

Aster HOSPITAL

We'll Treat You Well

Smart Hospital



WOW -Workstation On Wheels

❖ **WOW** : These are mobile medical carts with laptops mounted on them which allow easy access of Hospital Information System(HIS) for feeding daily notes and other important updates related to the patient.

Why was this required? :

- ❖ Accurate and immediate documentation in EMR in HIS.
- ❖ There is no compromise between Mobility and Productivity.
- ❖ Major reduction in Paper-based records.
- ❖ Increased information safety.
- ❖ Easy use of Wristband Scanners and Rovers.



WOW -Workstation On Wheels

- **Below are the problems solved :**

- Difficulty faced during rounds and long durations in between entering the info into the EMR.
- Excess paper used for drug charts and nurse/doctor progress notes while visiting patients in the wards.

- **Benefits of the innovation :**

- Production - Improved cycle time and turnaround time.
- Quality & Safety - Reduction in reporting/documentation errors.
- Demand - Number of clinicians, clinical and non-clinical staffs successfully trained in using WOW.
- Quality & Safety - Quality and credibility of information assured.
- Cost -Reduction of wastes and Improving time management and services.
- Environment - Going paperless (Target: 70%)



Bar-Coded Medication Administration

Bar Code Medication Administration (BCMA) -

❖ systems are electronic scanning systems that intercept medication errors at the point of administration.

5 Rights of medication administration -

- ❖ Right patient, Right dose, Right drug, Right time, Right route achieved.
- ❖ This is used by more than 150 doctors and 500 plus nurses in Aster Hospitals and all are well trained which has helped in the successful implementation. For scanning the barcodes, we use the Rovers which are wireless and handheld devices.



ROVER DEVICE – handheld with a barcode scanner on top.

Bar-Coded Medication Administration

Why was this solution required?

- ❑ Incorrect dose and medication administered.
- ❑ Incorrect routes.
- ❑ Lack of time due to various other tasks for the nurses.
- ❑ Too much of Paper records.

OUTCOME OF THE INNOVATION –

- ❖ **Production** - Improved efficiency and time saving process incorporated
- ❖ **Quality & Safety** -Reduction route and dose errors.
- ❖ **Demand** -Demand fulfilled for streamlining the process.
- ❖ **Quality & Safety** -Right medicine administered at right time and right dose.
- ❖ **Cost** -Reduction of wastes and Improving time management and services.



