مستشفى ثومبي الجامعي

THUMBAY UNIVERSITY HOSPITAL

Thumbay Medicity, Al Jurf, Ajman - U A E

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CAP ACCREDITED
COLLEGE of AMERICAN PATHOLOGISTS

STUDY 1

What are the possible causes for the delay in Turn-around-time in Laboratory test results and gaps in Operations of Phlebotomy and laboratory services at a University Hospital in UAE?"

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OBJECTIVES

1. To determine the turnaround time of the laboratory test results.
2. To identify reasons which lead to delayed TAT and implement an improvement program at a University Hospital in UAE.
3. To recommend effective solutions wherever required

Turn around Time is the time period between receiving specimens in the laboratory and dispatching reports with verification

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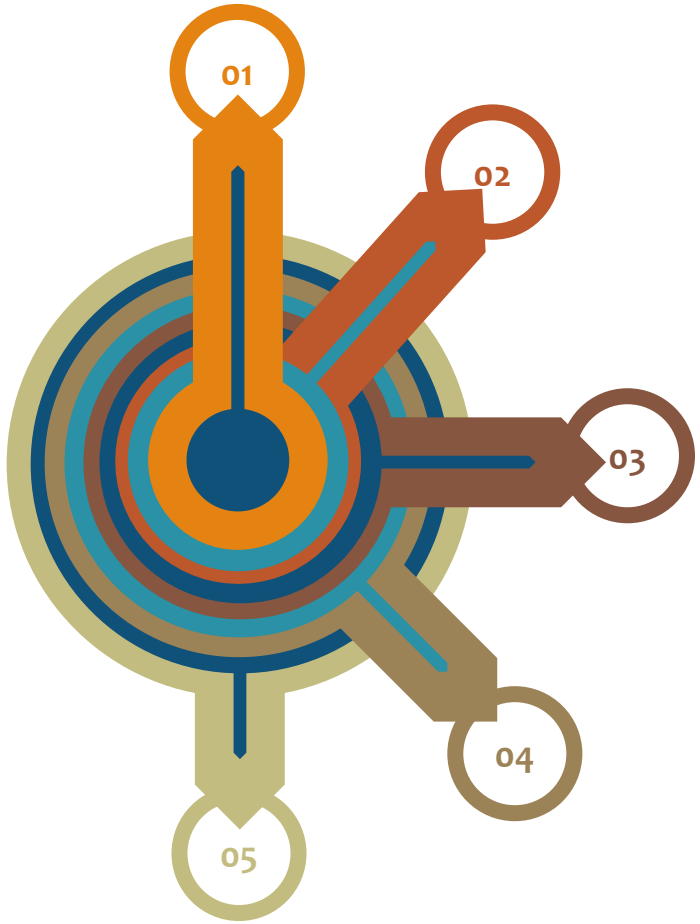
Methodology-April, 2022 – Closed file Audit



Area of study

Thumbay University Hospital, Al Jurf, Ajman

Type of Study

Cross-sectional Observational Study

Data

Quantitative Data, Convenient sampling technique

Method of data collection

Document Review, data analysis & physical observation

Audit Tool

Log book maintained by the phlebotomist and Information Management System in the hospital and laboratory.

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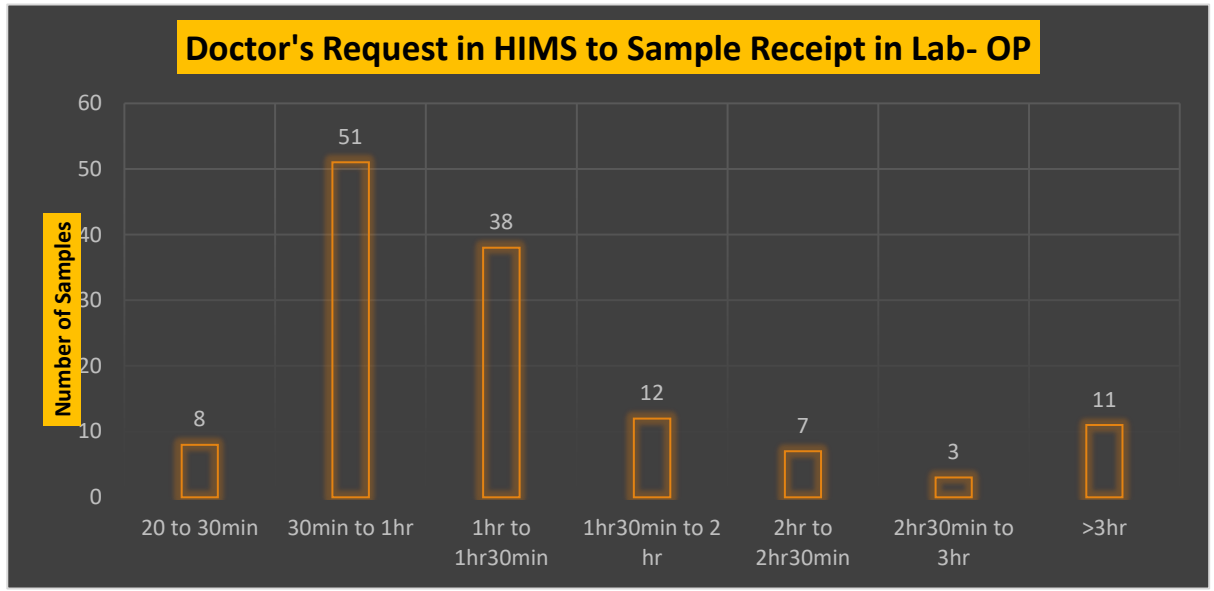
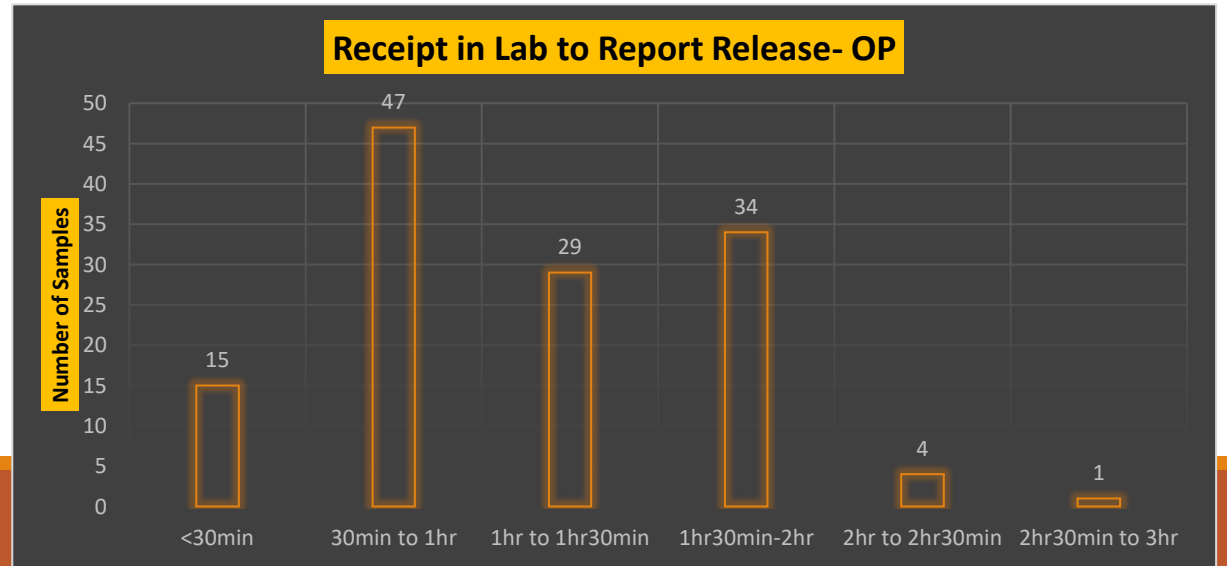
TAT for TUH Lab Tests



Key Finding:

