

Reducing ED LOS for admitted Internal Medicine patients

مركز جونز هوبكنز

أرامكو الطبي

Johns Hopkins

Aramco Healthcare

Project Team/Role Project Sponsor: Dr. Michael Walsh; **Project Owner:** Dr. David Cowan; **Project Champion:** Dr. Muhammad Zia; **Project Facilitator:** Rabie Kilan; **Clinical administrator:** Mr. Ahmad Zahrani; **Unit Manger:** Rabie Issa; **Senior Director ED-Critical Care:** Ayman Homoud; **Stakeholders:** Dr. Mahamadu Maida, Dr. Mohammad Noufal, Mahmoud Abu Saelek, Tessa Warwick, Taibat Asuri, Mr. Jamil Ammar

Background

Emergency Department (ED) crowding is one of the greatest challenges to delivering safe, high quality, urgent and emergency care. There is an association between ED crowding and Mortality, Increased length of stay, reduced quality of care, Poor patient experience, Staff burnout and difficulty in recruiting and retaining staff. According to a 2002 national U.S. survey, more than 90% of large hospitals report EDs operating “at” or “over” capacity.

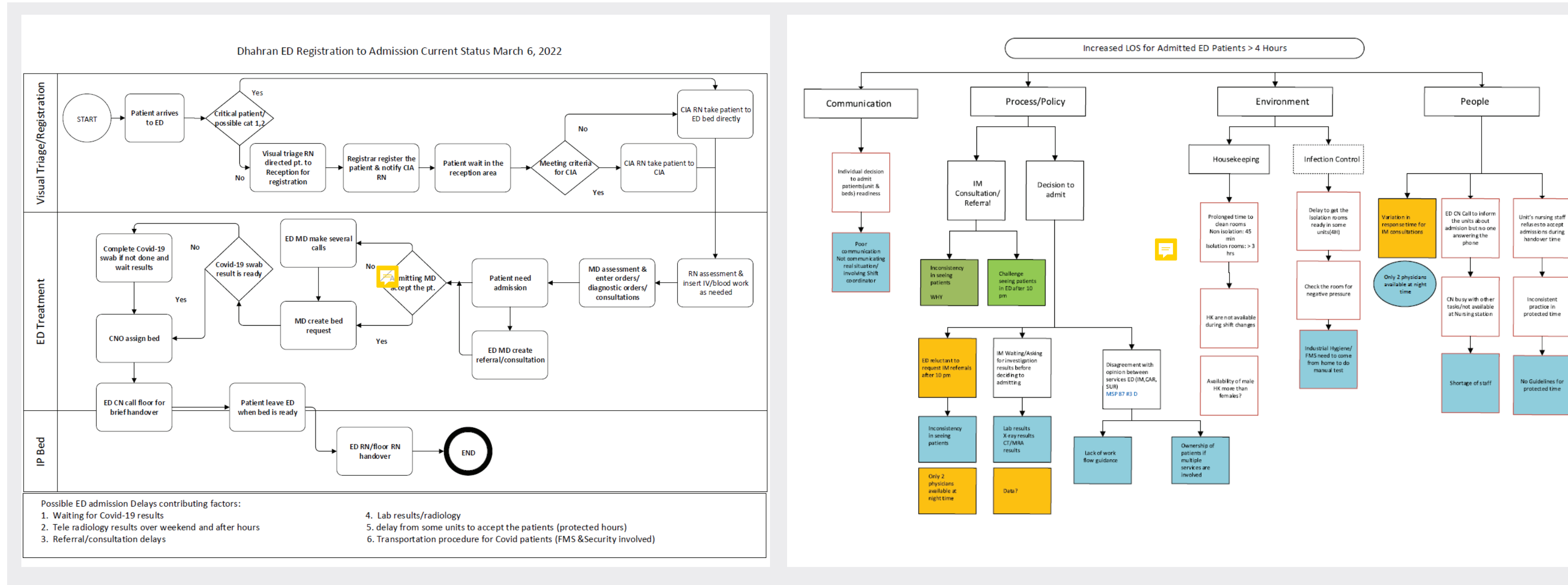
When EDs are overwhelmed, their ability to respond to community emergencies and disasters may be compromised. Exit block (also known as access block) describes the situation where patients who have been assessed in the ED are unable to leave the department due to a lack of capacity in the downstream system. Exit block is the single most common cause of sustained ED crowding. In JHAH more than 70% of admitted patients stay more than 4 hours in ED. Data showed that 56% of these patients are admitted under Internal Medicine making more than with Average LOS of 284 minutes.