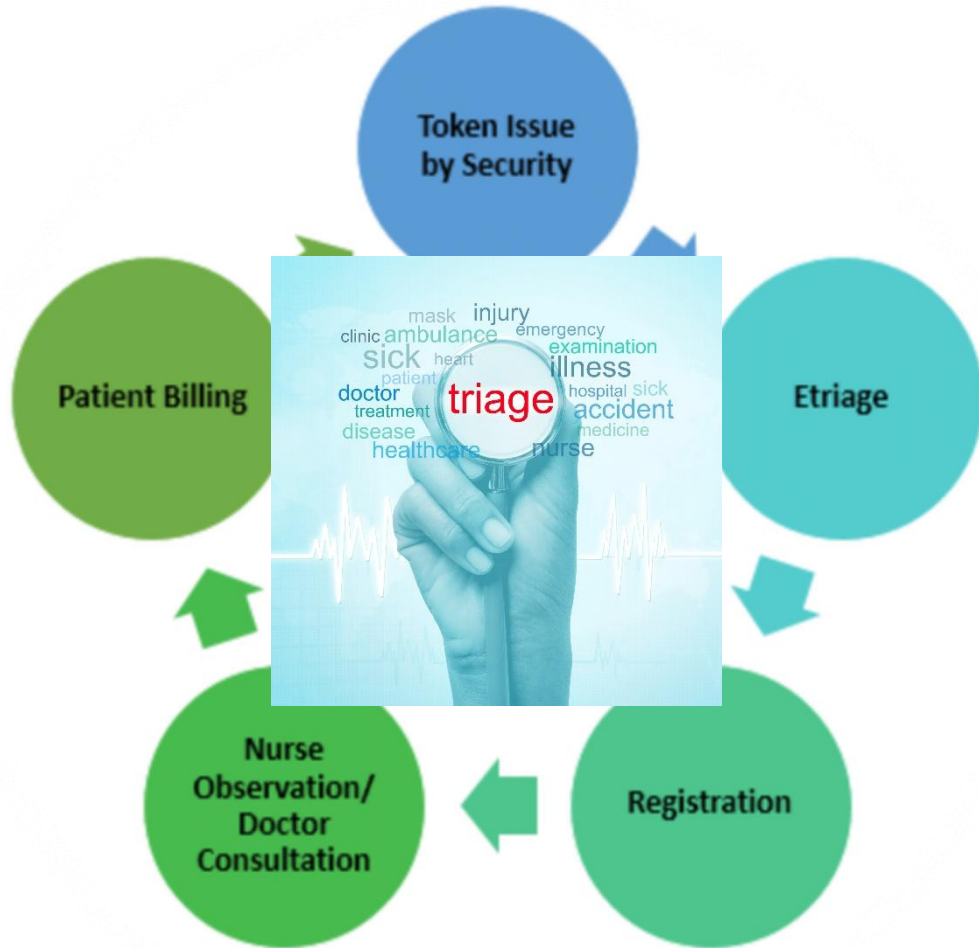
Bar-Coded Sample Collection

OUTCOME OF BCSC -

- ❖ Quick and system collection of samples.
- ❖ Easy sorting and transportation of samples.
- ❖ No chance for manual errors.
- ❖ Accuracy and authenticity of samples achieved.
- ❖ Trustable results and error free process implemented increasing patient satisfaction.



E-Triage



Integration of the devices with HIS

GE- VC150 – Device used for checking Vitals



Weight and height capturing device

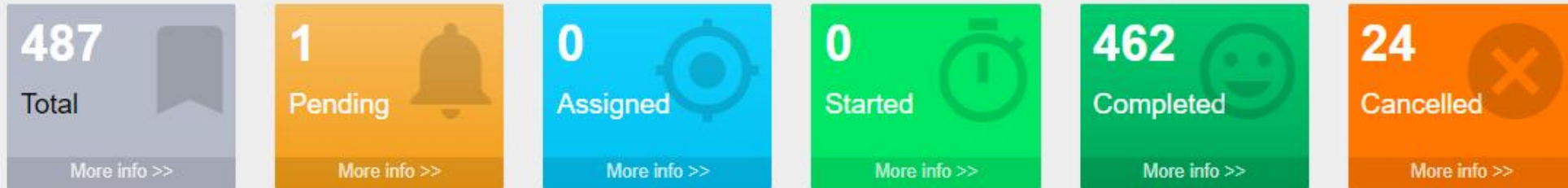


Service Request Management System- SRMS

Dashboard New Request Request List Master Report

Hi! Feeza Aga Logout

Service Request List (today's)



Aster Hospital (AHQ)

10-Dec-202

24-Jan-202

Search by requested by, location, category, status,

S#	Date	Requested By	From Location	To Location	Category	Remarks	Status	Porter	Ack Date	Completion Date
1	14/01/2021 8:23AM	TIJA KANIYAMPARAMPIL KURIAN	AHQ 4F East NS	AHQ 2F OT	BED MOVEMENT		OPEN			
2	13/01/2021 6:58PM	EVELYN MARIAM MATHEW	AHQ 5F east NS	AHQ 4F IP billing	DOCUMENT MOVEMENT		COMPLETED	RAGESH RAVI	13/01/2021 6:58PM	13/01/2021 7:01PM
3	13/01/2021 5:44PM	TIJA KANIYAMPARAMPIL KURIAN	AHQ 4F East NS	AHQ 2F OT	BED MOVEMENT		COMPLETED	RAGESH RAVI	13/01/2021 5:47PM	13/01/2021 6:13PM
4	13/01/2021	TIJA	AHQ 4F West	GR-1 LEFT LOBBY	WHEEL	DISCHARGE	COMPLETED	RAGESH	13/01/2021	13/01/2021

Service Request Management System

Why was this solution required ?

- ❖ Delays in addressing call by Porters.
- ❖ Delays in getting in touch with a Porter.
- ❖ Not able to finish urgent tasks on time.
- ❖ Difficulty in managing patient calls

OUTCOME OF THE INNOVATION :

- ❖ Reduction in waiting time.
- ❖ Increased mobility and accessibility.
- ❖ Reduced escalation.
- ❖ Watch on TAT and service checks and reports.
- ❖ Quick access to patient calls and immediate action taking capability.



TALAB

Why was this solution required ?

- ❖ Delays in addressing calls by different departments for patient's needs.
- ❖ Nurses time wasted for calling & forwarding the tasks to other departments like MEP, Housekeeping, Dietetics etc.
- ❖ Not able to finish urgent tasks on time.
- ❖ Difficulty in managing patient calls

OUTCOME OF THE INNOVATION :

- ❖ Reduction in waiting time.
- ❖ Right task assigned to right department.
- ❖ Reduced escalations.
- ❖ Watch on TAT and service checks and reports.
- ❖ Quick access to patient calls and immediate action taking capability.