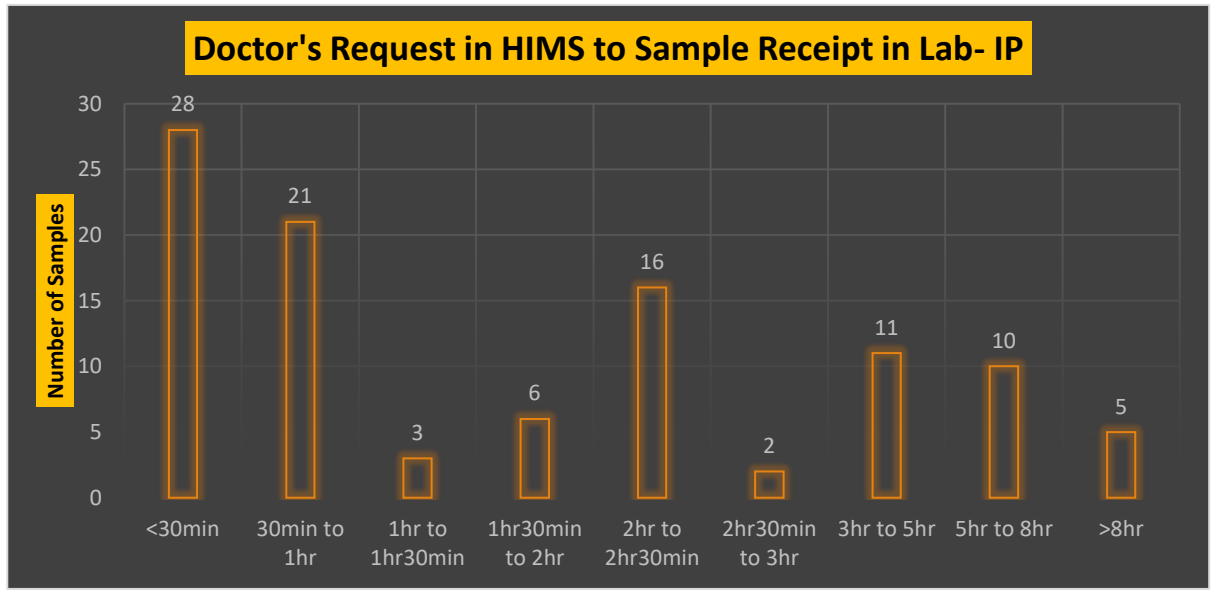
- **45% of samples reaching lab within 1 hr.**
- **55% of samples taking 1 hr to 3 hrs or more to reach Lab**



Key Findings:

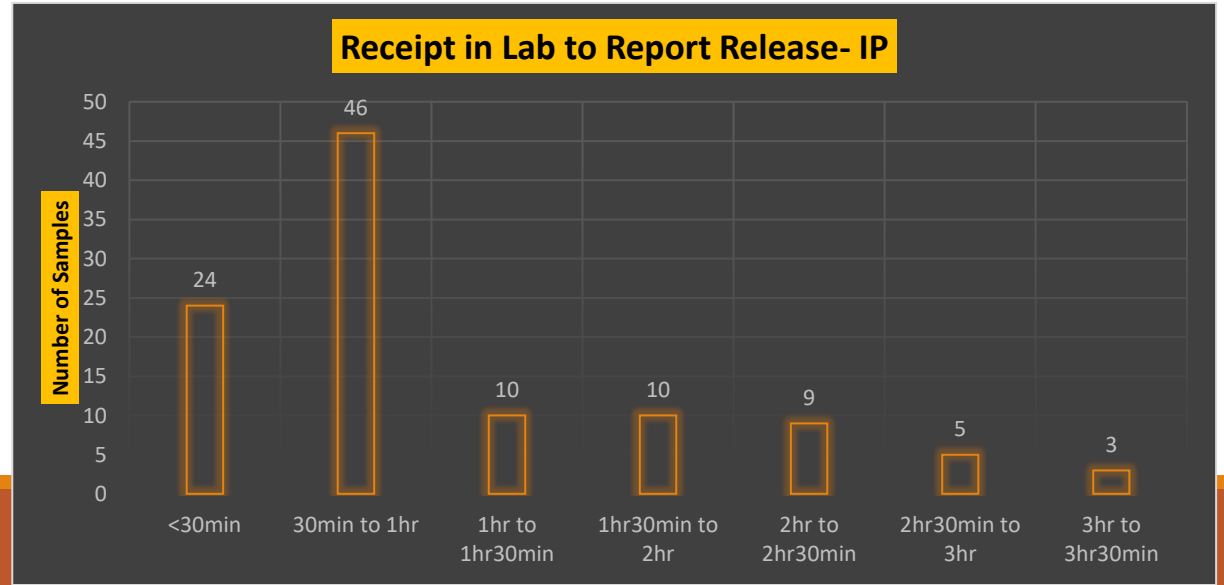
- **12% of reports released within 30 mins.**
- **48% of reports released within 1 hr.**
- **96% of reports released within 2 hrs.**
- **100% of reports released within 3 hrs.**

TAT for TUH Lab Tests



Key Findings:

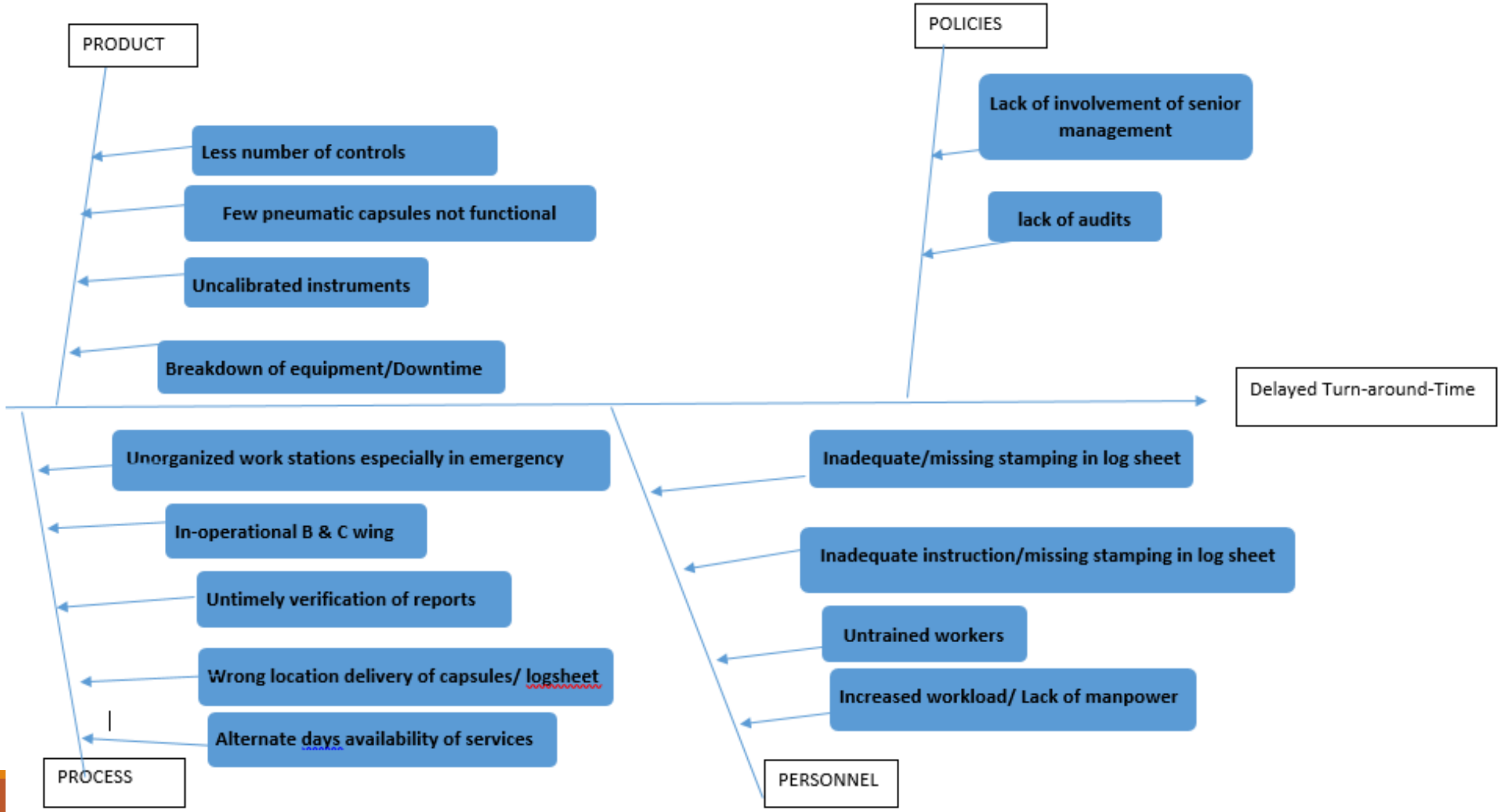
- **27% of samples reaching lab within 30 min.**
- **56% of samples reaching lab within 2 hrs.**
- **44% of samples reaching lab after 2 hrs to 8 hrs or more.**



