

## Emergency Room

### Overview

The emergency room process is a critical process for any hospital. Short wait times and a positive experience represent important drivers of patient satisfaction, while inefficient processes that cannot handle peak demand can result in lost revenues and poor community image, not to mention concern over patient safety.

The emergency room process also represents an excellent place to launch a major change initiative. It has clear boundaries while involving a number of departments and provides a good first experience at developing the cross-functional *Change Management Framework* and techniques necessary to drive change through the hospital enterprise more broadly.

A variety of tools are deployed to drive reduction in door-to-physician, door-to-discharge, and door-to-inpatient cycle times, while simultaneously improving patient and staff satisfaction.

### Typical Emergency Department (ED) Scenario

#### Symptoms

- Door-to-physician time is 60 minutes or longer
- Door-to-inpatient bed is several hours
- Patients left without being seen (LWOBS) is 2% or more

#### Achievable Results

- 25-50% reductions in critical waiting times
  - Door-to-physician
  - Door-to-discharge
  - Door-to-inpatient bed
- 50-80% reduction in patients left without being seen

### Reduction of ED Queues and Elopement Through the Straight Back Approach

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#### Background

Patients who leave the emergency department without being seen (LWOBS) represent lost revenue and a failure to successfully fulfill the hospital mission—with potential safety implications. In addition, poor patient satisfaction due to long wait times and overcrowding will almost certainly cause lost future revenues as some patients choose to go elsewhere.

Even in well-known and well-run emergency departments, LWOBS numbers can run up to 8% of patients presenting for care. Emergency departments which have effectively dealt with the LWOBS challenge experience less than 1% of patients who LWOBS.

The financial impact is easy to see. Each one percentage point reduction in the LWOBS rate will allow the department to see and bill for care an additional ten patients per thousand visits. The flow through to inpatient revenue and margin can be readily calculated as well.

While there are several options to address the LWOBS challenge, the ideal solution will include improvement in LWOBS numbers, increased patient satisfaction, and increased safety for patients, at no net cost to the emergency department.

## The Straight Back Approach

The fundamental approach in the straight back system is to move patients immediately from triage to an ED treatment area, without ever seeing a waiting room. A number of challenges will normally need to be overcome in order to accomplish this. On the process side, care cannot begin until the patient has gone through a minimal registration procedure. In addition, the chart must be available almost immediately in the care area. Thus, it is critical to develop supporting processes that meet these needs. In larger EDs with multiple treatment areas, it is also possible for one area to become overloaded. An appropriate rotation system can address this and, in our experience, the triage coordinator role can be expanded to include an oversight function in the rotation system.

On the cultural side, there is always a certain amount of resistance when a radical concept is proposed, and *straight back* certainly qualified as radical at Beaumont. In our particular case the ED physicians were supportive, but we were not sure how the nursing staff would react. In order to provide maximum empowerment to the group that would actually have to make the new system work, we invited the Nursing Practice Council to take a lead role in defining all of the detailed processes and practices. This proved to be an effective approach, as can be seen from the success of the initiative.

## Results

The straight back system, as implemented by William Beaumont Hospital-Royal Oak, has succeeded in reducing the LWOBS experience from 4.5% to 0.5%, has increased patient satisfaction scores significantly, and has enhanced patient safety. Financial costs of these changes was, indeed, zero. Estimated net revenue impact for the hospital is approximately \$40 million per year.

## Case Summary

### Situation

- Large Trauma 1 teaching hospital
- Nearly 100,000 ED visits per year
- Long ED waiting time and crowding with patient LWOBS at 4.5%

### Challenge

- Reduce rate of patients LWOBS
- Initiative must be cost neutral

### Results

- LWOBS reduced from 4.5% to 0.5%
- Increased net ED revenue by \$15,200 per 1000 visits; \$1.5 million annually
- Increased net hospital revenue by an estimated \$40 million annually
- Patient satisfaction scores increased five percentage points
- Patient safety enhanced
- No added costs 