

Keesler Medical Center

Location

Keesler Air Force Base,
Biloxi, Mississippi

Emergency Department

25,000 APV

Solutions

- EV physician documentation
- EV nurse documentation
- EV patient tracking
- EV CPOE
- EV discharge instructions

Results

- Decreased LOS by 29 percent
- Decreased D2D by 78 percent
- Decreased LWOBS by 99 percent
- Increased staff satisfaction

The Challenge

Located in Biloxi, Mississippi, Keesler Medical Center is one of the largest U.S. Air Force medical facilities in the country. Drowning in low- to mid-acuity patients, Keesler struggled with efficiency, patient flow and throughput that resulted in a discouraged staff and below average metrics in major key performance indicators including:

- Length of stay (LOS)
- Door to doc (D2D)
- Left without being seen (LWOBS)

“We struggled with the typical emergency department issues: bottlenecks, long waits, angry patients and a frustrated staff,” said Joseph Pocreva, M.D., Col., USAF, MC, Medical Director, Keesler Medical Center. “You could watch an entire full-length feature film before seeing your doctor. The staff in particular was ready for a big change.”

The Solution

In 2009, Keesler Medical Center implemented EV™, an emergency department information system (EDIS) complete with analytics and reporting. The comprehensive and real-time report provided an in-depth look at the deficient areas within their department. The data and statistics were used to actively manage and make decisions relating to patient flow, throughput, staffing, resources, bottlenecks and more.

The Results

After implementing EV, Keesler uncovered and quantified the deficiencies within their emergency department (ED) which resulted in notable process improvements and a total ED transformation.

“EV’s ease of use and data mining capability allowed us to become more efficient, quantify our work and make intelligent decisions based on data rather than instinct or myths. Simply put, EV is a powerful tool and the result is that we are now able to spend more time with our patients,” said Col. Pocreva.

An intuitive approach to low-acuity patients

Keesler needed to maximize the available beds in their emergency department. Using EV, Keesler reengineered processes for triage, bedding and information capture for low-acuity patients. The first step was placing a single provider and nurse in the triage room to treat and release patients who did not require a bed. The second was building a five-bed urgent care center as an additional care option for lower-acuity patients. These process changes saved bed space and resources for higher-acuity patients and resulted in consistent improvements in all key performance indicators.

“EV allowed us to quickly sort patients by their acuity and chief complaint which revolutionized the patient flow and throughput of our ED,” said Col. Pocreva.

Change management improvements

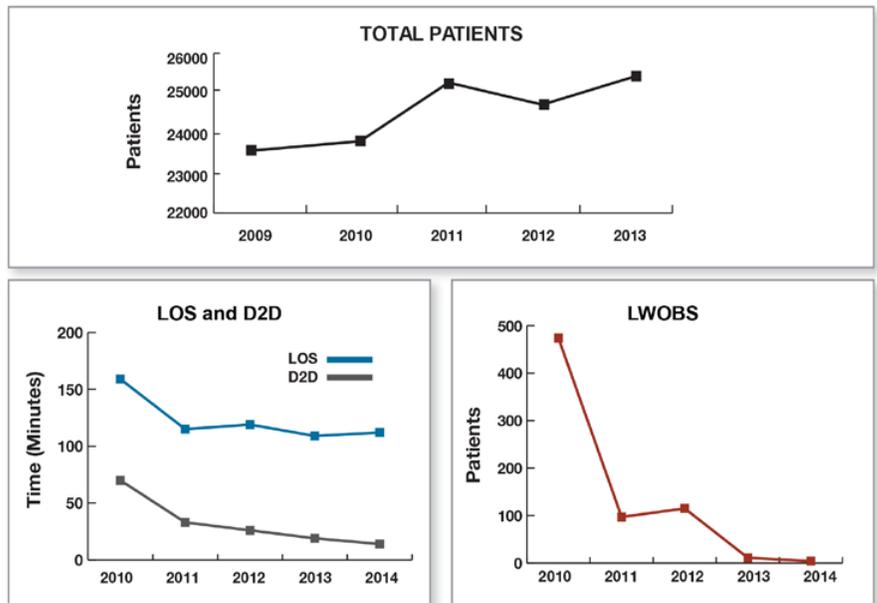
The leadership staff was able to execute changes in real time and communicate the reason for change based on the data available within EV. The staff believed in and supported new practices and processes because the data was there to show them how the improvements would make a difference. The emergency department also got quieter as the staff was able to leverage the live tracking board for communicating patient information and status updates.

Increased visibility and improved throughput

Keesler discovered that the triage of 100 percent of patients was a bottleneck. As patients signed in at registration, EV's tracking board would broadcast the patient's chief complaint across the emergency department. Each area of the department would proactively pull the patients to the most appropriate treatment areas based on that chief complaint. Keesler found that the ability to quickly sort patients by chief complaint revolutionized the throughput of the department. They eliminated the triage bottleneck and avoided sending low-acuity patients to high-acuity beds.

“In 2009, we had 500 left without being seen (LWOBS) encounters. This was an average 2.2 percent of our visits and while this was within the national averages, it was still 500 patients who had given up on us. In 2014 with EV, that number was down to just four LWOBS,” Col. Pocreva.

Key performance improvements



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-Joseph Pocreva, M.D., Col.,
USAF, MC, Medical Director
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