Key Findings:

- **23% of reports released within 30 mins.**
- **66% of reports released within 1 hr.**
- **84% of reports released within 2 hrs.**
- **97% of reports released within 3 hrs.**

ROOT CAUSE ANALYSIS



CONCLUSION

There were several outliers that influenced the laboratory's TAT, and in order to minimize the TAT, the hospital needed to concentrate on monitoring the procedures, reducing waste, and eliminating repeated tests. The laboratory consultants' verification of test findings required time, and equipment outages, staffing shortages, transportation techniques, and underutilization of the pneumatic tube system all led to TAT delays. The absence of senior management participation in identifying gaps and discussing them with stakeholders may have improved the process flow prior to intervention.

Policies should be designed and implemented to improve TAT, and audits should be undertaken on a regular basis.

This will not only increase patient happiness, but will also help to minimize patient length of stay and speed up the hospital release procedure.

Pneumatic Tube System

STRATEGY FOR IMPROVEMENT

- Improve Phlebotomy Services; both OP & IP
- Further Optimization of Lab operations to save more time
- Layout improvement for sample collection areas

RECOMMENDATIONS

•After sample collection and labeling, the nursing staff should be encouraged to use the pneumatic tube system.
•It must be assured that the laboratory receives the proper labeling and log chart.
•The closure of sample containers needs to be verified twice.
•Pneumatic capsules that are not working properly need to be fixed to ensure appropriate equipment operation.
•Equipment and machines require routine maintenance at regular periods.
•Regular audits will aid in monitoring and, ultimately, TAT improvement.
•It is important to identify the key performance measures that fall short of the standards.
•It is necessary to identify wastes and non-value-added services that may delay reporting. Once waste activities have been identified, they should be stopped using the best management practices and resources.
•The laboratory consultants must be trained in lean management so that a better monitor and implementation can be assured

STUDY 2

"Assessment of Data Management Practices and Analysis of Gaps against standards set by JCI" in a University Hospital in UAE.

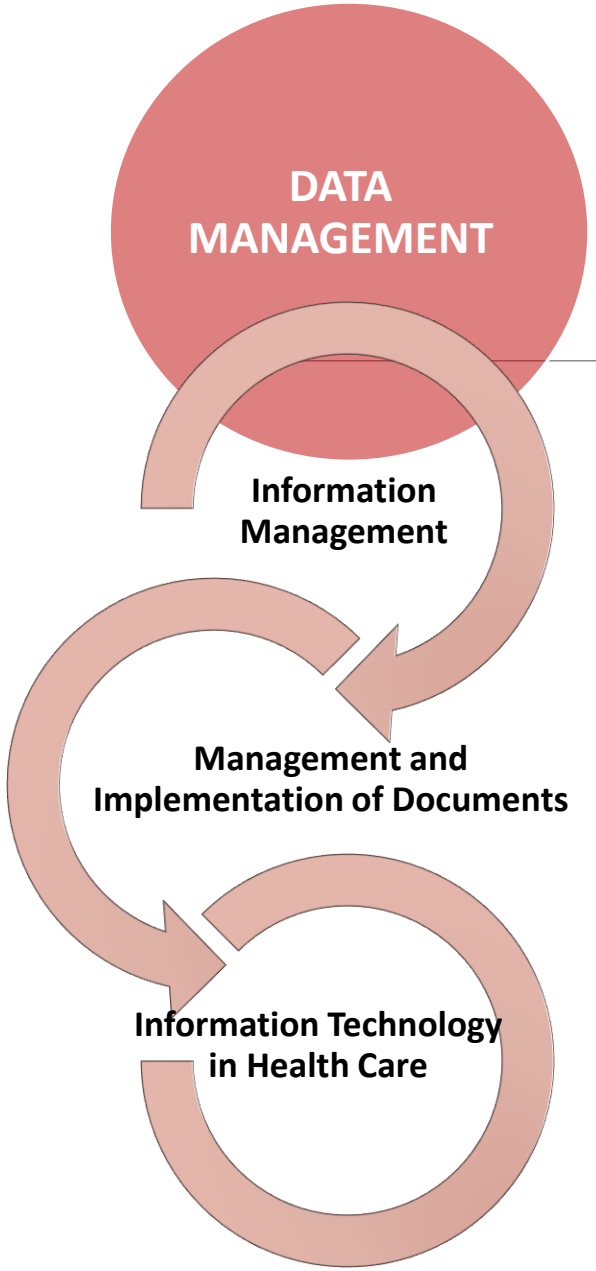
Need for repeated on job training in implementation of JCI.

THE DOCUMENTATION REQUIRED IN JCI IS LARGE.

CHALLENGES FACED in IMPLEMENTATION of SOPs in a HOSPITAL

Skilled staff such as JCI certified trainer/coordinator is required.

The quality standards of JCI are descriptive and elaborative, where attention is paid to even small details that are difficult to maintain.



OBJECTIVES of the study

1. To understand if the existing documentation procedure is in accordance with the SOPs established by the hospital.

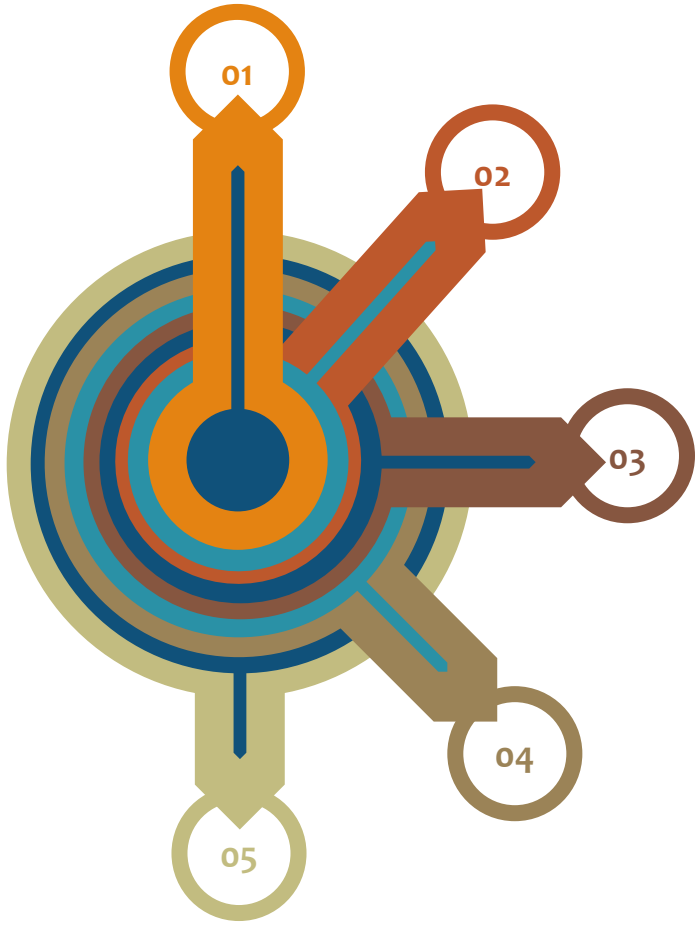
2. To assess the hospital management information system and carry a SWOT analysis

3. To recommend effective solutions wherever required

What is compliance?