Ward Patient Info Display

Visualization

- UHID, Room no, Doctor name, Specialty, nurse name and MEWs.
- Room no of patient calls

MEW Score

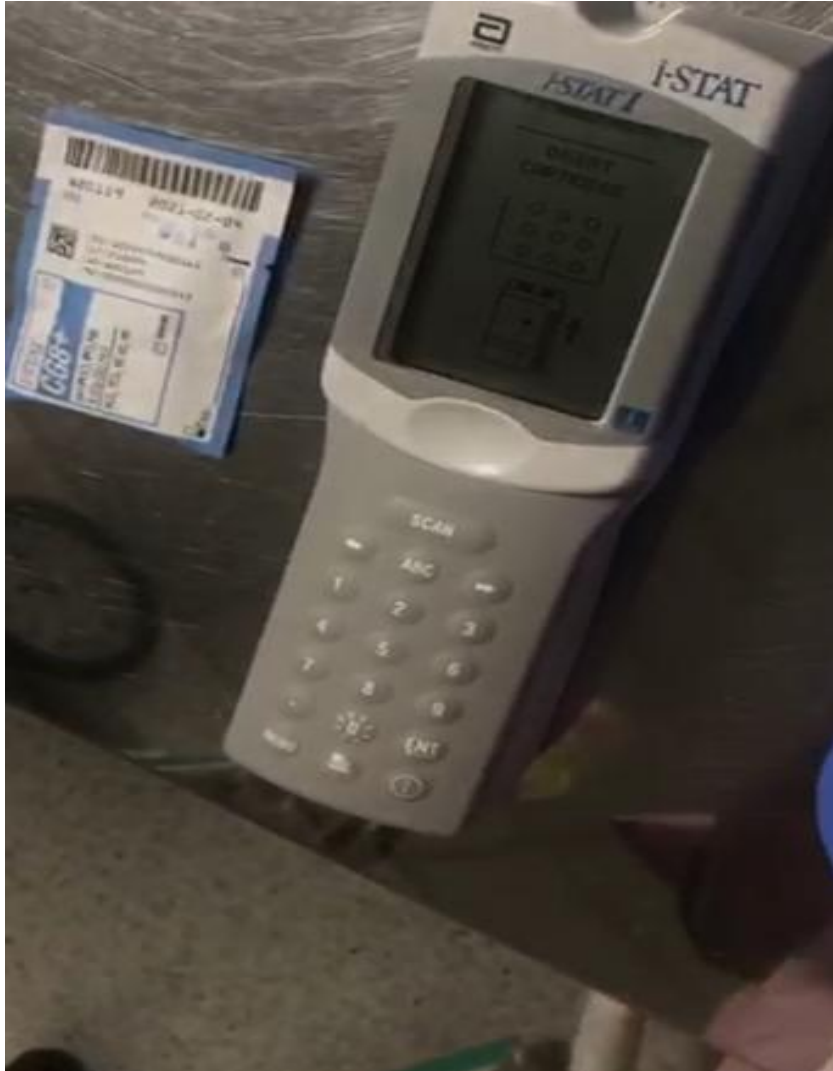
- Modified early warning score(MEWS)
- Quality and safety in management of surgical wards
- Prevent delays in intervention/transfer of patients

Integration

- Details auto-populated from HIS
- Nurse name entry through web app by supervisors

UHID	Room	Doctor Name	Specialty	NURSE	EDD NPOINVEST/REFERRALS	MEWS
400082982	515	Dr.CHITRA GOPALAKRISHNANGYNAECOLOGY	OBSTETRICS & GYNAECOLOGY	Revathy Mary	Patient call	1
900302436	516	Dr.CHITRA GOPALAKRISHNANGYNAECOLOGY	OBSTETRICS & GYNAECOLOGY	Revathy Mary	Patient call	0
400101128	517	Dr.KAVERI SHARMA	OBSTETRICS & GYNAECOLOGY	Revathy Mary	Patient call	0
400095542	518	Dr.Shuchita	OBSTETRICS & GYNAECOLOGY	Nimmy	Patient call	0
400101279	519	Dr.SAFEENA,ANAS	OBSTETRICS & GYNAECOLOGY	RENUKA	Patient call	0
400100942	520	Dr.Dr Lubna Fatimah	OBSTETRICS & GYNAECOLOGY	RENUKA	Patient call	0
900219917	521	Dr.FATHIMA SAFA	OBSTETRICS & GYNAECOLOGY	Revathy Mary	Patient call	0
900329739	522	Dr.BINOY NELLISSERY	PAEDIATRICS	Akhila	Patient call	0
400067176	524	Dr.SAFEENA,ANAS	OBSTETRICS & GYNAECOLOGY	Revathy Mary	Patient call	0
400097416	525	Dr.AMTUL MUBEENA SYEDA	OBSTETRICS & GYNAECOLOGY	Nimmy	Patient call	0
900023512	526	Dr.CHITRA GOPALAKRISHNANGYNAECOLOGY	OBSTETRICS & GYNAECOLOGY	RENUKA	Patient call	1
400100822	527	Dr.CHITRA GOPALAKRISHNANGYNAECOLOGY	OBSTETRICS & GYNAECOLOGY	Nimmy	Patient call	0
400099491	528	Dr.SAFEENA,ANAS	OBSTETRICS & GYNAECOLOGY	Revathy Mary	Patient call	0
400100864	WBU 01	Dr.Sai Srinivas Bhagavatula	PAEDIATRICS	Remya	Patient call	0

I-stat Integration with HIS



I-stat is POCT clinical analyzer used at bedside at ICU, NICU, Cath lab and ER department for doing ABG, Electrolyte etc.

