Reducing First Case Cancellations and Delays in the MRI Suite

Mount Sinai Queens Hospital

Mount Sinai Queens (MSQ) is a Magnet® designated community hospital in Astoria, Queens. The Labor Management Project (LMP) provided leadership development and process improvement (PI) coaching to the imaging department to reduce delays for cardiology inpatients scheduled for MRI scans.

The Challenge
The Imaging Department at MSQ experienced a large number of first appointment cancellations and delays among cardiology inpatients scheduled for an MRI, impacting the efficiency of the entire day’s MRI schedule.

The Solution
To build leadership capacity and capabilities in staff at all levels and titles, the LMP collaborated with MSQ and 1199SEIU to form a Leadership Development Committee of Imaging Services management and frontline staff to oversee PI projects throughout the department. LMP consultants met with the Leadership Committee biweekly and with a PI team either weekly or every other week. They also coached the committee and the PI team on PDSA (Plan, Do, Study, Act) and Lean process improvement methodologies, project management, and communication skills.

In addition, the LMP coached the PI team on how to use PI tools such as root cause analysis and process mapping to identify reasons for MRI first case cancellations and delays. The team discovered that the major causes of delays were incomplete safety forms and sedation orders, lack of IV access for sedation, and patients not being ready for transport. Next, the LMP facilitated discussions among labor and management PI team members to identify interventions to decrease delays.

Interventions included:

- The evening imaging team created an inpatient MRI schedule (Figure 1) for the following day
  - The schedule listed all cases by unit, including priority cases, with color coding for each floor/unit

- Imaging distributed the schedule in the morning to all cardiology inpatient units, with instructions to have patients ready on time for their MRI
● Imaging staff rounded on cardiology unit patients and staff each morning to assess patient readiness for transport to the MRI suite

The Results
The percentage of first cases that were cancelled or delayed dropped from 38% to 9.5% over 120 days (Figure 2).

Figure 2: Percentage of First-Cases Cancelled/Delayed, April-July 2016

Positive Feedback
Sean O’Brien, Medical Secretary Soraya Flores and MRI Technologist: “While working with this process improvement project we quickly realized that team effectiveness was crucial in order to implement the improvements.”

Antoine Jones, Radiology Supervisor: “Together everyone achieves more.”