'Compliance' as a term denotes whether the parameter is being met with the standard.

February, 2022 – Closed file Audit



Area of study

Thumbay University Hospital, Al Jurf, Ajman

Type of Study

Non-experimental and Observational

Data

Quantitative Data, Simple random sampling

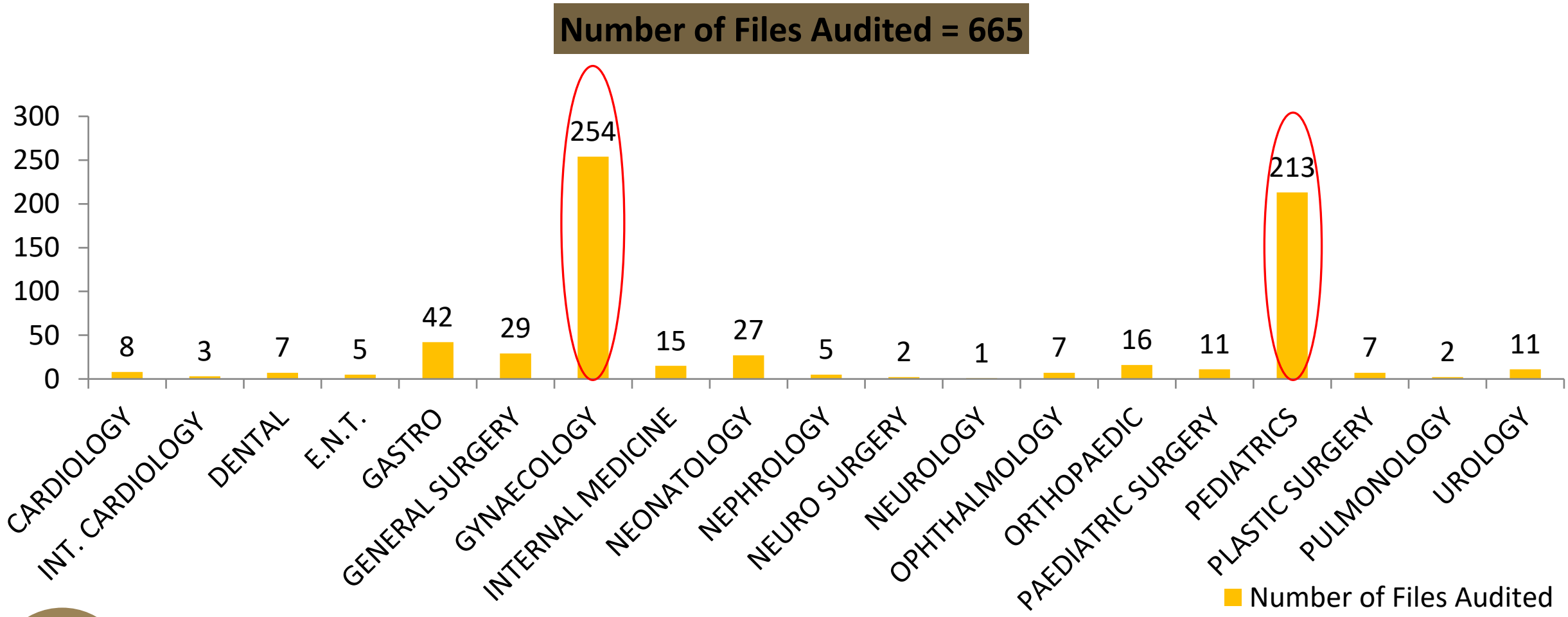
Method of data collection

Document Review, data analysis & physical observation

Audit Tool

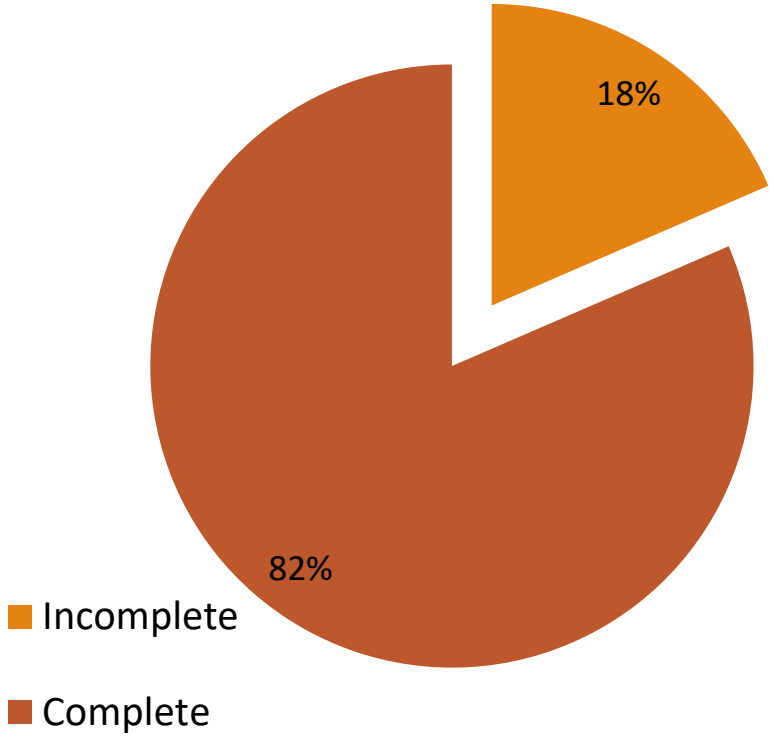
MRD audit checklist

Assessment of Medical Records From Thumbay University Hospital

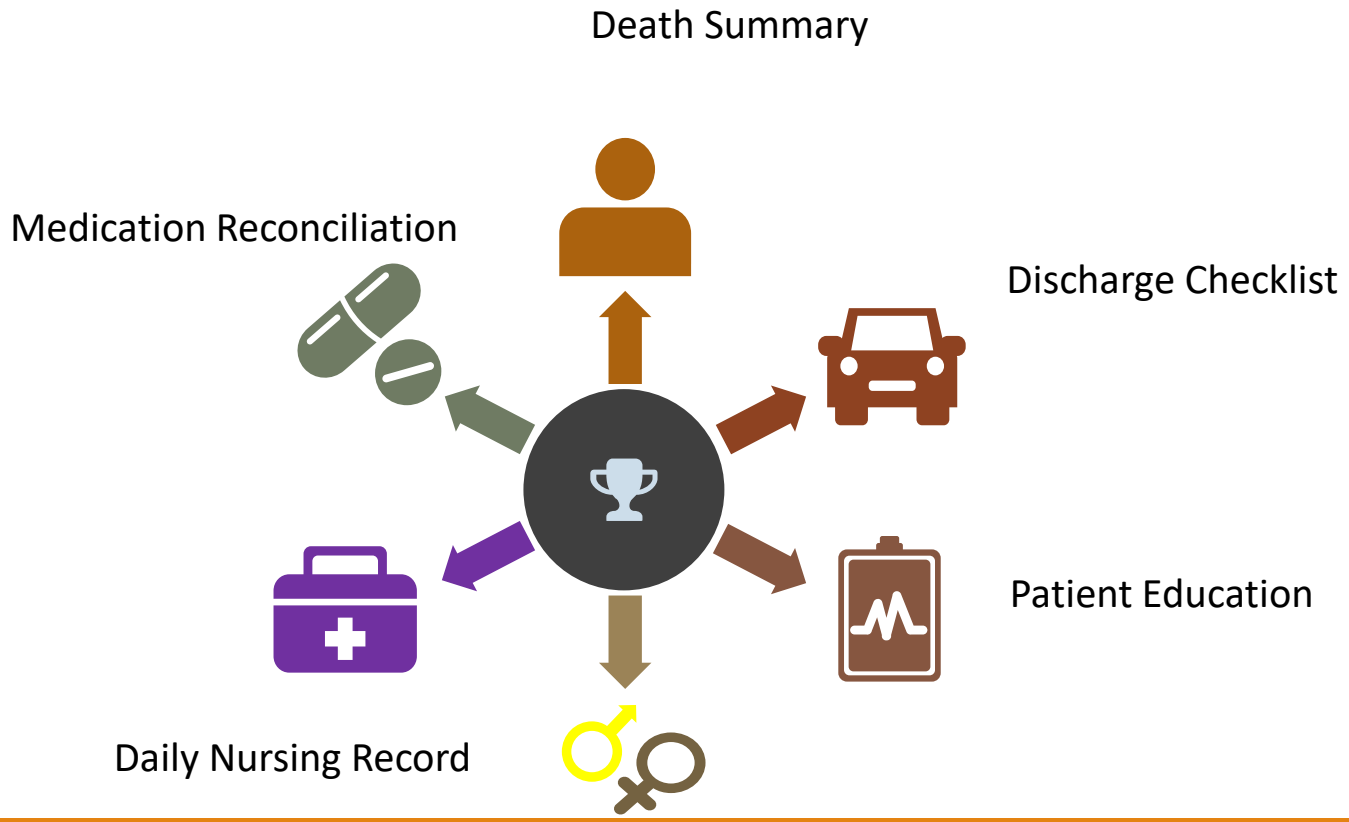


COMPLETION STATUS OF MEDICAL RECORDS FROM THUMBAY UNIVERSITY HOSPITAL

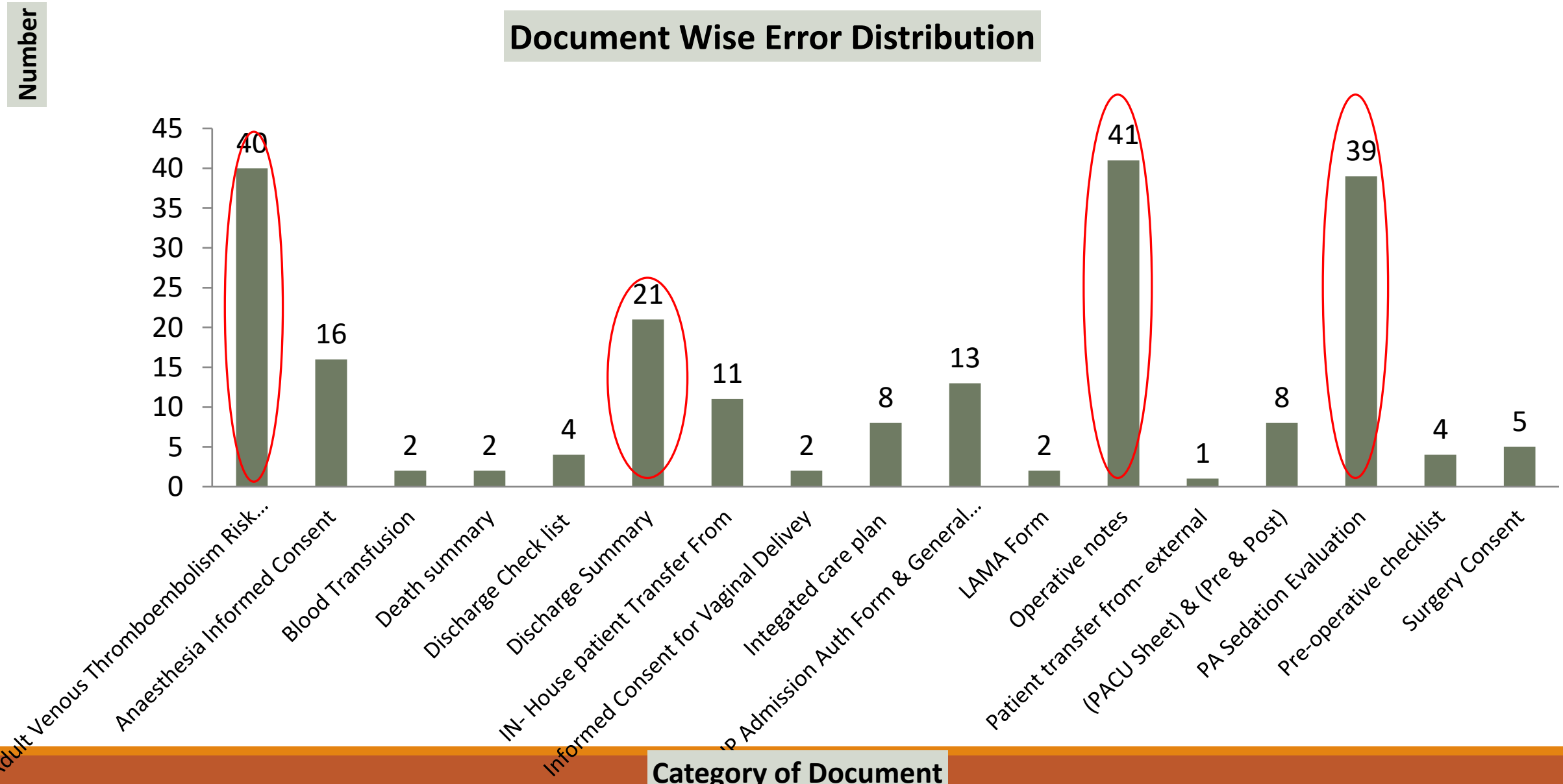
Completion Status of Medical Records



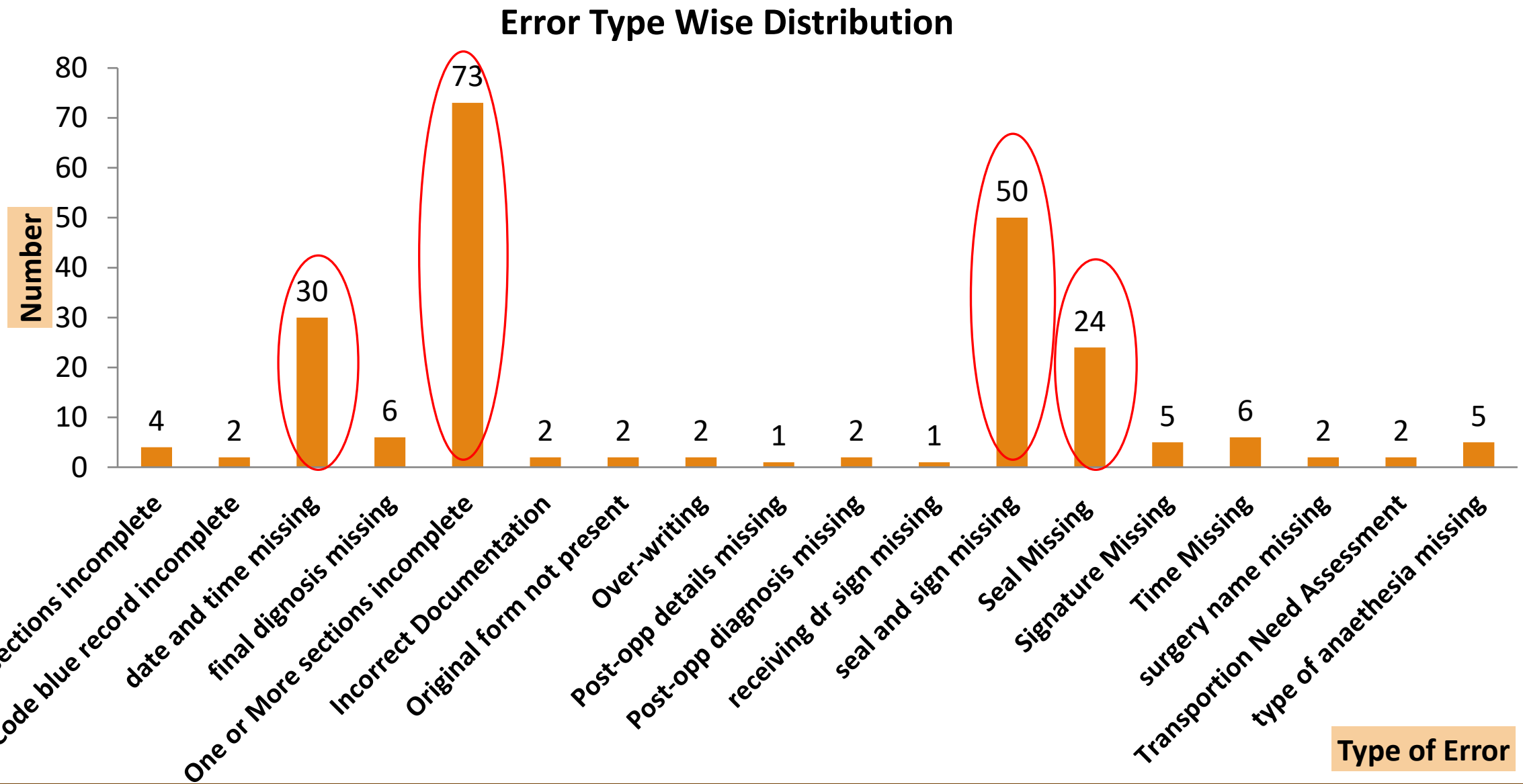
Documents with more than 90% Compliance



Compliance Of Medical Records From Thumbay University Hospital



Share Of Deficiencies Found



Suggested TAT- less than 5 days

Current TAT for Gap Completion- 10+ days

Observation and Suggestion- 1

Data collection tool should be improved to cover more parameters as per JCI’s recommended medical record audit tool.

CURRENT DATA COLLECTION TOOL

B	C	D	E	F	G	J	K	L	M	N	Q	R	S	T	U	V	W	X	Y	Z
Doctor Name	Department	IP No.	Hosp No.	Pat.Nam	Date of Adm.	Bed No.	Company	Discharg	Leath of stay	Status	Patient transfer fro exter	LAMA	Death summa	Discharge Summar	Medicatio n Reco	IP Admission Authorisatio n Form &	Informed Consent for Vaginal Delivey	Surgery Consent	High Risk Consent From	Anaesthesia Inf
Osama El Sayed Reak Elassy	PEDIATRICS	17741	112386	MANSOOR ISSA HASSAN ISSA SAHED DAD	02-06-2022	4022-SR BED 1	NEURON INSURANCE - ENAYA	11.2.2022	5	Incomplete				seal is missing						
Kasturi Anil Mummigatti	GYNAECOLOGY	17742	115302	DEEMA HASSAN ALI MOHA	02-06-2022	LDR-01 BED 1	NEXTCARE INSURANCE RN3 NETWOR	8.2.2022	2	Complete										