Below are the problems solved :

- ❖ Difficulty for Nurses to upload and safekeeping of reports taken at bedside at different departments
- ❖ Stress of order entry for billing according to performed test and cartridges.

OUTCOME OF THE INNOVATION :

- ❖ Results are interfacing from machine to HIS automatically and available in EMR after performing the test.
- ❖ Auto order entry for billing once test performed to save the revenue loss.
- ❖ Reduce the wastage of paper.

Glucometer Integration with HIS



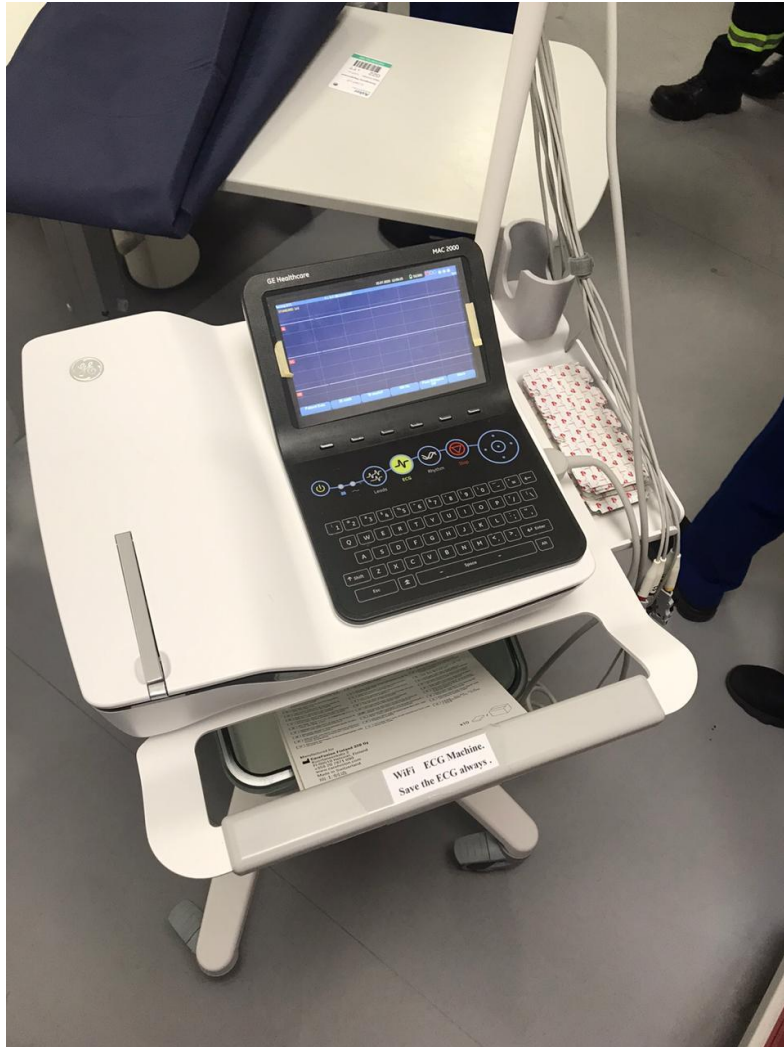
Below are the problems solved :

- ❖ Difficulty for Nurses to upload and making the entry of GRBS
- ❖ GRBS monitoring was difficult for patients.
- ❖ Stress of order entry for billing

OUTCOME OF THE INNOVATION :

- ❖ Results are interfacing from machine to HIS automatically and available in EMR after performing the test.
- ❖ Auto order entry for billing once test performed to save the revenue loss.
- ❖ Reduce the wastage of paper.

ECG Integration with HIS



Below are the problems solved :

- ❖ Difficulty for Nurses to upload and safekeeping of reports

OUTCOME OF THE INNOVATION :

- ❖ Results are interfacing from machine to HIS automatically and available in EMR after performing the test in PDF format.
- ❖ Reduce the wastage of paper.

Vios Integration with HIS

Vios - Used in ICU in Aster Hospitals-

- ❖ Vios Medical has designed a user-friendly, wireless, FDA-cleared monitoring platform that works anywhere, across the continuum of care. Vios Monitoring System enables you to monitor 7-lead ECG, heart rate, respiratory rate, pulse rate, SpO2, non-invasive blood pressure, patient posture and activity.
- ❖ This software has been integrated with HIS - The Vios Monitoring System automates collection, processing, and display of patient physiological data which seamlessly moves patient data into the electronic health record (EHR), enabling clinicians to focus their time on other patient-centric care activities.





Below are the problems solved :

- ❖ Difficulty for Nurses to upload and safekeeping of reports taken during labor at the time of distress
- ❖ Stress of order entry for billing

OUTCOME OF THE INNOVATION :

- ❖ CTG reports are interfacing from machine to HIS automatically.
- ❖ Reduce the time to scan and upload in HIS.
- ❖ Auto order entry for billing once test performed to save the revenue loss.

