Improving ED Flow through the UMLN II

Westmoreland Regional Hospital
Greensburg, PA
402 beds, 44 ED beds
http://www.westmoreland.org/

Westmoreland Regional Hospital, located about 35 miles east of Pittsburgh, is part of Excela Health. Founded in 2004, Excela Health is a regional provider of medical care comprising four hospitals. Westmoreland, the largest of the Excela hospitals, is centrally located and is the only site within the system that performs open heart surgery. Jeanette Hospital, one of Westmoreland's sister hospitals, recently stopped providing emergency services.

STEEEP PERFORMANCE IMPROVEMENT CHARACTERISTICS

Safe—Patients are not being boarded as long in the ED as information is being better communicated to inpatient floors.
Efficient—A standardized communication tool reduced unnecessary communication between the ED and the inpatient floors.

The Problem

Like many hospitals, Westmoreland struggled with significant ED crowding and patient boarding. From December 2008 through February 2009, there were 2,519 inpatient admissions from the ED. The average time from the decision to admit a patient to when the patient was admitted to an inpatient bed was 215 minutes.

The Solution

Under the Urgent Matters collaborative, Westmoreland adopted an inpatient report tool as a part of a larger "Building a Bridge" strategy to improve communication between the ED and inpatient floors.

Results

Between December 2009 and February 2010, there were 3,096 inpatient admissions from the ED; and the average time from the ED physician's decision to admit until the patient arrived in an inpatient bed was 203 minutes, 12 minutes lower than the pre-implementation period. Although not statistically significant ($p = .10$), this improvement is impressive considering that there was a 6 percent increase in the number of overall ED patients, a 3 percent increase in inpatient occupancy rates, and a 23 percent increase in the number of patients admitted to inpatient floors from the ED comparing the pre- and post-periods.

Background

ED crowding and boarding at Westmoreland were longstanding and significant concerns and a sources of frustration for both patients and staff. Issues stemmed from inadequate communication between the inpatient units and ED, with departments acting in isolation rather than in collaboration. A reactive, rather than a proactive approach, resulted in short-term solutions with varying degrees of success.

In the past two years, a restructured leadership team focused on improving ED throughput. A hospital-wide throughput team was charged with improving coordination between the ED and the inpatient units by focusing on accountability and communication. Participating in UMLN II was a logical, proactive step for the hospital. It gave patient flow efforts higher visibility within the hospital and health system by requiring accountability to an outside entity.

Improvement Strategies

At the initial project meeting, the throughput team discovered that the ED had already implemented, or attempted to implement, many of the strategies in the UMLN II toolkit. However there were continuous communication challenges.

Based on this issue, the team selected the "Build a Bridge" program [http://www.rwjf.org/pr/product.jsp?id=56478] from the UMLN II toolkit. One of the resources from this program is an "Inpatient Report Tool." This tool is a one-page standardized summary/communication fax sent from the ED to the inpatient floors in advance of the patient's chart arrival. While it is not meant to replace the patient chart, it includes chart information necessary for admission. It functions as a concise description of the patient's current condition and recommended care plan. Ideally, the primary ED nurse completes the Inpatient Report Tool and faxes it to the inpatient unit within 20 minutes from the ED admission order. Prior to implementation of the this tool it took on average 13 phone calls between the ED nurse and the inpatient floor nurse to effectively handoff every patient admitted through the ED.

Implementation of the Inpatient Report Tool Strategy

Westmoreland attempted to utilize a tool similar to the Inpatient Report Tool several times in the past 20 years. Through analysis and discussion, the throughput team identified several previous barriers to success, including:

- Lack of prior planning;
- Lack of day-to-day leadership or accountability for implementation;
- Insufficient executive leadership support;
- Insufficient follow-up;
- Insufficient input from inpatient floors;
- Lack of unit champions;
- Concerns about the length of the tool; and
- Insufficient staff education prior to implementation.

To overcome identified barriers, the team engaged inpatient managers and staff upfront. The first step was to have inpatient staff review an early draft of the tool. It took approximately four weeks to incorporate suggested changes, such as adding the ED nurse's name and contact number.

Once the tool was revised, inpatient nurse managers were charged with instituting and championing the tool on their respective floors. The throughput team, in coordination with the nurse managers, educated inpatient staff on the tool, its purpose and use. The strategy was communicated to staff through both e-mail and staff meetings.

For quality control, inpatient nurses flagged forms that were either incomplete or inaccurate and returned them to the unit and ED managers for review. Each concern was reviewed and modifications were made to the form and process. For example, the ED now calls the inpatient floor to confirm receipt of the faxed report.

Even though the process was implemented in May 2009, staff still perceives the tool as a "work in progress." While there have been only a few suggestions from the med/surg floors, there have been several concerns from the progressive care, cardiac step-down unit (PCU). This staff was concerned because not all the relevant information for patients with more complex cases was provided to the unit. Based on these concerns, ED staff worked with the IT department to create an electronic version of the inpatient report tool with more detailed information for patients requiring more complex care. ED leaders hope the electronic form will lead to electronic versions for other units.

Diligent and ongoing communication with all staff has been instrumental in acceptance and use of the form. Simple solutions and shared responsibility have been crucial to success. Key lessons include:

- The importance of inpatient nurse managers taking a leadership role in championing the tool and addressing concerns;
- The value of engaging inpatient staff at the outset to make them part of the process; and
- How ongoing input promotes employee buy-in and ownership.

Resources Needed for Implementation

The major resource is staff time. Selection, implementation and maintenance of the strategy required over 200 hours of aggregate staff time. This patient flow improvement initiative was led by the project director/manager of nursing services and the ED nurse manager. The only purchase was $200 for two new fax machines for the PCU.

Results and Continual Improvement

The average time from the ED physician's decision to admit until the patient arrived in an inpatient bed is 203 minutes, 12 minutes lower than the pre-implementation period. Although not statistically significant ($p = .10$), this improvement is impressive considering that there was a 6 percent increase in the number of overall ED patients, a 3 percent increase in inpatient

occupancy rates, and a 23 percent increase in the number of patients admitted to inpatient floors from the ED.

Interviews with staff show several other benefits, including improvements in patient safety and the overall reputation of the ED within the hospital. Unlike previous attempts to standardize communication between the ED and inpatient floors, most staff believed that the strategy is sustainable because of greater levels of inpatient floor buy-in and executive support. Further, success from this project has led to the implementation of several additional process improvement projects.

To keep the momentum going, the throughput team recently sponsored a Throughput Fair, where 15 departments presented 24 different posters on various improvement projects. More than 400 hospital employees attended this fair.