Prashanth Hegde	GYNAECOLOGY	17743	115976	ADEBISI TITILAYO TAIWO	02-06-2022	3082-83 TS BED 1	Delivery Booking-Thumbay University Hospital	8.2.2022	2	Incomplete										
Mahir Khalil Ibrahim	INTERNAL MEDICINE	17748	128004	AMNA ABDULLA MOHAMED ALMULLA	02-06-2022	4025-SR BED 1	Self Payment	8.2.2022	2	Incomplete			Code blue incomplete							
Kasturi Anil Mummigatti	GYNAECOLOGY	17750	128000	BIBI AMINA KHAN ABDULLAH	02-06-2022	3065-66 TS BED 1	Delivery Booking-Thumbay University Hospital	7.2.2022	1	Complete										
Shanthi Therese Fernandez	GYNAECOLOGY	17751	104814	ROMANA AMIR	02-06-2022	LDR-08 BED 8	NEXTCARE INSURANCE RN3	8.2.2022	2	Incomplete				date of discharge is wrong						
Zulekha Banu	GYNAECOLOGY	17753	92623	FATHIMATH NASEERA MOHAMMAD ARIF	02-07-2022	3086-87 TS BED 1	AL BUHAIRA NATIONAL INSURANCE (LIMITED &RESTRICTED NETWOR	7.2.2022	1	Incomplete						date and time				

RECOMMENDED CHECKLIST

OPEN & CLOSED MEDICAL RECORD REVIEW CHECKLIST						
S. No		PARAMETERS	MET 10	NOT MET 0	NOT APPLICABLE	REMARKS
1	Admission Checklist	All Columns filled				
2	Doctors initial assessment (H&P Examination)	Completed within 24hrs				
		Sign/ Date/ Time/ Seal of the doctor present				
		Allergies column documented				
		No unapproved abbreviations used				
3	Medication Reconciliation	Done for a patient on admission				
4	Clinical Pharmacist Intervention form	All columns completed				
		Signed by Clinical Pharmacist				
5	Compliance to discharge planning at the time of admission.	Completed on admission				
6	Patient Identification	Patient Label / details on each medical record				
7	Nursing Initial assessment	Completed within 2 hrs.				
		Fall risk assessment/ scoring done accurately				
		BMI documented				
		Pain Scoring done				
		Skin Integrity done				
		Reconciliation done				
		Time/ Date/ Sign				
8	Nursing daily	Assessment done during every shift				

Observation and Suggestion- 2

