

**Hospital Name:**

Northwestern Memorial Hospital

**Address:**

251 E. Huron  
Chicago, IL 60611  
(312) 926-2000

**Contact:**

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Director of Emergency Services

2006 ED Volume: 73,881  
Growth from 2005: 5.6%  
Total Staffed Hospital Beds: 676  
Acute ED Beds: unknown  
Fast Track: Yes  
Clinical Decision Unit: Yes

**Problem to be Resolved:**

Slow throughput

**Key Words:**

- Six Sigma Initiative
- ED management

**Lessons Learned:**

By assigning each manager responsibilities based on expertise, as well as grouping responsibilities in a way to increase efficiency and decrease overlap, performance of each managerial task has been optimized.

**Reason for Change:**

Believing that quality of an ED is directly related to time issues, Northwestern Memorial Hospital sought solutions to the long waits and slow throughput that affected patient stay.

**Implementation:**

In addition to a Six Sigma initiative, Northwestern Memorial Hospital completely redesigned its ED management structure. Rather than having one nurse manager, this position was broken down into four full time positions. These four nurse managers each work different shifts, have different staff, and have different primary job functions. Essentially all regular management tasks, such as salary, budget, staff, quality management, etc, were divided between these individuals, depending on the experience and expertise of each.

In particular, the nurse manager for the observation unit (OU) was also assigned to be involved in managing certain tasks in the ED. By having one person managing both of these areas, it has been easier for Northwestern to coordinate activities between the two units. The role of the OU has also increased, and the unit is now used more effectively. Northwestern began triaging "orange" patients (middle level according to their color-coded triage scale) to the OU. These patients otherwise generally had the longest waits in the ED. Under the new system, they are treated in the OU instead. Additionally, admitted ED patients are often sent to the OU while they await an inpatient bed, which frees up space in the ED.

**Results/Impact:**

From 2001 to 2005, ALOS in Northwestern's ED decreased from 85 to 45 minutes. Overall throughput also decreased, from 308 to 230 minutes. As patient satisfaction is often largely related to length of stay, it is not surprising that patient satisfaction increased from 74.6 percent to 84 percent during the same time period.