Clinical Safety & Effectiveness
Cohort # 18

Surgery Delays

CENTER FOR PATIENT SAFETY & HEALTH POLICY
UT Health Science Center
SAN ANTONIO
The Team

• Division
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  • Karen Aufdemorte, Facilitator

• Sponsor Department:
  • Dr. Ronald Stewart, Chairman Department of Surgery
Project Milestones

- Team Created: January 2016
- AIM statement created: February 2016
- Background Data, Brainstorm Sessions, and Fishbone Analyses: February/March Workflow 2016
- Interventions Implemented: February 2016
- Data Analysis: March/April 2016
- CS&E Presentation: June 3, 2016
Background

- Delays to surgery start times
- One delay can impact the entire OR schedule, affecting patient wait time, OR turnaround, staff overtime, and the waste of faculty time, to include the surgeon and anesthesiologists.
Pre-operative Holding
- Consent
- H&P
- Scheduling form
- 24 hour update
- Training
- Equipment setup
- Equipment placed and prepared correctly
- Equipment request
- Implants
- Procedure cards
- Room setup
- Communication with staff
- Communication with patients
- Communication with physician

System
- Multiple EMRs
- Multiple laboratories
- Different insurance coverage/plans
- Process to order equipment
- Clinic communicating implant requirements
- OR availability
- Insurance clearance
- Surgeon availability
- Patient availability
- Communicating booking/scheduling needs
- Clinic conveys to OR staff equipment needs

Personnel
- Communication between faculty and staff
- Training in workflow process
- Communication between staff at different facilities
- Multiple Benefit/Surgical Coordinators

Problem
- Improve work flow in clinic to decrease surgery delay

Environment
- Multiple facilities
  - Multiple Clinic sites
- Multiple referring physicians

Surgery Scheduling
- OR availability
- Insurance clearance
- Surgeon availability
- Patient availability
- Communicating booking/scheduling needs
- Clinic conveys to OR staff equipment needs
Goal: To decrease DOS delays by streamlining and defining pre-operative clinic/office protocols for universal use.

Decision for Surgery made after evaluation in the office or at hospital

Office Decision: Physician determines procedure and routes completed note to the Surgical Coordinator, along with instructions (hospital vs office procedure, which facility, anesthesia required, etc.)

Pre-Op process is followed, including documenting H&P, completing the physician orders (92 form), and obtaining a signed consent form

Forms are given to the Surgical Coordinator

Coordinator reviews the physician calendar and books the surgery onto the calendar.

Coordinator checks the forms for completeness and forwards the packet to UHS OR Scheduler and to OnBase. The Consent form to OR Scheduler acts as the Booking Sheet for the UHS OR team to post to the OR Board.

Coordinator attaches the complete packet to the calendar event on the surgeon's calendar, making it again available to anyone who has access to the calendar.

Pre-Op process is followed, including documenting H&P, completing the physician orders (92 form), and obtaining a signed consent form

Physician/Physician Team sends Physician Orders and Consent forms to UHS OR scheduler to post the case.

Coordinator enters surgery event onto the physician calendar.

UHS/Trauma/Inpatient Decision: Physician determines procedure and alerts Surgical Coordinator via email with procedure codes and instructions (hospital vs office, facility, anesthesia, etc.)

Coordinator reviews the physician calendar and books the surgery onto the calendar.
<table>
<thead>
<tr>
<th>Category</th>
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<tr>
<td>Anesthesia</td>
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<td>Facility</td>
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<tr>
<td>Materials</td>
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<td>SPD</td>
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<td>Staff</td>
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<tr>
<td>Surgeon</td>
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<tr>
<td>Vendor</td>
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Data logs from the University Health System Operating Room reports were used to look at total delays. Since we were concentrating on improving office workflow, we focused on physician/office related delays in the data analysis and only in our Division of Plastic & Reconstructive Surgery.