Aim

To reduce ED LOS time by 10% by December 2022 for Internal Medicine patients

Methodology

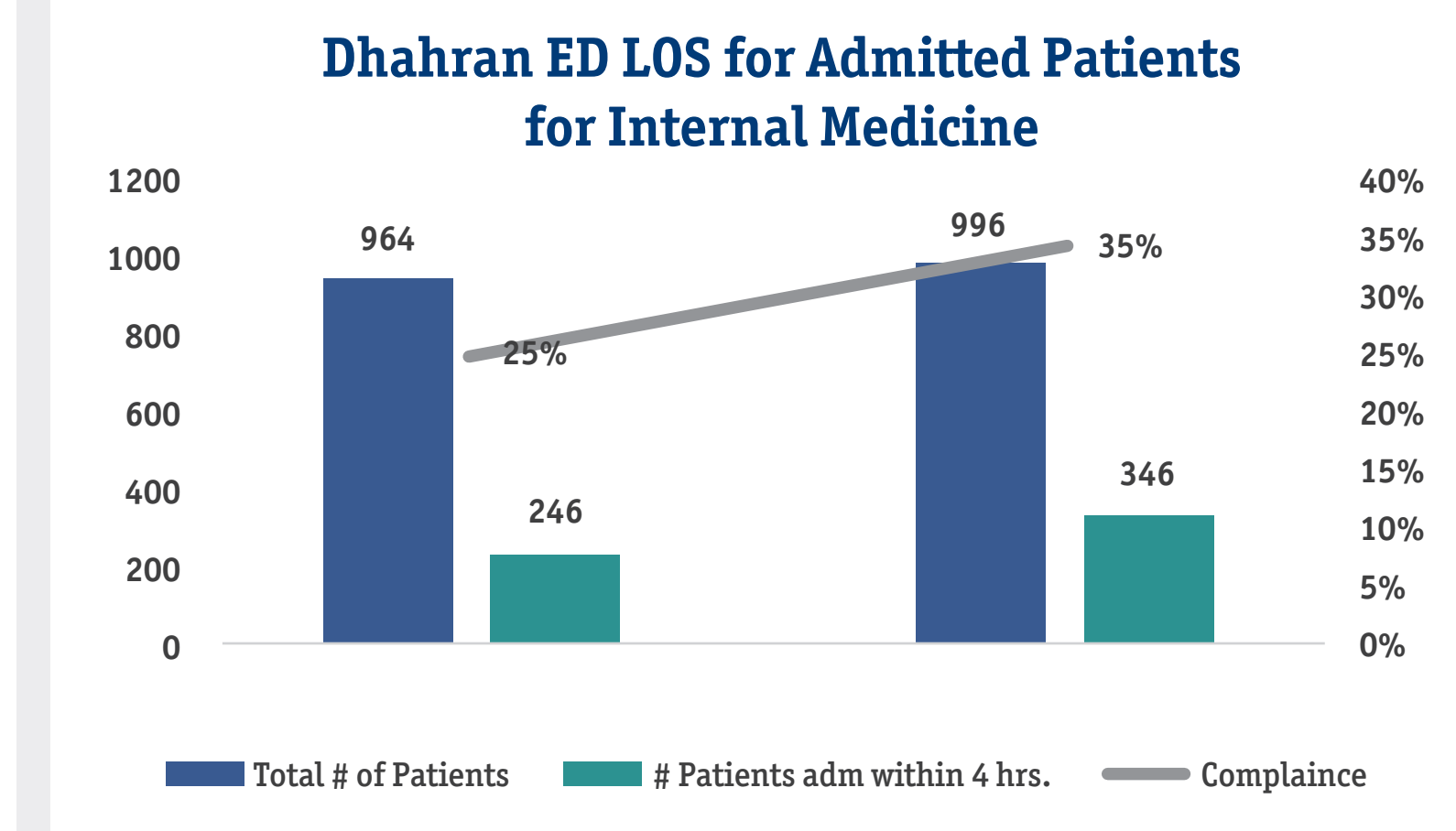
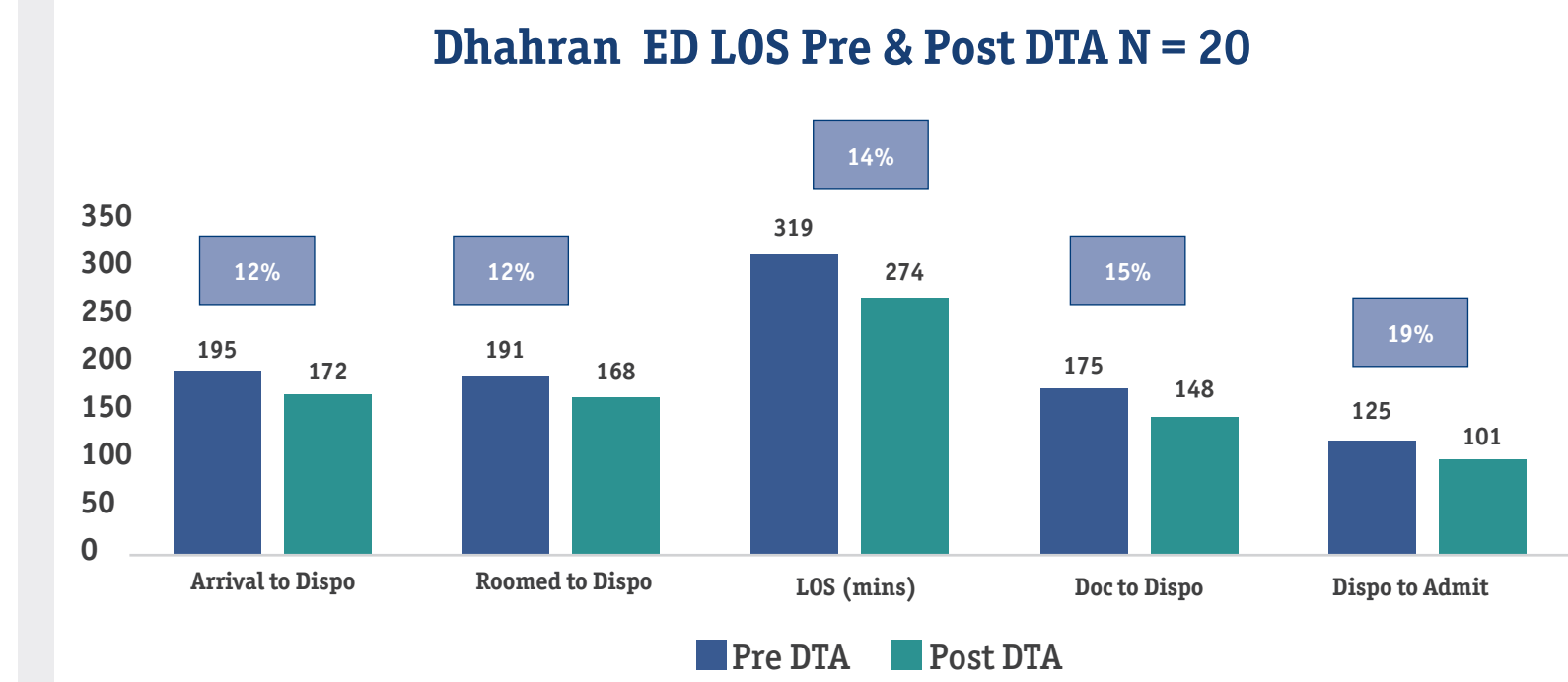
A Multidisciplinary team was convened to work on quality improvement project using CUSP methodology. For better understanding a process mapping was conducted (Fig.1) followed by Root cause analysis (Fig2). Finally the team developed action plan to address the findings. One of the major interventions was the early identification of patients who need medical admissions by Emergency physicians .DTA is an electronic record and notification of the event that a clinical decision to admit a patient has been made to Medical team and alerts bed management.



