

## 8) Elimination of Catheter Associated Urinary Tract Infections

North Shore Medical Center

*Nicholas Leydon, MBA MPH, Executive Director, Kaizen Promotion Office; nleydon@partners.org*

### PROJECT DESCRIPTION

Our hospital is dedicated to eliminating Catheter Associated Urinary Tract Infections (CAUTI) and has focused the past year on this goal by using Toyota Production System methods. Through a series of multi-day improvement events driven by frontline staff, our hospital was able to improve process measures (i.e. avoid placing indwelling catheters that do not meet clinical criteria) as well as outcome measures (i.e. the number of patients who experience a CAUTI).

The keys steps to this process included (a) visioning session with key clinical and operations leaders, (b) a five-day improvement event every 90 days focusing on a specific CAUTI issue (c) a weekly 5-minute report to hospital CEO to explain current implementation and barriers (d) monthly report to entire hospital about results.

While this effort was led by senior leaders and staff from the Kaizen Promotion Office, innovation and post-event implementation was carried out by frontline staff, such as nurses, nursing assistants, physicians, and patients.

### OUTCOMES ACHIEVED

- Three (3) reported CAUTI in first 8 months of 2015 compared with 13 reported in 2014.
- 100% of indwelling catheters were placed based on stricter, newly- redesigned criteria. The ED identified the broad category of "I&O" as a safety concern; after criteria changes, no patients now receive a Foley for this reason. (Baseline 30%)
- 100% of patients with indwelling catheter received reassessment every 1-2 hours, based on protocol. (Baseline 40%)
- 100% of patients had regularly-documented reason for Foley (Baseline 68%)

### LESSONS LEARNED

- Multi-day improvement event, with focused weekly accountability, is structurally helpful for accelerating improvement.
- Involving a multi-disciplinary team is critical in developing new tools or methods.
- Using data to state the problem, as well as the measure of success, is motivating for all operators.