

SUMMER TRAINING REPORT

PRESENTED BY :

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MBA-HM (2020-22)

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HOSPITAL INTRODUCTION



Max Smart Super Speciality Hospital spread over 14.35 acres of nature friendly landscape and state-of-the-art infrastructure

Total 250 beds including:

- 50 Critical Care Beds (excluding HDUs)
- 172 IP Beds including VIP Suite, Deluxe Rooms, Single Rooms, Double Rooms & Multi Occupancy Rooms
 - 12 Modular Operation Theatres + Minor OT
- 20 bedded Dialysis Set-up
- 8 bedded Emergency Resuscitation & Observation unit

OBSERVATIONAL LEARNING

VARIOUS DEPARTMENTS AND SERVICES PROVIDED

Anesthesiology Services

Cardiology Services

Cardiothoracic Surgery Services

Critical Care

Day-Care Services

Dermatology and Venereology Services

Emergency Medicine Services

Endocrinology Services

General Medicine

General Surgery Services

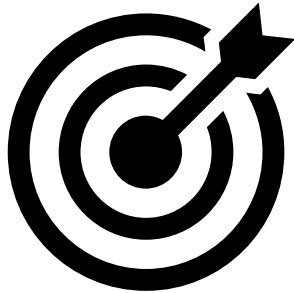
Geriatrics

Hepatology

Hepato-Pancreato-Biliary Surgery Services

Immunology
Medical Gastroenterology
Neonatology Services
Nephrology Services
Neurology Services
Neuroradiology
Obstetrics & Gynecology
Oncology (Medical)
Ophthalmology
**Orthopedics Surgery including Joint
Replacement & Arthroscopic Surgery**
Otorhinolaryngology
Pediatric Cardiology
Pediatrics Services
Plastic & Reconstructive Surgery
Psychiatry Services
Respiratory Medicine Services

PROJECT REPORT



To retrospectively study
the length of stay(LOS) in
emergency(ER)

INTRODUCTION- EMERGENCY DEPARTMENT

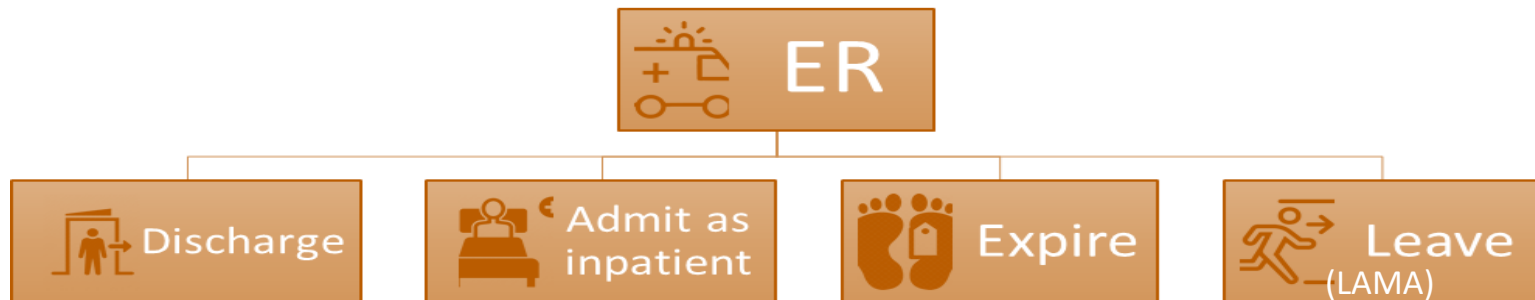
Definition-

An emergency department, also known as an accident & emergency department is a medical treatment facility specializing in emergency medicine, the acute care of patients who present without prior appointment; either by their own means or by that of an ambulance.

Location- Ground floor



POSSIBLE OUTCOMES



LENGTH OF STAY(LOS)

Definition –

- Length of stay is a term commonly used to measure the duration of a single episode of hospitalization.
- In ER LOS is the time spent by the patient in the ER room measured from billing to departure, admission or transfer.