Case Sheet

Word Processo

MICHELLE DAV
No.: 05688376

from 19/07/20

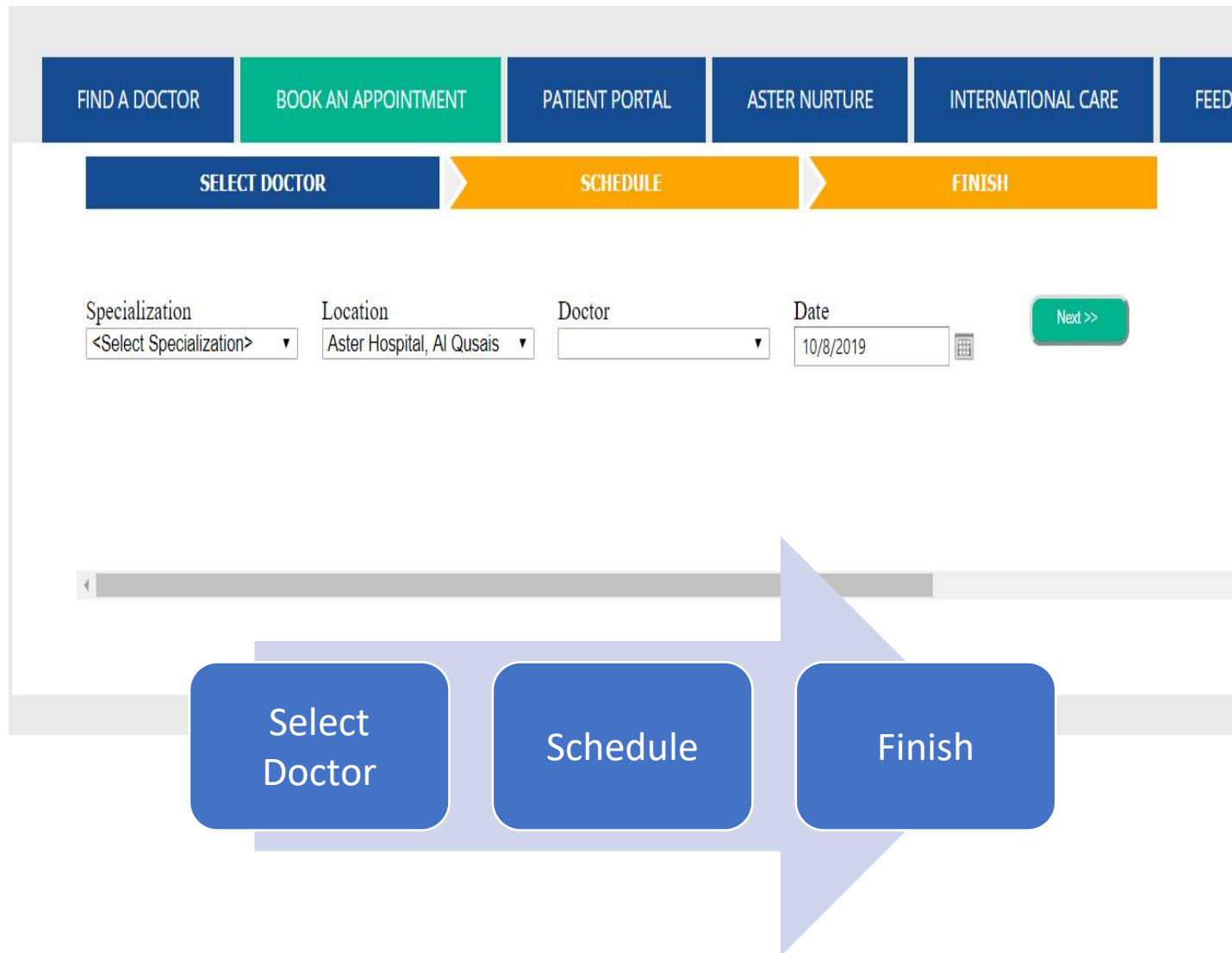
Name	FileName	Received Datetime	
CTG	20200720153920400060343.pdf	7/20/2020 3:39:34 PM	Viewfile
CTG	20200720113808400060343.pdf	7/20/2020 11:38:21 AM	Viewfile