Data aggregation and analysis methodology must be improved so that a quantifiable value for medical record compliance can be obtained.

RECOMMENDED METHODOLOGY

S.No	1	2	3	4	5	6
Doctor Name	Pushpa Bhimani	Shameema Asif Muhammed	Wajiha Ajmal	Prashanth Hegde	Shanthi Therese Fernandez	Mohamed Sobhy
Department	GYNAECOLOGY	GYNAECOLOGY	GYNAECOLOGY	GYNAECOLOGY	GYNAECOLOGY	GENERAL SURGERY
IP No.	17581	17582	17584	17586	17588	17589
Hosp No.	126228	89112	125396	126332	108378	125683
Date of Adm.	02-01-2022	02-01-2022	02-01-2022	02-01-2022	02-01-2022	02-01-2022
Adm.Time	12:10 AM	01:00 AM	04:20 AM	05:50 AM	06:50 AM	07:20 AM
Discharged Date	02-02-2022	2.2.2022	02-02-2022	1.2.2022	02-02-2022	02-02-2022
Lenth of stay	1	1	1	1	1	1
Audit Parameter	Finding	Finding	Finding	Finding	Finding	Finding
Patient transfer from- external	N/A	Y	N/A	N/A	N/A	Y
LAMA	N/A	N/A	Y	N/A	N/A	Y
Death summary	N/A	N	N/A	N/A	N/A	N/A
Discharge Summary	Y	Y	N	Y	N	Y
Medication Record	Y	N/A	Y	Y	Y	N
IP Admission Authorisation Form & General Consent	N	N	Y	Y	Y	Y
Informed Consent for Vaginal Delivey	N	Y	N	Y	Y	Y
Surgery Consent	Y	Y	Y	Y	Y	Y
High Risk Consent From	N	Y	N	N/A	N/A	N
Anaesthesia Informed Consent	Y	N	Y	N	N	Y
Pre Anasthetic / Sedation Evaluation	Y	Y	Y	Y	Y	N
Postanaesthetic Care uint (PACU Sheet) & (Pre & Post)	Y	N/A	Y	Y	N	N/A
Pre-operative checklist	Y	Y	N	N	Y	Y
Safe Surgery Checklist	Y	Y	N	N	Y	N
Anaesthesia Record Sheet	Y	Y	Y	Y	Y	N
Operative notes	Y	Y	Y	N	Y	N
Adult Venous Thromboembolism Risk Assessment	Y	N/A	N	N/A	N	Y
Blood Transfusion	N/A	N/A	N/A	N	Y	Y
New Born Chart	Y	Y	Y	N	Y	Y
Discharge Check list	Y	Y	N	N	Y	Y
Integated care plan	Y	Y	Y	N	Y	N
Patient & Family Education Documentation	Y	Y	Y	Y	Y	Y
IN- House patient Transfer From	Y	N/A	N	Y	Y	N
Total number of applicable parameters	19	17	20	18	19	21
Total number of Complaint parameters	16	14	11	10	14	13
% Compliance	84%	82%	55%	56%	74%	62%

Observation and Suggestion- 3

Only pre-intervention data should be used to calculate the compliance.

