

EMERGENCY DEPARTMENT



Date	11/14	11/15	11/16	11/17	11/18	11/19	11/20	11/21	11/22	11/23	11/24	11/25	11/26	11/27	11/28	11/29	11/30	Total
Total Volume	106	82	91	92	101	80	77	83										86
LWBS	22	8	8	8	8	0	0	0										88%
LOS	180	175	197	171	193	188	160	189										169
Arrival to Triage	10	8	12	13	13	11	10	10										10
Arrival to Room	20	12	20	17	21	17	11	15										15
Arrival to MD	50	43	48	38	48	35	32	45										45
MD to Discharge	100	100	107	100	108	107	97	98										95
#FT / FT LOS	30 / 120	20 / 80	22 / 88	20 / 80	20 / 80	19 / 76	11 / 44	22 / 88										20 / 80
#CC FT / # Hours	63 / 252	71 / 284	65 / 260	63 / 252	56 / 224	49 / 196	62 / 248	67 / 268										67 / 268
# ADMITS	16	17	13	21	17	9	14											15
ADMIT LOS	240	270	261	260	281	275	227	265										245
Admit Dec to Depart	60	77	72	94	97	89	69	101										83
Bed Assign to Depart	30	56	48	40	50	53	38	59										46

Overview – Emergency Department

- At John Kim & Associates (JKA), we are keenly aware of the role an Emergency Department (ED) plays as both a key service to the community as well as a key entry pathway for the hospital.
- Focusing on multiple aspects of performance including: quality of care, ED wait time, length of stay, LWBS and coordination of care (with primary care provider)
- Understanding that the ED *value stream* includes not only processes and departments within the hospital (ancillary and inpatient departments), but also one that connects the ED to the community (through primary, specialty, and urgent care) is the key to improving ED *value stream* (vs. department) performance
- JKA works to create processes and systems that improve flow of patients, information, and care inside the department, within the hospital and through transitions in care outside the hospital.

CASE STUDY: EMERGENCY DEPARTMENT

Background Information and Project Overview:

Creation of the Emergency Department *model line* began with hospital leaders participating in an Enterprise Strategic Planning (ESP) session. The ESP was used to align hospital and ED department strategic objectives, operational objectives, understand their organizational needs, and establish baseline ED performance. This foundation enabled strategic, operational and performance objectives to be defined.

Background on the ED:

- 24 room Emergency Department located in 180 bed hospital (part of an 11 hospital health system)
- Hospital relocated to a new facility 6 mos. prior (to model line work) and was struggling to meet performance goals.
- Daily struggle to support volume increases while managing within tight budget: Length of Stay (LOS) was 30+% above goal and Left without Being Seen (LWBS) was more than 3x the health system goal
- Morale and trust was at an all-time low amongst providers and staff

Model Line Approach:

The ED project goals were defined and approach was designed to impact the metrics and deliver the ROI. The *Model Line* strategy focused on removing key obstacles to flow by letting the *'fast go fast'* (front end), improving *'decision to admit to admit'* (back end) and improving coordination of key ancillary support departments (Lab, imaging, etc).

Baseline Data:

- | | |
|----------------------------------|-------------|
| • Left without Being Seen (LWBS) | 6.88% |
| • Average Length of Stay (LOS) | 230 minutes |
| • Admit Decision to Department | 125 minutes |

First, separate patient pathways were created based upon acuity. The pathway for our least sick patients was staffed with a mid-level provider. This moves significant patient volume (“100% of the right 30%”) from the main ED into a **‘Fast Track’** pathway.

Second, the attention went to the removal of the **‘block’** at the end of the ED process for patients being admitted. The resulting process streamlined the admissions process through the use of quick admit (standing) orders, coordination with inpatient units (minimize preventable change of shift admissions) resulting in ↓ 40% in admission time out of the ED).

Next, the focus went to balancing acuity and volume. A system was created to respond *dynamically* to changing situations in the ED; thus improving work balance across providers throughout the day (especially during peak times). This approach also improved ED staff morale and resulted in better overall experience for patients.

Additionally, shared processes and understanding of time between ED personnel and ancillary service providers was established. This created cross-departmental understanding of why delays occur and how to prevent them in the future.

An ED Management system was built to manage all processes, track progress, and create the framework to engage staff and create opportunities for further improvements.

Results: \$3+mm from LWBS and resulting admissions

Current Performance (After 3 months):

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|--------------------------------|-------------|-------|
| • LWBS | .88 % | ↓ 87% |
| • Average LOS | 160 minutes | ↓ 30% |
| • Admit Decision to Department | 75 minutes | ↓ 40% |