

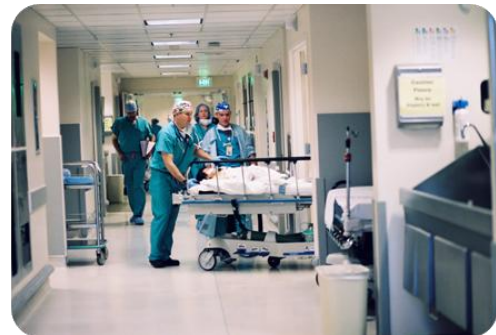
CPI in the Emergency Department

For more than five years, the Emergency Department (ED) staff at Seattle Children's have used continuous performance improvement (CPI) to help improve customer service and patient satisfaction. Little did they know that this improvement philosophy would be the foundation to successfully manage the largest patient surge ever to hit their ED.

The H1N1 pandemic of 2009 tested many hospitals across the U.S. but children's hospitals were particularly hit hard as worried parents flocked to emergency departments. Media stories showed crowded EDs, long wait times and frustrated parents. The scene within Seattle Children's ED was different. Even though the hospital had two surges of H1N1, in May and October 2009, it was able to mitigate patient surges with the use of CPI.

Challenges

- Be prepared to handle patient surges and manage additional strain on staff – without increasing the percent of patients who leave before being seen
- See patients exhibiting flu-like symptoms while minimizing exposure to patients with complex medical conditions who could become very ill if they got the flu



Solution

- The staff increased flexibility in its processes, space and staffing plans to accommodate large volumes of patients and ensure the highest quality care was provided. Improvements included:
 - Directing patients with flu-like symptoms to a separate entrance to limit the spread of infection and streamline check-in
 - Green-taped lines on the floor provided way-finding guides
 - Black tape in the flu symptom waiting area outlined separate space for each family to help prevent the spread of infection
 - Expanding seamlessly into other hospital units when the surge hit to allow the ED to flex-up for more patients
 - Standardizing communications for families, physicians and staff for ED patients with flu-like illness
 - Weekly meetings with leaders from all affected departments, including support areas to discuss staffing and supplies, helped set expectations and enable teamwork
 - All hospital staff had access to the online H1N1 tracking tool to review these items in real-time and a system was put in place to reallocate staff and supplies to units in need
 - To manage patient volumes, the leadership team used a patient activity measurement tool as a visual aid for all areas of the hospital; a surge

would trigger a cascade of ED and hospital-wide responses to support the delivery of care in the ED

Results

- During the surge the ED handled an average of 150-160 patients a day, with the busiest day at 176 patients (up from a daily average of approximately 100 patients)
- Fewer emergency department patients leave without being seen at peak times (achieving a 0.7% rate, compared to a 2.4% national rate)
- The overall time required for the patient discharge process in the ED was cut in half
- The average amount of time a patient stayed in the ED during his visit remained the same during the H1N1 outbreak as compared to the same time period for the previous year, despite a marked increase in patient volume
- The weekly all-departments meeting and online tracking tool were so successful that they will be used to help support other surges or crisis situations

“We have totally changed our process with the second lobby area and our check-in process is completely different. But even though we’ve had more patients, it doesn’t feel stressful because we have been able to manage the flow so well.

Erin Lockleer, Emergency Department Coordinator

“When we talk about eliminating waste, we’re not talking about parts of the visit that are essential or valuable to families. We’re talking about cutting out all the things that keep our nurses and physicians from spending time at the bedside with the patient.”

Russell Migita, MD Clinical Director, Emergency Department