Interventions

Identified Concerns	Action Plan list	Responsible person	Target Date of Implementation	Target Date of Completion	Date of Completion	Status
Variation in response time for referrals (IM) Only 2 physicians available at night time /inability to answer phones when busy/ ED Hesitant to create epic referral	Create DTA (Decisions to Admit notification): ED MD create order-epic notification to be sent to the mobile of internal medicine on call.	Dr. Zia/Dalal Al Homaidi	6/12/2022	7/28/2022	DTA go live 6/16/2022	Completed
Disagreement about the service of admission or ownership of patients if multiple services are involved	1) Develop guidelines/criteria for admission (Card, OBGYN....). If no agreement who will admit the patient ED MD will decide as per MSP 86-1. 2) Share the guidelines with all services and insure proper awareness, and those guidelines can be find and followed when needed	Dr. Noufal/Dr. Maida/ Dr. Zia	6/1/2022	9/2/2022	10/2/2022	Completed
Delay due to: 1. laboratory results 2. Radiology results (tele radiology)	1) Consider local lab in ED 2) According to MSP 88 section 4 ED preliminary report has to be reported within 2 hours. MSP need to be reviewed 3. Provide data for average TAT for Labs and telemedicine	Ahmad Zahrani/Somaya Hajri/Rabih Issa	6/5/2022	9/3/2022		In progress
No Clear Guidelines for protected time (handover/ shift change) for nursing	Develop standards for protected time and share with units. Start with critical care area then expand to all units	Mr. Ayman Hammoud	6/1/2022	9/2/2022	10/2/2022	Completed
Nurses not answering the phone/shortage of staff/ multi tasks	Charge nurses to use portable cisco devices for ED handover/accepting admissions	Mr. Ayman Hammoud	6/1/2022	9/2/2022	10/2/2022	Completed
Delay for admissions due to room readiness, mainly due to availability of HK during shift change	Area supervisors will monitor and make sure that HK staff not leave from the area until other shift arrive.	Dihaiman Al Qahtani	6/2/2022	7/2/2022	7/2/2022	Completed

Results



- 20 random patients with DTA orders were compared to standard admission orders.
- DTA order was effective in reducing LOS for up to 14% in medical patients when used in Emergency Department in our sample size.

Conclusion

- Data supports that DTA is effective in reducing LOS.
- More work is needed to increase utilization and expand to other services like cardiology and surgery.
- Assessment areas may be needed for further expansion and improve patient flow.

The opinions expressed in this poster are solely those of the Authors and not necessarily those of Johns Hopkins Aramco Healthcare (JHAH). JHAH does not guarantee the accuracy or reliability of the information provided herein