Variable – Time

Unit – in Mins

4-HOUR WAIT

- The most commonly cited measure of ER performance is the 'four hour wait' - the percentage of patients whose total time in ER is less than four hours.
- NHS England's current target is that 95% of attendances should last less than four hours, measured from arrival to departure, admission or transfer.



4 hours

↳ above 240 mins ≤ 5%.



**240
minutes**

Source - <https://commonslibrary.parliament.uk/research-briefings/cbp-7281>

OBJECTIVE

- To compare the LOS in ER of MAX SMART SUPER SPECIALITY HOSPITAL(MSSSH) Saket, New Delhi with international benchmarks for year 2020.
- Calculate total number of footfall in year 2020.
- To measure the median LOS of ER year 2020.
- % of patient getting discharge and admitted from ER only.
- To compare LOS in ER for critical and non-critical patients.
- To measure number and percentage of patient staying in ER beyond 240 mins

METHODOLOGY

AREA OF STUDY: Emergency department (MAX SMART HOSPITAL, Saket, Delhi.

DURATION OF STUDY: 2 Month 10th May to 2nd July

TYPE OF STUDY: Retrospective Study.

TYPE OF DATA: Qualitative

TECHNIQUE: Data collective from CPRS. ((Computerized Patient Record System)

TOOL: Performing data analysis on secondary data of year-2020 received from CPRS

Type of data- continuous (time).

Study period- 15/05/21 –1/07/21. (Retrospective)

SAMPLE SIZE: Total no. of patient coming in Emergency Department in year 2020 was 5335.

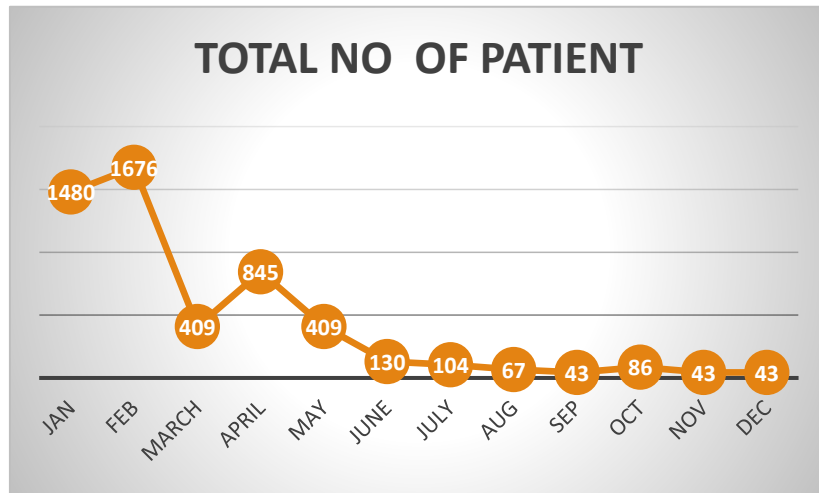
DATA COLLECTION: The study data was downloaded from BI software *PANTAH0* for the period JAN-DEC 2020.

DATA ANALYSIS Using :- Microsoft Excel using Bar charts, pie charts etc.

Data compilation Analysis and interpretation

Total Number of Patients in ER (Year 2020)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Patient	1480	1676	409	845	409	130	104	67	43	86	43	43