Zoom

Initial As

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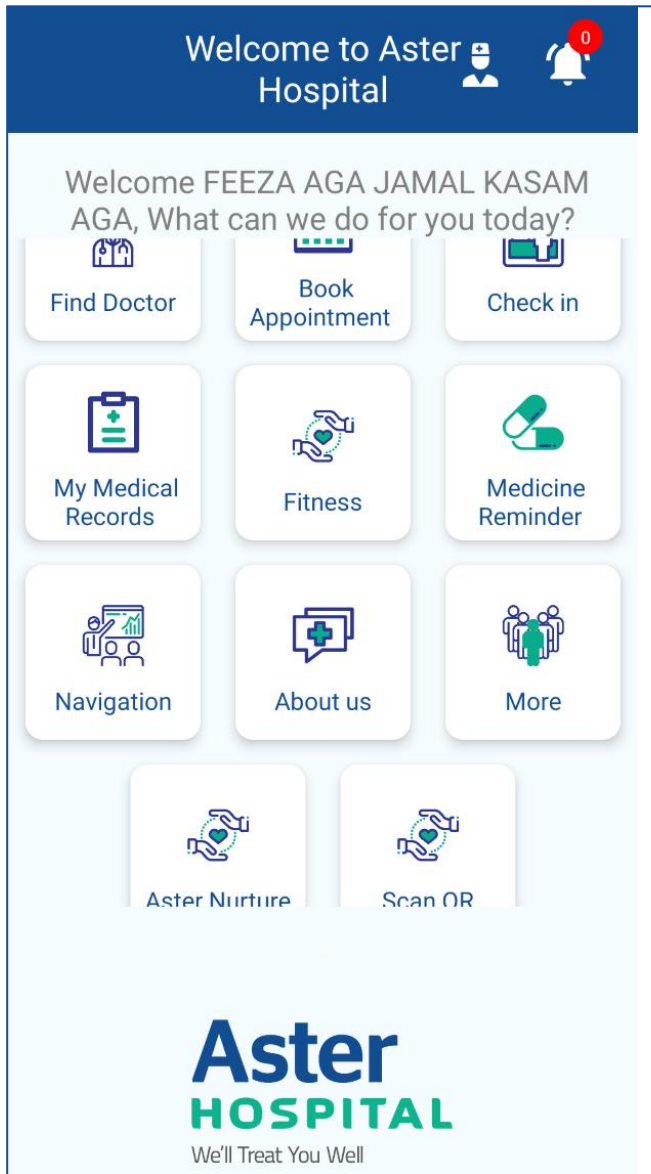


Below are the problems solved :

- ❖ Long queues in the hospital
- ❖ Difficulty in managing appointments
- ❖ Overburdening calls in call center.

OUTCOME OF THE INNOVATION :

- ❖ Easy 3 step Booking
- ❖ 35% appointments –last 6 months
- ❖ Reduced calls at Call center
- ❖ Increase in patient flow.



Below are the problems solved :

- ❖ Difficulty in managing patient enquiries on lab reports.
- ❖ Complaints regarding queues in hospital for appointments.
- ❖ No easy way of getting info about doctors in the hospital

OUTCOME OF THE INNOVATION :

- ❖ Easy 3 step appointment booking
- ❖ 10% appointments –last 6 months
- ❖ Reduced calls at Call center
- ❖ Easy viewing of lab reports on mobile once ready.
- ❖ QR scanner for scanning QR codes for accessing hospital applications
- ❖ Medicine reminders for patients
- ❖ Quick review of available doctors in hospital

 Zara



1:45 PM



Hi there! I'm Zara, your Virtual Aster Assistant 🙌

1:45 PM

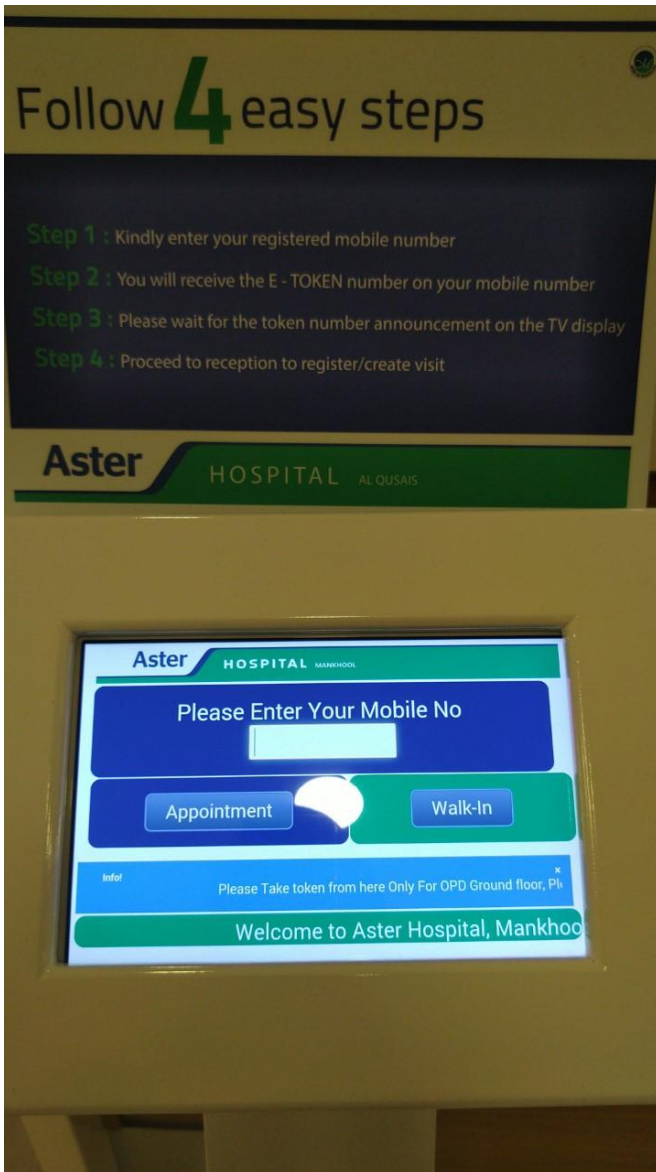
Please click on what you're looking for...



