

## 70,000 Volume ED Boosts Efficiency Through Front-End Flow Optimization

*A 70,000 volume, 46-bed suburban ED achieves increased efficiency thanks to a streamlined triage process, improved front-end operations, and optimized scheduling*

### EXECUTIVE SUMMARY

This 70,000 volume suburban emergency department (ED) turned to Core Clinical Partners because their efficiency metrics such as length of stay (LOS), door-to-provider times, and LWBS rates needed improvement. When our team observed the department, it was apparent that the team had no issue handling patients who were already in beds. However, when the ED got busy, they struggled to move patients through the triage process efficiently.

LOS was longer than desirable, triage of low acuity patients versus high acuity patients was not optimized, and patients were waiting too long to see a physician or advanced practice provider (APP).

To remedy this, we worked closely with ED and hospital leadership to improve these metrics by placing an APP in triage, streamlining front-end flow, and optimizing schedules to best serve volume and acuity trends. Within 12 months, these improvements resulted in:

**8% decrease in overall LOS**

**16% decrease in low acuity LOS**

**72% decrease in door to provider times**

**85% decrease in LWBS rates**



## BACKGROUND

Before partnering with Core, this level 4 trauma center had a locally rooted, hospital-employed ED staff and a strong ED medical director and nursing director. The ED had a Fast Track set up, but no provider in triage to expedite patient treatment. Patients were waiting more than a half hour (on average) to see a provider. Like many hospitals, the ED's budget didn't allow for additional headcount. We were tasked with developing a cost neutral staffing model that improved efficiency.

To turn the tide, they sought a partner that could bring a fresh outside perspective on their patient flow and identify low-hanging opportunities to improve efficiency metrics.

***Patients were waiting more than a half hour (on average) to see a provider. Like many hospitals, the ED was faced with a staffing challenge to ensure their staffing model was cost efficient and effective.***

## ASSESSING OPPORTUNITIES FOR IMPROVEMENT

We began with a simple mission: to work closely with the department's current leadership and staff to understand what was working and what was not for the department.

Our assessment process included observing operations, performing demand capacity modeling, and interviewing key stakeholders. Stakeholders included nursing staff, APPs, and physicians working in the ED. We asked where they saw things break down and which strategies they had already implemented. This helped us understand where they had been, where they are going, what worked, and what had not.

After this initial 2-month assessment period, we gained a better understanding of the ED's volume, acuity trends, and common bottle necks. It was clear that the triage process and front-end processes overall were prime for optimization.



## BOOSTING EFFICIENCY THROUGH STRATEGIC CHANGE

A few key strategic changes we made included:

### ***Schedule Optimizations to Best Meet Volume Demands***

First, we modified the ED schedule to better meet patient volume demands based on our demand capacity modeling findings. This allowed us to move 12 hrs of APP coverage to the triage area.

### ***Implementing an APP in Triage***

Placing a provider in triage immediately shortened door-to-provider time. It also enabled providers to begin work-ups sooner and discharge low acuity patients faster. As a result, more physician time was spent on higher acuity patients.

### ***Streamlining Front-End Flow***

We modified front-end processes by not only implementing a provider touch point earlier in the process but also creating a space for lab draws in the front-end flow. To implement these changes, we worked closely with our hospital sponsor who helped with hospital staff buy-in on the changes.

***Within 10 months of implementing a provider in triage, optimizing scheduling, and streamlining patient flow, the ED began to experience a significant decrease in door-to-provider times and LWBS rates.***

## RESULTS

Within 10 months of implementing a provider in triage, optimizing scheduling, and streamlining patient flow, the ED began to experience a significant decrease in door-to-provider times and LWBS rates. Door-to-provider times dropped from nearly 35 minutes to less than 9 minutes, a 72% decrease.

**72%**  
DECREASE

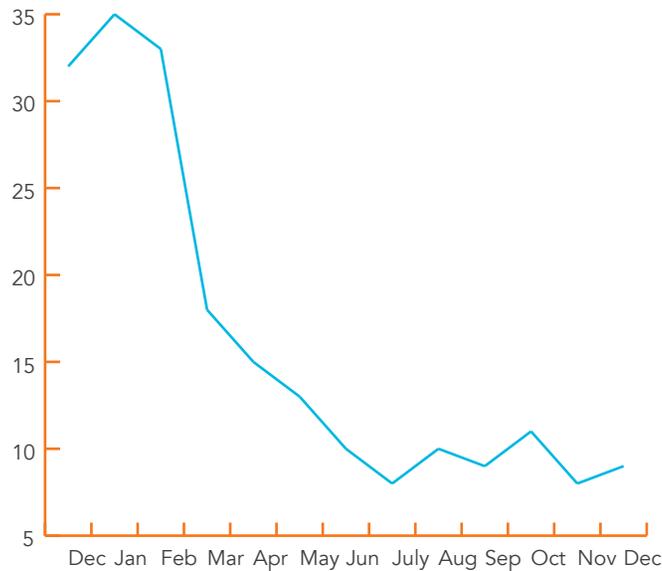
in door-to-provider times



## RESULTS

Our improvements made an immediate measurable impact when we began implementation in February.

### DOOR-TO-PROVIDER TIME



**Door-to-provider times dropped from nearly 35 minutes to less than 9 minutes, a 72% decrease.**

### SMOOTHER TRIAGE REDUCED LENGTH OF STAY

Improved door-to-provider times directly affected other department metrics too. Concurrent with an 85% decrease in LWBS rates, the ED saw a 16% decrease in length of stay for low acuity patients—a direct result of improved patient experience and efficiency. At the same time, more efficient processes overall contributed to an 8% decrease in overall length of stay over the same time period.

### LENGTH OF STAY