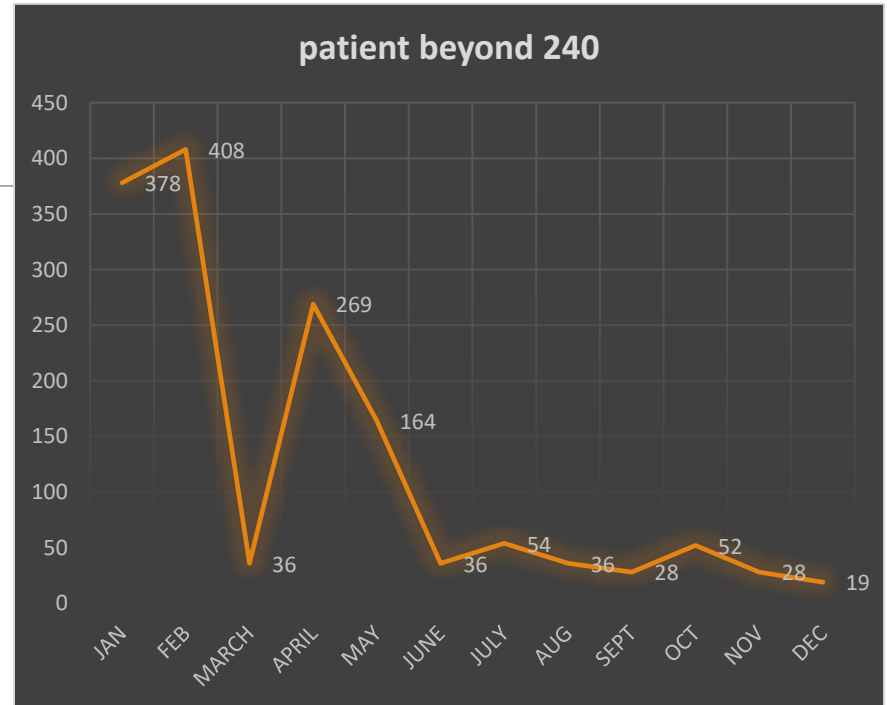
In year 2020 a total no. of **5335** patients arrived in ER.
The no. of patients arriving in ER shows a step fall after March-April possibly due to Covid-19 and lockdown impositions.

Interpretation

From the above graph we can state the flow of patient in emergency department are decreased due to Covid-19 lockdown. The total number of patients are coming in 2020 are 5335. And after April there is reduced in flow as the lines shows.

Patient beyond 240

Month	Pt. Beyond 240
JAN	378
FEB	408
MARCH	36
APRIL	269
MAY	164
JUNE	36
JULY	54
AUG	36
SEPT	28
OCT	52
NOV	28
DEC	19

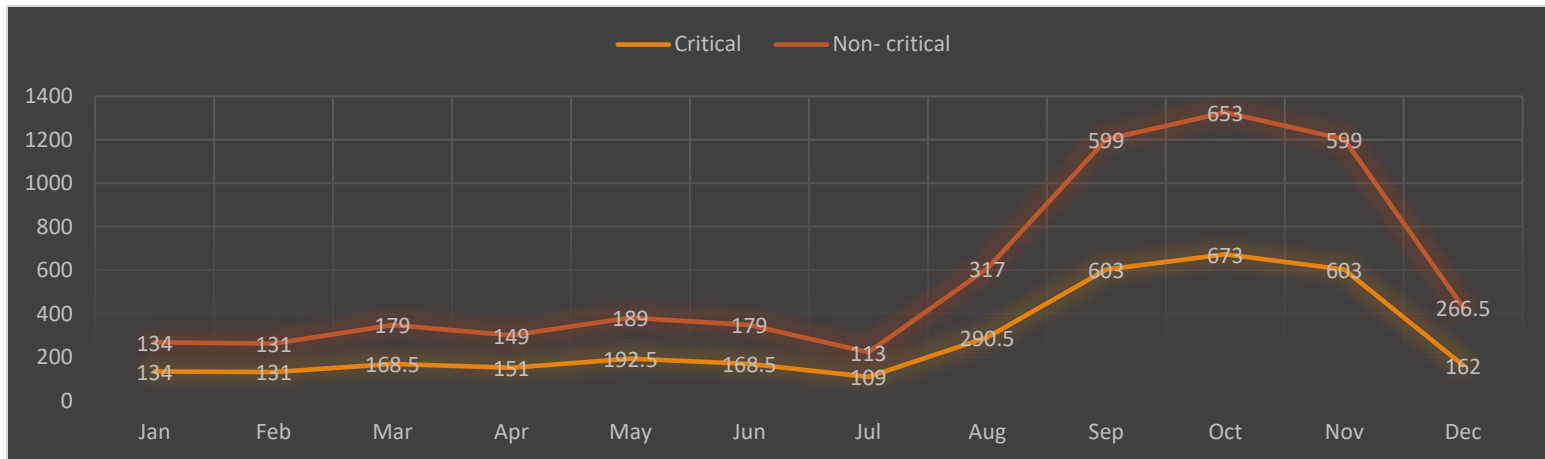


Interpretation

On observing the above data it seems that the in month of Jan and Feb there are high number of patient that are staying in emergency beyond 240 mins. But after the lockdown imposed. Only in April month there are high number of patient that are staying in ER department. After that there is no high number of cases as such shown in Jan ,FEB,& April.