Recommendations

01

Trainings

to be enhanced for nursing staff and doctors regarding appropriate recording of procedures, care plan and signatures and for management of vulnerable patients including marking of files.

02

List of abbreviations

Allowed list of abbreviations needs to be programmed into the system o that error of using abbreviations that are not allowed could be minimized.

03

Seminar sessions

Should be conducted regarding the importance of complete and correct documentation.

04

Sensitization

Consultants should be sensitized for counter signing of doctor’s notes within the required time frame.

05

Audits

Regular assessments can be made through audit for randomly chosen files to ensure high standards.

Recommendations

Certain non-specific recommendations that could increase efficiency and quality of services

Standardization

Hospital-wide standardization of the Discharge summary can be beneficial.

Improvement

Nurses need to be trained regarding mandatory pain assessment and infection control.

Update

Documentation methodology needs to be updated.

Rewards

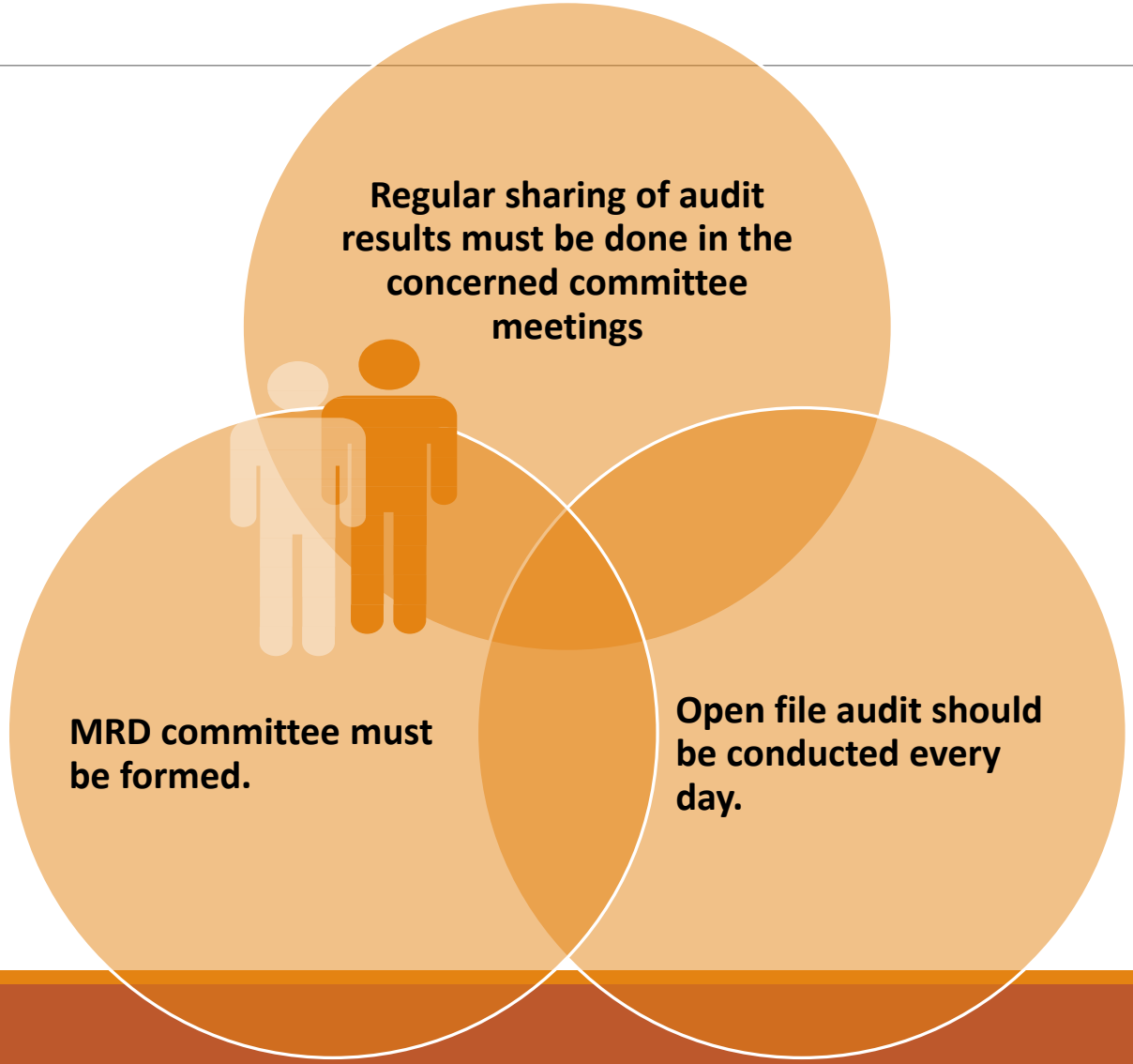
Rewarding the best performing Department Unit could prove effective in bringing the required changes.

MEDICAL RECORD DEPARTMENT

OBSERVATIONS

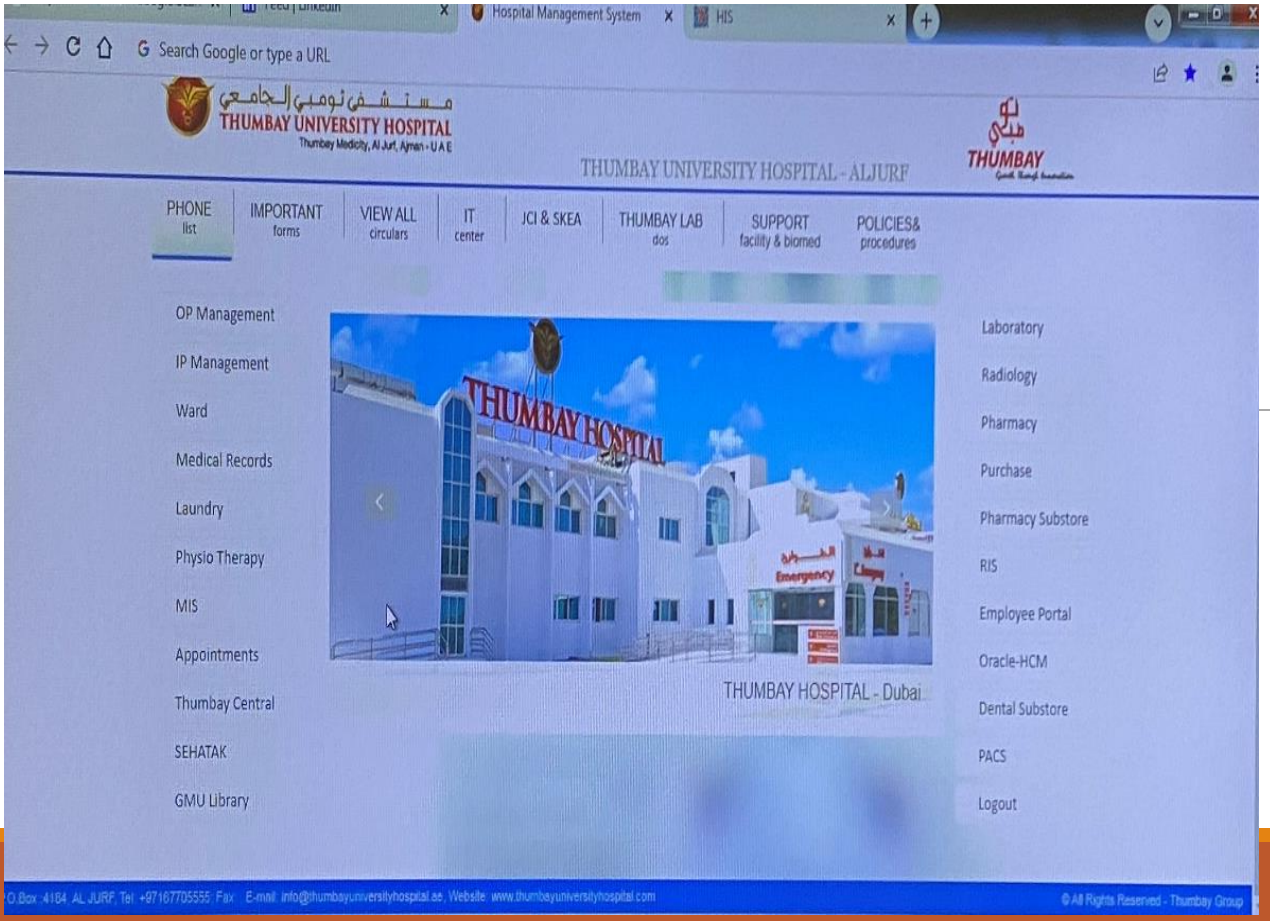
- TAT for closing of gaps and retrieval of files in case of emergency is not defined in the department.
- Gaps in the security system- Absence of electronic lock on the main door. Since MRD has an issue of security and confidential documents, an electronic door operator could be helpful.
- Human resource has not received training and/or re-orientation in a couple of years.
- The discharged long-stay patient's records have not been scanned since previous year of 2021. (Oct-Dec)
- Huge volumes of patient records are present for LTC patients which were observed to be unassembled/disorganized.
- Sequence wise stacking could be done. While an effort is made but the sequence is not maintained for ease of retrieval when required.

