# Adding Value to the Surgical PAT Process

by Ohio Health Process Excellence (PEx)

## **24 HOURS?**

The standard measure for completed Pre-Admission Testing (PAT) prior to surgery in hospitals and surgical centers is 24 hours. Patient information is hastily assembled by Techs and RNs with anticipation that all will go smoothly the next day...DOS (Day of Surgery). DOS arrives and Pre-Op is scrambling as the anesthesiologist requests more testing. The surgeon is pacing back and forth constantly checking the clock. As they watch the confusion, patients and their families begin to wonder whether this was the right decision.

There is a better measure.

# PAT at 72 HOURS? - Absolutely!

Serving the west side of Columbus, Ohio, Doctors Hospital is a 200 bed non-profit teaching facility. In August 2008, Doctors Hospital executives identified the PAT process as one of their operational focus areas. Further, they recognized that one of its key drivers was to raise their Pre-Admission Testing (PAT) standards to 95% at 72 hours prior to the day of surgery. Doctors Hospital averages over 400 surgeries a month. During this time only 38% of the PAT charts were complete 72 hours prior to DOS; and, just 82% were complete the day prior to surgery. Additionally, less than 75% of the PATs charts were reviewed by the anesthesiologists prior to just before the case. The executive's objective was not only to decrease day of surgery delays and cancellations; but also to increase patient safety through the anesthesiologists' review of patient's charts three days before surgery.

#### **SCOPE & TOOLS**

In September 2008, the Surgery Department and the PEx Group\* partnered to develop a 72 hour PAT Process. The project's scope was identified as routine surgery cases. Emergent / urgent cases and patients whose medical condition warrants DOS follow-up (e.g. dialysis, pregnancy) were deemed out of scope. The two key metrics were the percentage of PAT Complete 72 hour prior DOS and the percentage of Charts Reviewed by Anesthesia.

Using Lean tools such as the Value Stream Map (VSM), Standard Work, and Visual Management, the team found opportunities to create an effective process. Key areas included complete surgery booking information, concise PAT standards, required dates and times of PAT, and accountability through a Standard Process, Figure 1. Consistency was paramount for the new process to be both effective and efficient. The surgery schedulers, the surgeon offices, and the PAT coordinator had to be on the same page. A breach in the process could result in back sliding and eventual failure of the process (see example below).

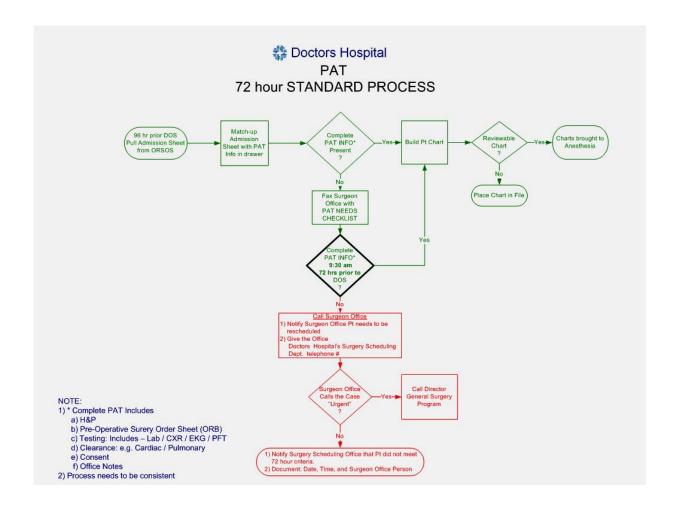


Figure 1 PAT 72 Hour Standard Process

Metrics were established in a dashboard format. Doctors Hospital's administration as well as the project team are now able to view PAT information on a daily basis. The metrics shown are a monthly run chart of the 72 hour compliance, a bar graph displaying 72 hour compliance by surgeon offices, and a pareto chart showing the 80% of the non-compliant surgeons.