Measuring critical and non-critical Median Length of stay in Emergency department (Monthly 2020)

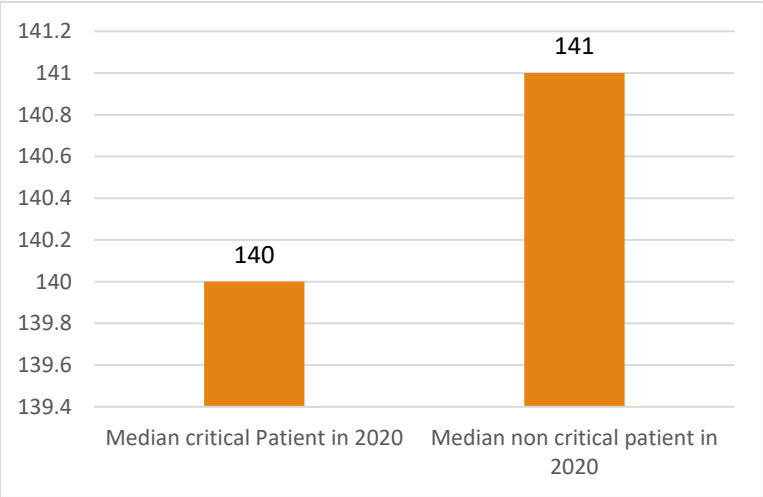
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Critical	134	131	168.5	151	192.5	168.5	109	290.5	603	673	603	162
Non-critical	134	131	179	149	189	179	113	317	599	653	599	266.5



Interpretation

From the above graph it seems that from Jan to July the Median value of Length of stay in critical and non-critical patients are less than 240 but in August to December median value of length of stay non-critical patients was continues increase beyond 240 mins.

Median value of All the patients beyond 240 in ER department in year 2020

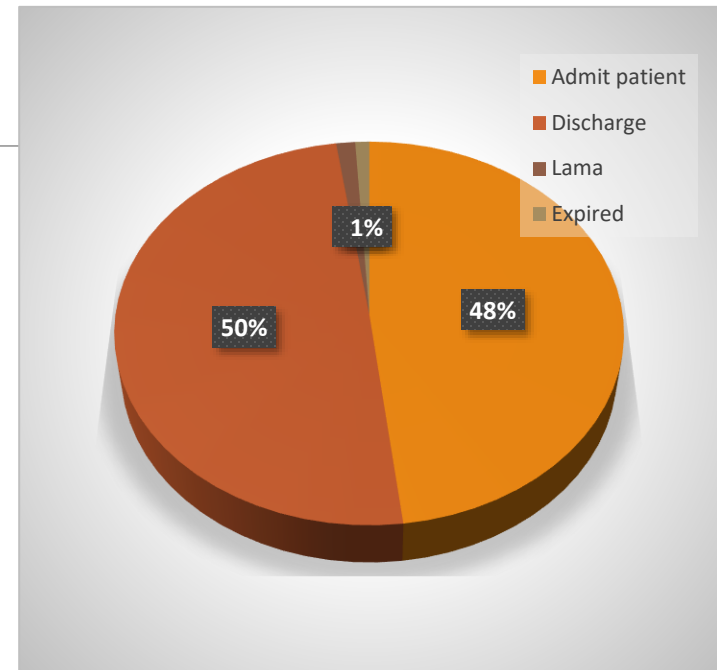


Median critical Patient in 2020	140
Median non-critical patient in 2020	141

Interpretation

From the above graph it seems that the Median value of critical and non-critical patient in year 2020 is less than 240 mins.

