The Coordinated ED

Case Study | Scripps Health

This is CASE STUDY 4 of 4 from HealthLeaders Media Breakthroughs: The Coordinated ED

In collaboration with PwC
Case Study | Scripps Health

An Emergency Redesign

Scripps Health President and CEO Chris Van Gorder has all the statistics to look at wait times, throughput, patient satisfaction, and all other relevant measures for ED success across Scripps’ five hospitals at his fingertips. But there is nothing like having your mother-in-law visit one of your EDs to know if your performance is measuring up.

Fortunately after a recent ED visit, he found a satisfied patient.

“By the time I got to the hospital to pick her up, she had been sutured. She had a CT. She was ready to go, and she was thrilled,” Van Gorder says.

It wasn’t always this way. San Diego–based Scripps has four emergency departments and two trauma centers, which see a combined 157,000 ED visits annually. Van Gorder, whose first executive job in a hospital was running an ED, says his leadership team became increasingly concerned with long waiting times.

At one ED, at least 15% of the patients were leaving without being seen. The average wait time at one hospital was 72 minutes. Staff there practiced triage basically the same way they did 20 years ago when Van Gorder was running an ED, he says. “Maybe we had more sophisticated triage back then, but we still basically followed the 80/20 rule: taking care of 20% of the patients that were really sick and usually get back in a bed right away, and 80% of the people who aren’t really that acute that sit waiting forever.”

Van Gorder and the leadership team were concerned that inefficiency was starting to be taken for granted. “I kept spouting that if this was virtually any other industry where we had a significant customer dissatisfier and a roadblock in our system, we would focus all our time and attention and energy on that until we got it fixed,” he says. A multidisciplinary staff that included ED physicians, nurses, and executive leaders went off-site for a week to come up with a new plan.
In the last two years, Scripps has embarked on an ED process redesign to increase throughput, reduce wait times, and improve patient satisfaction. In the early stages the team asked a simple question: Does every patient require a bed? When they decided the answer was no, everything changed, says Juan Tovar, MD, emergency department chair at Scripps Mercy Hospital at the Chula Vista campus and chair-elect of Scripps’ medical executive committee.

In the traditional ED, a patient goes to the triage nurse for assessment and then goes to an ED bed. "And they remain there until they’re set to go home," Tovar says. "What happens then is that the patient becomes dissatisfied if at any point they get moved from that bed. And that bed is also occupied by a patient that might not necessarily need one for a common cold or an ankle sprain. They would remain in that bed holding that bed up for a patient that could potentially need surgery, that could potentially need admission to the hospital or need a place to be in order to get treated faster."

Under the new care stream, the patient is assessed by a nurse who decides "within two or three minutes" whether the patient is acute and likely to be admitted or is likely to be treated and released, says Mary Ellen Doyle, RN, corporate vice president of nursing operations for Scripps Health.

Scripps divided its ED into two teams. The blue team handles the seriously ill patients who are likely to be admitted and may need multiple IVs, MRIs, respirators, or have conditions that require a bed. The gold team handles the treat-and-release patients who might have a cold or a twisted ankle. They also treat conditions such as influenza, pregnancies, and sub-acute strokes.

Rather than go to a bed, the patients under the gold team’s care are put in recliners. Three recliners fit into a space that would otherwise accommodate only two beds. And because they’re recliners, they’re more comfortable and less intimidating for patients.

But the real gains come from the care team. Before the redesign, patients might explain their symptoms to front desk staff, the triage nurse, the ED nurse, and then again to a physician. The repetition did nothing for the patient and was time-consuming. Now, the nurse and the doctor do the assessment at the same time as soon as they can after the patient is put in a recliner. "In doing it together they can immediately determine if there are labs that need to be done, x-rays, or any other information that is going to be needed to make a definitive diagnosis about what the patient needs," Doyle says.

In terms of flow, the redesign means that the ED staff is actively assessing and treating virtually nonstop. That, in turn, means a fundamental change in the way the nurses operate, Doyle says, with more handoffs and less down-time. That shift did not come without growing pains.

"In the first redesign effort we did lose some clinical staff because nurses, particularly very experienced nurses that had worked in the department for a long time, some of them just could not adjust to the work flow." As a result, the health system has altered some questions it asks when hiring new nurses to emphasize communication and rapid assessment skills, Doyle says.