Recommendations for Medical Record Department Status- Implemented



HMIS & SEHATAK

Is the current HMIS capable of meeting current and future system requirements for TUH?



STRENGTH

*Current system has all the necessary modules.

*Integrated with other departments.

*System is accessible on any machine in department.

WEAKNESS

*Interface is not user-friendly.

*No method of sending/ receiving spontaneous notifications across departments.

*System goes on stand by mode.

SWOT ANALYSIS

OPPORTUNITY

*Use of mobile applications.

*Use of portable devices in case of failing machinery.

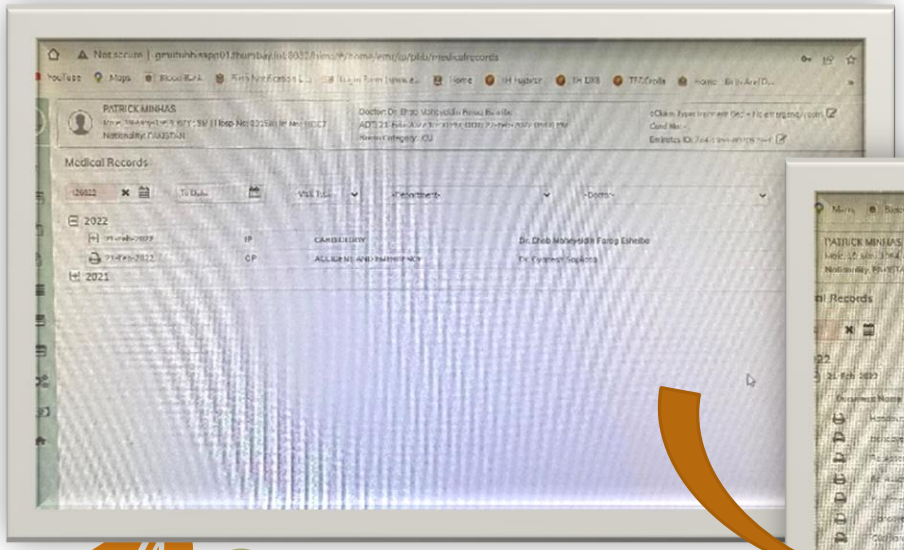
THREATS

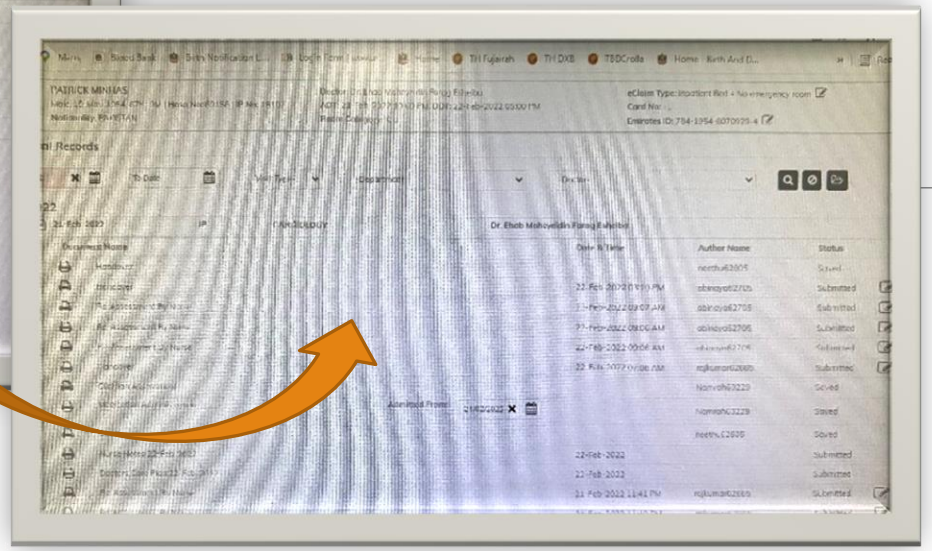
*Dependent on windows licensing.

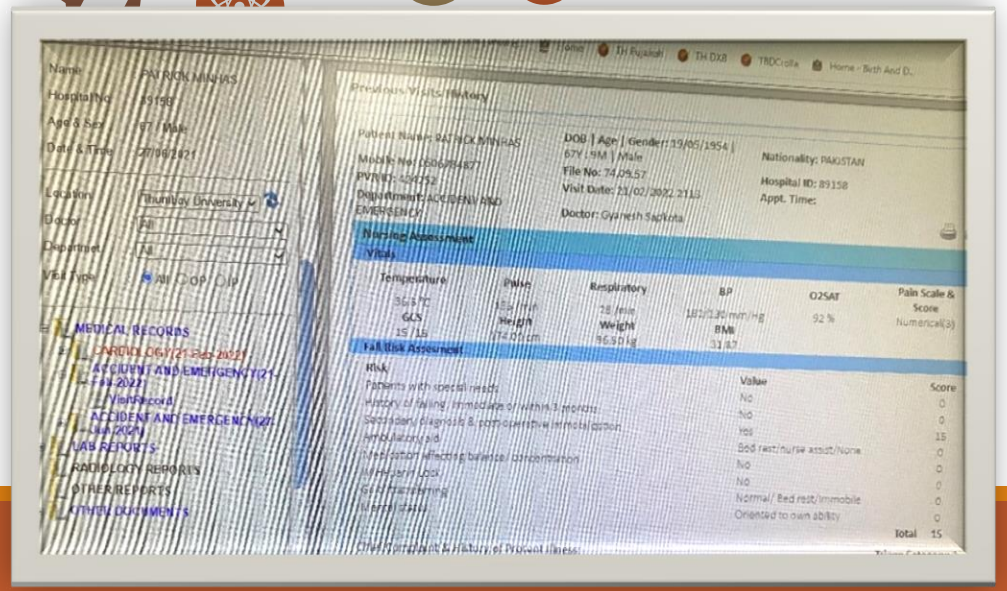
*Internet connectivity issue.

*Cyber security.

*Technologically not the best in market







- **ALLERGY ASSESSMENT & PAIN SCORE IS SOMETIMES NOT RECORDED.**
- **THE ABBREVIATIONS THAT ARE NOT ALLOWED ARE BEING USED IN CLINICIAN'S ASSESSMENT.**

PATIENT'S IDENTIFICATION DOCUMENTS(emirates) ARE NOT SCANNED.

THE PROCESS OF ACCESSING FILES IS TIME-CONSUMING AND NON-INTUITIVE.


Health Care
Doctor
Hospital
Pharmacist
Nurse
Dentist
First Aid
Surgeon
Emergency
MEDICAL
Health Care
Doctor
Hospital
Pharmacist
Nurse
Dentist
MEDICAL
Health Care
Doctor
Hospital
Pharmacist
Nurse
Dentist
First Aid
Surgeon
Emergency

THANK YOU !