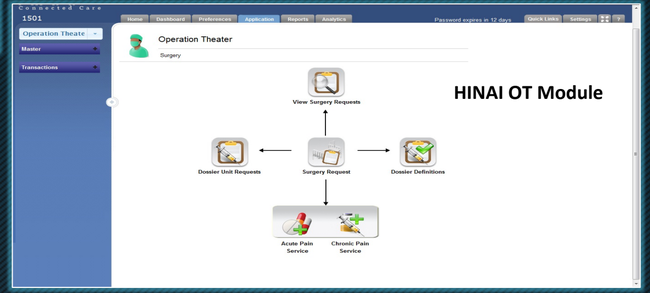
THE 8 PEOPLE YOU MEET IN OT SCHOOL

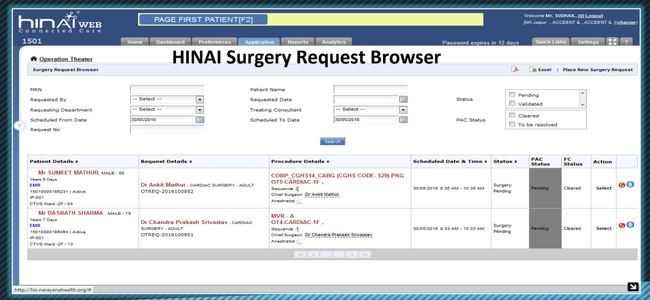
1. Chief HOD
2. OT Manager
3. Surgeon
4. Anesthetist
5. Per-fusionist
6. Staff Nurse
7. OT Technician
8. Housekeeping

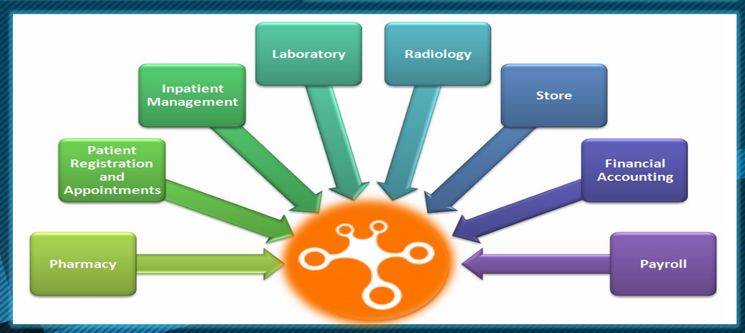
PROCESS MAPPING

Process mapping started with manpower available for efficient and optimum utilization of OT.
Total manpower of OT Department is 104.
The Operating Theatre (OT) complex is composed of eleven operating theatres out of which nine are functional for high standard clinical care.









HMIS OT Module is proposed for scheduling the OT cases. Module is designed in such a way that OT will not be booked until all the relevant fields are filled.
OT can be booked prior to surgery date as well as on the same date itself.
To make the module user friendly, the list is to be prepared consisting of surgery, surgery code and tentative duration. As soon as the name of the surgery is entered, surgery code and tentative duration of the surgery will be automatically displayed on the module.
The HMIS software used is called as HINAI WEB which is a part of ICT (Information Collaboration Transformation) Healthcare software.

Benefits of implementing a Hospital Management System

Limitations

From Patient's End:

- Late arrival of patient despite patient education and counseling.
- Non-submission of documents on time leading to late approval.
- Change in decision for having surgery.

Resistance To Change:

- As the Nursing and other staff are not very much tech-savvy, it will be difficult for them to acclimatize to OT-HMIS Module.
- Staffs adherence to protocol such as booking OT on time, on-time starts, being punctual would be difficult.

As healthcare workers we have to believe that our main responsibility is to maintain our accountability and to deal with issues with a professional point of view.
Describing the project it is very important to conclude its significance in understanding all contributing factors, exchanging ideas with people, learning new strategies. Tackling such an area as the OT was an imperative decision and a challenging job since it is well known that OT's are the money generating areas in any private healthcare institutions. Recommendations given into this area will not only improvise the OT efficiency, but quality of care in general will be improved by raising the bar for better practice and enhanced communication.