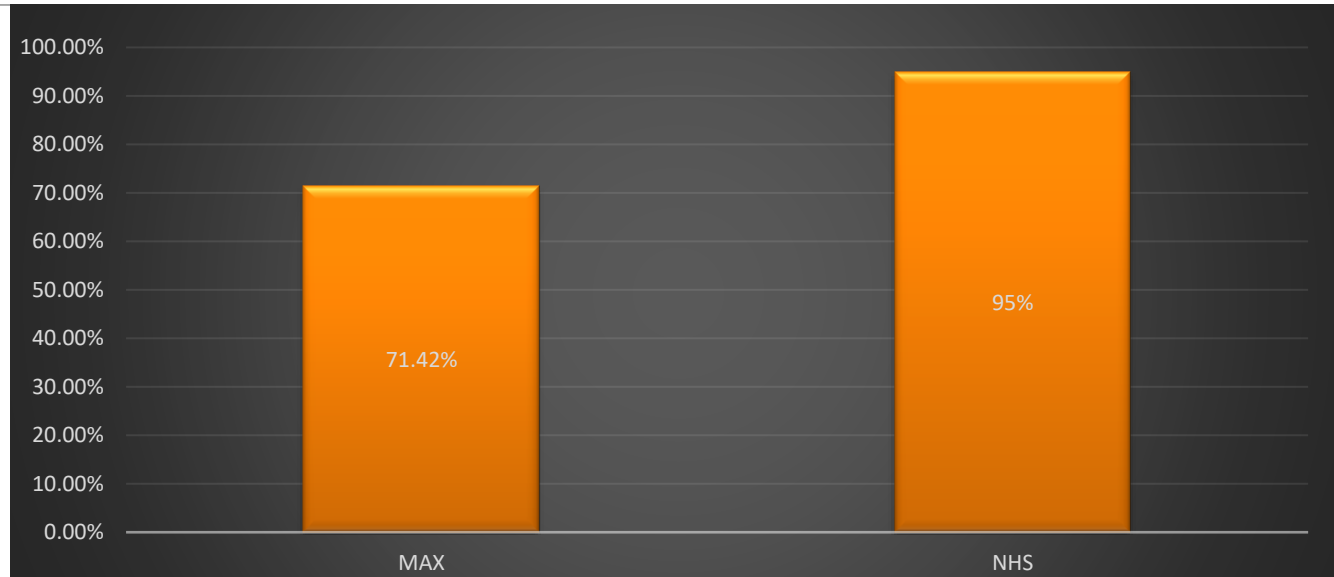
Total number of patient	1525	
Number of Admitted pt.	733	48.07%
Number of discharge pt.	757	49.64%
Number of Pt. goes lama	20	1.31%
Number of pt. expired	15	.98%



Interpretation

From the above graph we seems that the total number of patient that are staying beyond 240 mins. in the ER department are 1525. In which 757 around 50% are those who are discharge from emergency due to some had mild symptoms, advice home isolation, some are discharge after the patient got stable and only 15 patients were expired in ER department who had stay beyond 240 mins. Out of 1525 patient only 20 patients are go to LAMA because of non-availability of bed.

Comparison



Interpretation

From the study on LOS in ER department in Max Smart hospital there were 5335 total patient that are coming in ER department in year 2020. From which 1525 patient that are staying beyond 240 mins. in ER department. When I compared Max Smart hospital with NHS England in which 95% patients get shifted before 240 mins. only 5% patients are occupied bed in Emergency. And in MAX Smart Hospital they are on 71.42% patients that are shifted form Emergency department.

The following objectives are taken and their results are concluded

1. Total patients :-

No. of footfalls in ER decreased after the incidence of covid-19 and lockdown imposition with 83% of the total patients of the year confined in the first quarter.

2. Median LOS :-

Median LOS worsened towards the year end with highest in October(653 mins).

4 out of 12 months – August, September, October and November had median LOS > 240 mins(4hr

4. Comparison with NHS, England:-

NHS target = 95%.

MAX Hospital = 71.42%

5. Critical vs non-critical patients:-

Median LOS for non-critical patients has more variation than that of critical patients with extreme values as follows-

- Critical patients – 109 mins (July) – 673mins (October)
- Non-critical patients – 113 mins (July) – 653mins (October)

6. Median LOS was above 240mins in –

- critical patients (Aug, Sept, Oct, Nov) 4 out of 12 months.
- non-critical patients (Aug, Sept, Oct, Nov, Dec) 5 out of 12 months.

Thank you!

