

Emergency department implements split-flow process to help ease crowding

FROEDTERT HOSPITAL

Challenge

When Froedtert & the Medical College of Wisconsin's emergency department ("ED") was planning to remodel in 2015, they were looking for out-of-the-box strategies that might also help them reduce the ED's discharge length-of-stay and the percentage of patients who leave without being seen.

Action

A team member suggested that a split-flow strategy might work, and with a renovation underway, it would be easier to reconfigure the space to meet the needs of a split-flow process. With the support of hospital leadership and frontline ED staff, the ED was reconfigured to support a split-flow process, creating space for "vertical" patients – those patients who could stand or sit for evaluation – in addition to the space that already existed for "horizontal" patients, or those patients who needed to be evaluated in stretchers.

After a planning process that included a tabletop exercise to test the new design, the team landed on a final design that included a dedicated exam rooms and an adjacent Continuing Care Area that could accommodate up to 18 patients in chairs or recliners. At first, the team tried to implement a complex set of triage criteria based on chief complaint that nurses would use to determine a patient's eligibility for the vertical unit. When this proved too complicated, they developed a simpler, five-point decision algorithm (see inset for detail), that allows triage nurses to quickly determine whether patients are appropriate to be seen in the vertical unit.

Hours and staffing

The ED's vertical unit runs daily from 9-1 a.m. As currently configured, the unit has 18 recliners in the Continuing Care Area and 12 exam rooms – 10 are used for patient exams and two are used for discharge and treatment. There are two faculty shifts in the vertical area during the

time it's open. Typically, there are 1-3 advanced practice providers on at a time (usually 2) and nurse staffing includes 1-2 nurses in the Continuing Care Area and additional nurses that are doing primary patient care in the vertical rooms

Outcomes

In the first six months of implementation, the ED experienced a drop in discharge length of stay by 25 minutes and saw their percentage of patients who left without being seen drop from 3-5 percent down to 1-2 percent. When the vertical area is open, approximately 40 percent of ED patients are triaged to the vertical area.

Lessons learned

In the first six months of implementation, the ED experienced

- Space and design are key. Having the right physical space to accommodate a vertical area is essential. You don't necessarily have to do a major redesign, but you need the dedicated internal area (CCA) in order for vertical to work. If possible, try to design the rooms so they look different in vertical; this helps providers get into the right mindset to make vertical run well.
- Keep triage simple. Develop an easy-to-use triage tool to make it easy for the triage nurse to determine which patients are appropriate for the vertical area.

Vertical Criteria for ESI 3's

Ineligible for Vertical if:

- Intoxicated/Altered
- At risk for self harm
- Non-ambulatory at baseline
- Cannot sit in a chair
- Age > 60 + 1 of the following
 - Headache
 - Dizziness
 - Abdominal Pain
 - Shortness of Breath
 - Chest Pain