Type your message here



Chat Bot : available in mobile as well as website of Aster Hospitals has helped to accomplish more while using fewer resources. It has helped create a sustainable ecosystem in which repetitive, logistical tasks are rapidly processed by bots using AI.



Problems solved

Excessive paper wastage

No proper way of organizing the patient queue

Inconvenience caused to patients

Time consuming process

Benefits of QMS

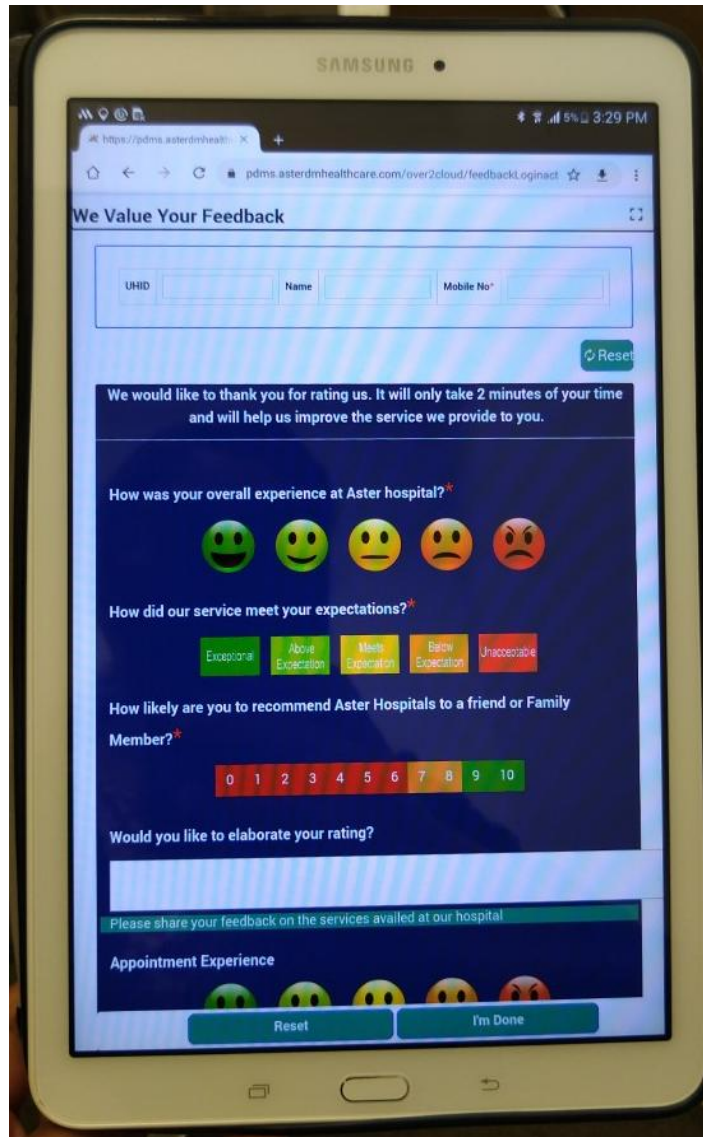
Fast queuing technique

Unique Token created for each patient

Token details sent on patient mobile number

Hassle free process

Reduction in paper use

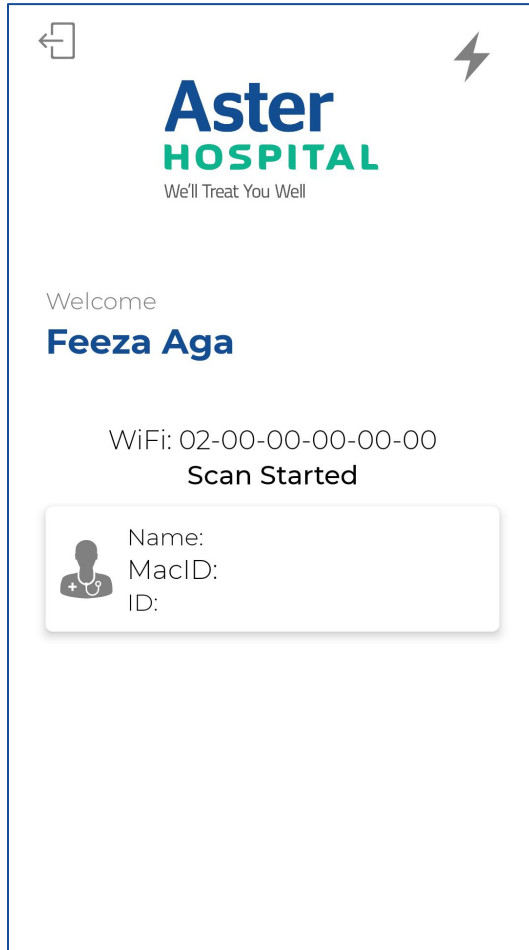


Website/App for patient feedback collection -

- ❖ Feedback tabs placed at various counters for collecting feedback from patient while they wait for them to be served in OPD areas.
- ❖ Application integrated with HIS which captures the information from HIS and displays contact details of the patients for further replying or query resolving of feedbacks received from them.

Why was this required?

- ❖ Need for an easier way to get patient feedback.
- ❖ Instant feedback collection and segregation for analysis.
- ❖ Need for quicker action for working on patient complaints.
- ❖ Understanding patient's perspective of Hospital operations.



Beacon Tracking -

- ❖ Beacon - each patient bed head is installed with a beacon bracelet for tracking/ proper tagging of patient to bed numbers.