## **IMPLEMENTATION**

From mid-September to December, preparation and communication with the surgeons and their offices took place (see Figure 2). The Director of Surgery and the General Surgery Program Director, owners of the PAT Process, met with the executives and surgeons. The Standard Process was faxed to all the surgeon offices; individual office visits were made in some instances. Questions were encouraged, and team members were ready to address these questions with help from their Standard Process. Open communication was a priority before the role out.

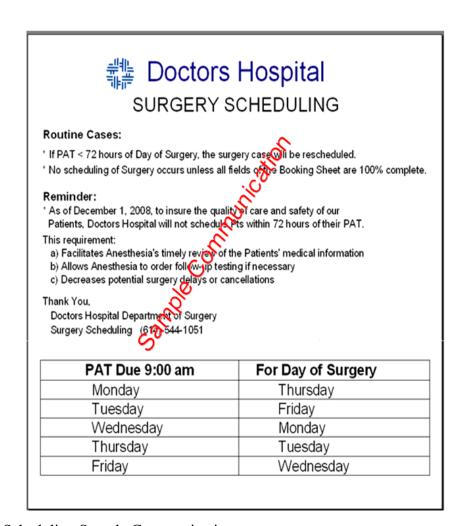


Figure 2 Surgery Scheduling Sample Communication

On December 1, 2008, the 72 hour PAT Process started. As expected, immediate push back came from both surgeons and their offices. The Directors were fielding calls for two weeks and keeping the executives informed of the progress. Both the PAT Coordinator and the Surgery Schedulers felt uneasy. Although difficult, every team member stayed the course. December saw the 72 hours PAT numbers jump from 38% to 69%.

By January 2009, numbers had improved to 88%. Resistance by the surgeons and offices waned and the anesthesiologist started to comment about receiving the PAT charts earlier.

#### **RESULTS**

Today, Doctors Hospital is realizing 91% of the PAT charts ready at 72 hours, as seen in Figure 3. The goal is 95% with counter measures (corrective actions) currently implemented. The anesthesiologists are reviewing 99% of the PAT charts given to them. One of Doctors Hospital's anesthesiologists, Dr. Shockey stated, "Since December 2008, we have been receiving PAT charts 3 days prior to surgery. We are now able to identify potential needs and problems of the patient. This allows for an increase in patient safety and a decrease in cancelations on the day of surgery."

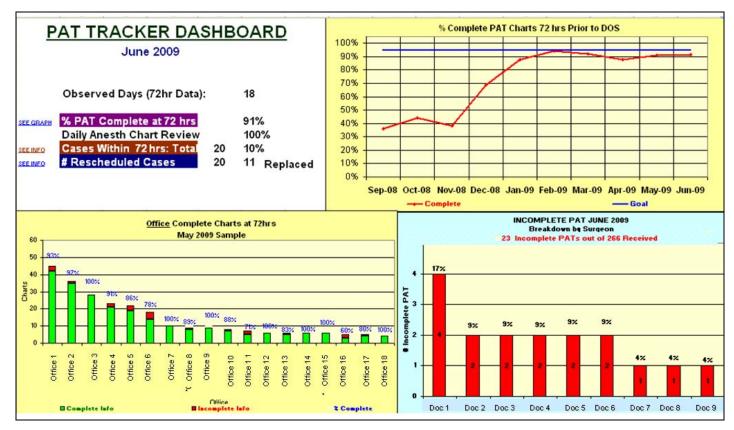


Figure 3 PAT Tracker Dashboard

#### **SUMMARY**

The Doctors Hospital 72 hour PAT Project is successful for three reasons. First, the Doctors Hospital executives and administration strongly support a Lean culture. Their backing of projects is vital. Second, the project team understood and implemented the principles of Lean / Six Sigma. And third, communication was clear and effective in all sectors of the project.

Seeing clearly the big picture through Value Stream Mapping, establishing Standard Work, and making the process visual are elements that create success. Doctors Hospital 72 hour PAT Project took this methodology and is successfully reaching its goal.

72 Hours PAT... absolutely!

<sup>\*</sup> Process Excellence (PEx) is an OhioHealth Corporate Department. Its mission is to drive improvement throughout OhioHealth by focusing on process using Lean / Six Sigma methodology.