- Change of surgeon
- The surgeon changed the case order
- The surgeon was not available at the time of the start
- Failure to request specialized instruments
- Failure to mark the site
- Missing Consent form
- Missing H&P
- Further assessment was needed and not done (cardiac clearance, etc.)
- The surgeon arrived late
- Unable to locate the surgeon
- Incorrect procedure was posted
MD Delays Plastic Surgery March 2015-Feb 2016

<table>
<thead>
<tr>
<th>Issue</th>
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<tr>
<td>MD Change Surgeon</td>
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<tr>
<td>MD Changed Case Order</td>
<td>5</td>
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<tr>
<td>MD Faculty Not Available</td>
<td>2</td>
</tr>
<tr>
<td>MD Failed To Request Special / Instruments</td>
<td>3</td>
</tr>
<tr>
<td>MD needed to Mark Site</td>
<td>3</td>
</tr>
<tr>
<td>MD No Consent</td>
<td>6</td>
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<tr>
<td>MD No Valid H&amp;P</td>
<td>1</td>
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<tr>
<td>MD Surgeon Further Assessment</td>
<td>1</td>
</tr>
<tr>
<td>MD Surgeon Late</td>
<td>1</td>
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<tr>
<td>MD Unable to Locate</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
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</table>
Pre-Intervention data showed a 5% delay when considering all the causes.

Dates of Pre-intervention Data collection was March 2015 to December 2015.

The SPC Chart on next slide shows the trend.
Plastic Surgery Rate of Delay
All Causes Pre Intervention

Rate of Delay

Mar-15 - Dec-15
Implementing the Change:

In order to assist in decreasing the occurrence of delays, a clinical workflow was developed to ensure a standardization of process that ensures all paperwork, including consents, lab results, and all clearances are completed at the office. Any specialized equipment or supplies such as implants, implant tissue sheets, or nasoscopes are listed on the scheduling form. This completed packet is then made available to the office staff and surgical team, and also to the hospital administration/financial department and the OR scheduling team.

The clinic staff was instructed on following the above process.
Implementing the Change:

Implementation again was February 2016

Issues: Bringing everyone on board and having all “buy” into process

Our advantage was that we are a small Division

Lessons Learned: Process must be clearly defined and communicated to all staff members for proper implementation.
Plan Intervention

• Thus far we are early on in the intervention. Preliminary data shows an increase in surgery delays, but we only have 3 months worth of post intervention data at this time.

• The plan right now is to continue to monitor the data and stay in communication with the hospital.
Plastic Surgery Rate of Delay
All Causes
Pre and Post Intervention
Sustaining the Change:

A clinic workflow that supports all aspects of surgery scheduling will be followed by the providers and the staff. To help sustain the changes, the process should be streamlined, easy to follow, and simplify work, not complicate things. Regular review of the process compared to the delay outcome report will help us tailor future refinement of the process.
An electronic consent form has been developed by the University Health System and is presently being piloted by different areas. The goal is to have the consent electronically signed during the clinic visit and uploaded directly to the UHS and UTMedicine EMRs. This will be a more efficient use of technology and greatly decrease the likelihood of missing consent forms on the day of surgery.
Although this is an ongoing project and a final return on investment cannot be determined as yet, the improvement of the office surgery scheduling process will greatly impact the hospital OR schedule. Increasing efficiency in the office will decrease delays in the OR, thereby allowing additional time to schedule more surgeries. This increases revenue $$$ for both the physician and the facility. It also enhances the quality of service we provide to our patients, which increases trust and reliability.
The next step is to go beyond the horizon of the Plastic & Reconstructive Surgery Division, and implement a standard office workflow through the Department of Surgery. The goal is to evaluate a six-month period and evaluate its impact.
When the patient trusts his providers and everything about his surgery is managed in an efficient and caring manner, that patient is more likely to remain loyal to the provider network and recommend the network to others. Efficiency also allows the Provider to increase the number of surgeries that he/she can schedule, which positively impacts the revenue of both the medical practice and the hospital.
Thank you!