Understanding whether the new patient flow would hold up under surge was key to the redesign’s success. So the team put analysis into “anticipating surge rather than catching up,” Tovar
Case Study | Scripps Health

Juan Tovar, MD, emergency department chair at Scripps Mercy Hospital at the Chula Vista campus and chair-elect of Scripps’ medical executive committee

Having trouble listening? Click here.

JHa - Hallers Medica - RT.27.png

CLICK TO PLAY AUDIO

©2011 HealthLeaders Media, a division of HCPro, Inc.

says. “The traditional construct is the surge happens and you play catch-up for a while, then the rest of the shift or day is manageable. By redesigning the process and by using computer simulation, we were able to anticipate physician and nurse staffing patterns to anticipate the surges so that we’re not playing catch-up anymore.”

The streamlined patient flow has resulted in faster times and better volume. Waiting time to see a physician has been cut from an average of 97 minutes to 29 minutes at two of the hospitals, says Davis Cracroft, MD, emergency medicine physician and medical director of Scripps Mercy Hospital. For a patient being treated and released, the length of stay has gone from around five hours to three. And for those being admitted to the hospital, the length of stay in the ED has gone from seven hours to five. Cutting those two hours off has made everyone involved a lot happier, Cracroft says.

“Cutting off two hours of wait time in an admitted or discharged patient means that we can put more patients in beds and increase our efficiency,” Cracroft says. “It’s also a huge patient satisfier. Our satisfaction surveys were pretty much abysmal before, and now they’re coming in very strong with wonderful comments from patients [saying] that they didn’t have to wait or that it’s the best care they’ve ever received in any emergency room. The doctors are happier because we don’t have to apologize to patients for their wait. The nurses are happy because they don’t have to put up with a patient that’s complaining about the wait time, and I think the overall mood of the department has been uplifted significantly.”

While the redesign and focus on covering surge has made the patient flow more efficient, it has also slightly boosted the number of physicians needed. But Van Gorder says the increase in volume has made up for any additional staff costs. Patient census at Scripps Mercy San Diego went from 141 patients per day to 166, an increase mostly attributed to a reduction in the number of patients who would previously show up, get frustrated by the wait, and leave without being seen. At one of the hospitals, the increase in volume has been enough to push the ED from a loss to a profit, Van Gorder says.

SCRIPPS TRANSFORMS EMERGENCY CARE

New ER Process Cuts Wait Times, Boosts Patient Satisfaction

Average waiting time to see a physician

<table>
<thead>
<tr>
<th></th>
<th>San Diego</th>
<th>Chula Vista</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2010</td>
<td>100 min.</td>
<td>75 min.</td>
</tr>
<tr>
<td>January 2011</td>
<td>75 min.</td>
<td>50 min.</td>
</tr>
<tr>
<td>January 2011</td>
<td>50 min.</td>
<td>25 min.</td>
</tr>
<tr>
<td>January 2010</td>
<td>25 min.</td>
<td>0 min.</td>
</tr>
</tbody>
</table>

Source: Scripps Health.

Roll over the chart key to dig deeper into the findings.
"We have seen a 91% reduction in the number of patients that left without being treated, to less than 1%,” Van Gorder says. "And we have a decrease of 97% in the amount of time that our hospital is on ambulance bypass because of this redesign. The paramedics are thrilled. The patients are happier."

Patient perceptions have changed as well. People who used to try to game the system by leaving their name at the ED, then coming back hours later, have no wait time, Tovar says. Some patients now show up at the ED for post-surgery follow-up care because that may be faster than seeing a physician with an appointment. And now the Scripps team is wondering what to do with what has become a mostly wasted piece of hospital real estate: the ED waiting room.

The improved process has raised a broader question of whether gaining ED volume is a good thing in an environment that is increasingly about cost-effective care and getting patients seen in the most appropriate setting for their needs. Tovar says the increased efficiency is less about drawing more patients into the ED and more about being better able to care for those that do come.

“What we’ve done is to make life easier for everybody,” he says. “For the patient, we have made them safe faster, made them feel secure and satisfied with the nursing and physician staff. And now that staff is not dealing with people that have been waiting in the emergency department three-plus hours who are upset and angry.”

Scripps has worked to promote educational programs about appropriate ED use, and Scripps physicians are quick to encourage people to use office-based care or urgent care centers when it is appropriate, Van Gorder says. “But unfortunately, we have a society that uses the emergency room as the front door. And to this day up to 50% of our admissions come through the emergency department. I don’t anticipate that that’s going to change that dramatically, and I think the reason for that is that it’s open 24 hours a day. It’s open seven days a week. Everybody knows it.”