- ❖ AsterMate app installed on rovers provided to nurses which scans the beacon and displays the room number and patient details.

Why was this required?

- ❖ It was always a struggle to find out whether the admitted patient is on correct bed according to HIS system.

OUTCOME OF INNOVATION -

- ❖ Track patients.
- ❖ Helps in identifying that right patient is in the right bed.

Temi

Robot for patient assistance



Temi - robot 2

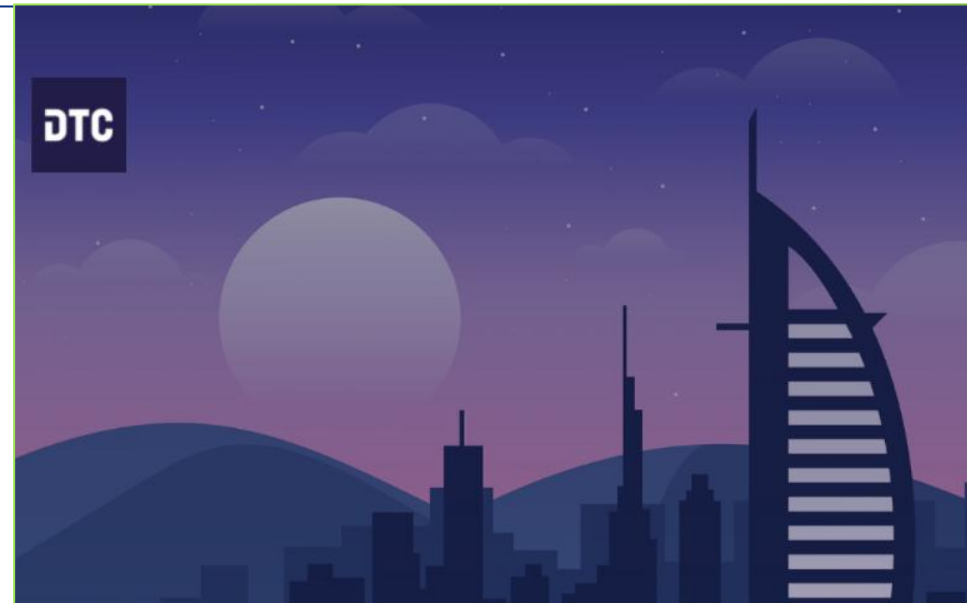
Project with DTC (Dubai Taxi Corp)

After booking an appointment, user can enter their details and will receive an OTP to book a Taxi

Dr.Patanjali-Charanabailu-Panduranga For 29 Sep 21 On: 17:00

Female Male

Enter the OTP recived -



Verify OTP

Didn't receive the OTP yet ? **Resend** !!

Project with DTC (Dubai Taxi Corp)

Patient can book a taxi as preferred

Menu > Book Ride


DTC

MENU

Book Your Ride

Pickup تاجير ملاعب - Dubai - United Arab Emirat


Drop Enter your drop

Car type*  **Electric Limousine**
4 seater

Schedule Now Later

Date *

Promocode

Payment *  Cash

Notes

Submit **Reset**

AL SATWA السطوة 308 52 Nad Al Sheba Race Course ZA'A

57th St 51 D86 24A Street

Dubai International Financial Centre مركز دبي المالي العالمي

DIFC

Dubai دبي

50A 50B D86

The Dubai Mall دبي مول

Burj Khalifa برج خليفة

DOWNTOWN DUBAI وسط مدينة دبي

YANSOON

Prime Tower

SOUTH RIDGE

58 A Rd 50 D86 D71 D72 D71

49 M