Solution: Atlantic General Hospital Surgical Workflow Improvement Process to Excel

Organization: Atlantic General Hospital

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IDENTIFICATION:
Atlantic General Hospital has a four-room OR completing approximately 3000 surgical cases annually encompassing orthopedic, general, plastic, ophthalmology, vascular and thoracic surgery. In March 2007, Surgical Services submitted a strategic action plan, “Surgical Workflow Improvement Process to Excel (SWIPE)”, to address areas of inefficiency and evaluate process standards for patient care delivery.

To identify and assess opportunities for improvement and to clarify the issues that needed addressing, the following analyses were utilized to focus our intentions. On September 25, 2007, a risk assessment of the Surgical Services clinical care, day-to-day operations and patient safety practices was conducted by Insureds of Freestate, Ltd, the hospital’s insurance carrier. On October 25, 2007 the Director of Quality conducted a Failure Mode Effects Analysis (FMEA) regarding the Pre-operative Process.

Baseline data used the average scores of 2007 data, which included patient and surgeon satisfaction scores, Quality measures, start time data, turn over time, and cancellation rates.

PROCESS:
A SWIPE team was appointed to address the tasks identified by the risk assessment and the FMEA. The team consisted of surgeons, anesthesia providers and a registered nurse from each area of the department including ambulatory admission and discharge areas, OR and recovery room staff members. In addition the Pre Admission Testing (PAT) nurse and OR surgical technicians, along with the VP, Patient Care Services and the Director and Clinical Leader of Surgical Services served on the team. The team developed a task list identifying concerns, time lines for completion and assigned responsibility to specific team members for resolution. The 95 issues identified were graded and placed on a scale for prioritization. The pre admission testing program scored very high on the prioritization list and was therefore identified as a major issue requiring process redesign. A subcommittee was then formed to address the PAT process issues. A LEAN event was conducted in March 2008, an algorithm was developed and lean principles were implemented as an effort to improve the PAT process efficiency. Once the new process was finalized, all physician office staff were invited to join the subcommittee and attend
monthly meetings. This new process was put in place September 1, 2008 and continued monitoring occurred with needed changes as identified.

**SOLUTION:**
Pre Admission Testing solutions and implementation included:
- Hired additional full time clerical/secretary staff member.
- Copilot computer system/fax to computer system was introduced.
- Changed the surgical posting requirements - if all necessary patient information is not received, no surgical case is posted.
- PAT nurse contacts all surgical patients within 24 hours of posted surgical procedure.
- Complete a pre-surgery assessment during the above mentioned telephone contact and schedule all preoperative testing
- Developed a flagging system to identify charts for high risk patients, with missing paperwork or needing consultation.
- Anesthesia department formalized best practice guidelines for preoperative testing and consultation, and became heavily involved in the new PAT process.

**SWIPE solutions and implementations included:**
- Hired a Central Processing Coordinator.
- Conducted a value analysis of all instrument and equipment needs and made additional purchases.
- Reviewed, revised and rewrote Surgical Services and Anesthesia policies and procedures.
- Introduced LEAN principles throughout the department, i.e., bedside registration
- Initiated a department code of conduct.
- Added an additional housekeeper
- Enforcement of the posting requirements due to support from Senior Leadership and the physicians.

The results of this implementation:
- Improved and maintained NRC Picker patient satisfaction scores greater than 90th percentile
- National Hospital Quality Measures improved and maintained at or above 90%.
- On time 0730 room start times went from .03% compliance to 32% compliance, which is higher than the national benchmark of 29%. An average start time is 0743.
- Turn over time improved from 30 minutes to 20 minutes.
- Cancellation rate decreased from 18% to 0.3%, and all cancellations remained 100% justified.
- Improved physician satisfaction scores.
- RN spends 75% of their time on nursing related tasks instead of chasing paperwork compared to 25% of their time prior to implementation
- Improved communication and collaboration demonstrated through completed patient charts, physician and nurse relations, and hospital interdepartmental collaboration.
Measures taken to sustain these positive results:

- Collect data and monitor via a monthly report card.
- Continued meetings with the SWIPE team members.
- Quarterly physician office staff and Surgical Services staff meetings.
- Reminder letters sent to surgeons failing to meet the benchmark for on time starts. This is done through the OR Committee.
- Review every cancelled case with surgeon, anesthesiologist and Ambulatory Surgery Unit RN