

Hospital Name:

Methodist Willowbrook
Hospital

Address:

18220 Tomball Parkway
Houston, TX 77070
(281) 477-1000

Contact:

Patrick G. Woods, MD, MBA
Medical Director

2006 ED Volume: 44,623
Growth from 2005: unknown
Total Staffed Hospital Beds: 68
Acute ED Beds: 12
Fast Track: Yes
Clinical Decision Unit: No

Problem to be Resolved:

The ED was seeing more than
46,000 patients in a facility
built for half that volume.

Key Words:

- Time-to-physician
- Physician-at-triage
- ED throughput
- Patient boarding

Lessons Learned:

Methodist Willowbrook
Hospital was able to
successfully add more staff to
triage without hiring new FTEs;
instead they reassigned
personnel to maximize the
work that could be done.

Reason for Change:

The ED at Methodist Willowbrook Hospital was overwhelmed, seeing almost double the patient volume for which their ED was designed. Consequently, the ED was frequently congested and boarding was prevalent. The ED was not meeting any of its throughput goals, especially in the fast track unit. Also, the ED saw a lot of inappropriate X-ray and blood work orders coming from triage.

Implementation:

Methodist's ED previously had a fast track unit, but felt that it was sluggish. It was not an effective solution to the overcrowding problem. Looking for a new strategy to help improve patient throughput, ED management decided to redesign the triage process. They put a physician at triage to assess patients and separate out low- and mid-acuity patients into two care streams: an "express care" unit for simple injuries and "mid care" unit for moderate conditions. In addition to evaluating patients, the frontline physician can write lab and imaging orders from triage. A nurse assessment and mini-registration are also done at triage before sending patients to express care, mid care, or the main ED.

Patrick G. Woods, MD, MBA, the ED medical director, decided to test the role of a physician-at-triage himself. For two days in early 2005, he spent a shift at triage, making sure that all appropriate labs and work-ups were ordered. This experience convinced Dr. Woods that a physician-at-triage could be a very valuable asset to the ED, and the concept moved on to a full pilot project in July of 2005.

The cost of placing a physician at triage is about \$600 per day; however that cost is offset by the revenue generated by improving patient throughput and capturing increased volume.

Initially there was some resistance to this new model from physicians and nurses. Proponents of the new system provided nurses with clinical evidence supporting the practice and informed physicians that the model reduces the liability risk by ensuring that two board-certified ED physicians evaluate each patient. Another argument given in favor of this new triage is that with less wait to be seen by a physician there is less potential for an adverse event happening during the wait.

Results/Impact:

During a one week pilot project in July of 2005, Methodist found that by adding a physician around-the-clock in triage and a dedicated mid-care service line reduced average length of stay (ALOS) in the ED from 3.2 hours to 2.5 hours, door-to-first pain medication from 2.1 hours to 0.85 hours, and the left without treatment (LWT) rate by 1 percent. Additionally, Methodist saw a

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small increase in collections revenue, because the lower LWT rate meant that they were seeing more patients who previously would have left, and these patients tend to be well-insured. The express care service was added after the trial, to further reduce congestion.

After Hurricanes Katrina and Rita, Methodist Willowbrook Hospital saw an increase in daily ED volume of around 20 percent. Despite this substantial increase, they were still able to sustain the reductions in ALOS and LWT. They feel that without these improvements, the hospital would not have been able to handle that influx of patients.

