



# Case Study: Metrics

## Hospital Information

**Banner Casa Grande Medical Center**  
Casa Grande, Arizona

- 45,000 ED visits

## TeamHealth Services

### Emergency Medicine

## Results

- 85% reduction in LWOTS, from 4.5% to just 0.7%
- 65% reduction in door-to-doctor time, from 60 minutes to 21 minutes
- 28% reduction in LOS, from 230 minutes to 167 minutes



Because Banner and TeamHealth have been partners for years, we trusted they could help us and we are pleased to see these dramatic results. We give a lot of credit to our fantastic nursing staff for their enthusiastic participation in this new model, and to TeamHealth Regional Medical Director Dr. Matt Ledges and his team for their innovation, expertise and leadership.

**Rona Curphy**

CEO, Banner Casa Grande Medical Center

**TEAMHealth**

## Challenge

In 2014, Phoenix-based health system Banner Health acquired Casa Grande Medical Center. Despite providing the hospital with an influx of new resources, the facility's 16-bed emergency department (ED) continued to perform poorly. It was plagued by long wait times and lengths of stay (LOS), high numbers of patients leaving without treatment (LWOT), and poor patient satisfaction scores. In fact, the facility had developed a negative reputation in the community that made it difficult to recruit quality ED physicians and led some patients to seek care in Phoenix or Tucson, both hour-long drives from Casa Grande.

## Solution

Banner Health called on a trusted partner, TeamHealth. With experience in 11 other Banner facilities, TeamHealth quickly went to work. Using its proprietary demand capacity analysis software, CalculatER, TeamHealth reviewed Banner Casa Grande's ED data for the prior 12 months, including volumes, arrival patterns and acuity mix. The tool helped TeamHealth quickly identify a new patient flow model and more appropriate, increased staffing levels.

Under the new flow model, TeamHealth divided the ED into two sections – acute and intake. After a quick-look assessment from a nurse, patients with conditions that require a bed are sent to the acute section, which includes the department's 16 beds and is staffed by two physicians instead of the department's previous one-physician model. Patients with conditions who do not warrant a bed go to the intake area. Once within intake, patients receive a joint assessment by an Advanced Practice Clinician and a nurse in one of seven intake recliners. From there, they are either discharged, sent to one of two procedure rooms for minor treatments such as stitches for a laceration, or a waiting area designated for patients awaiting test results.

## Results

With the new flow model, approximately 50% of the facility's ED patients go through the intake area on a given day, freeing bed capacity for the most acute cases and keeping patients moving swiftly through the department. The model delivered significant improvements on the very first day, thanks in large part to the enthusiastic participation of the facility's nursing leadership and staff, who worked closely with TeamHealth and the hospital administration to support the model's success.

In just the first month after going live, the ED experienced some of its best-ever metrics, including:

- A 28% reduction in LOS, from 230 minutes to 167 minutes – the lowest rate in its history
- Highest patient satisfaction scores ever, with "right treatment" and "informed about wait times" questions ranking in the 100th and 96th percentiles nationwide, respectively
- An 85% reduction in LWOTS, from a rate of 4.5% to just 0.7%
- A 65% reduction in door-to-doctor time, from 60 minutes to 21 minutes