Preventing Wrong Site Surgery: Recommendations for reforming the time-out process

Hospital’s name, etc here
★ Overview of data/frequency/type
★ Background on study
★ Findings & stories from the field
★ Recommendations/rationale
★ Implementation next steps
WSS in Minnesota

Year 1: 19
Year 2: 26
Year 3: 31
Year 4: 35
Year 5: ?
Types of Procedures

- Lung - chest tube or other: 11%
- Eye/lens: 14%
- Spine: 14%
- Gastrointestinal: 4%
- Knee: 13%
- Urologic: 5%
- Other: 30%
- Finger/hand/foot/toe: 10%
- Other: 11%
Where does WSS happen?

- OR (Operating Room): 43%
- Radiology: 15%
- Ambulatory surgery: 19%
- Other: 15%
- Diagnostic/Labs: 8%
Patient Outcomes

Year 5:
- No harm: 32%
- Treatment/monitoring: 68%

Year 4:
- No harm: 40%
- Treatment/monitoring: 51%
- Longer stay: 6%
- Serious disability: 3%

Year 3:
- No harm: 58%
- Treatment/monitoring: 35%
- Longer stay: 6%

Year 2:
- No harm: 48%
- Treatment/monitoring: 48%
- Serious disability: 4%

Year 1:
- No harm: 26%
- Treatment/monitoring: 63%
- Serious disability: 11%

Legend:
- Blue: no harm
- Green: treatment/monitoring
- Purple: longer stay
- Orange: serious disability
How are we doing?

- OR schedule/consent matched: 15.5%  No
- Surgeon signed site with initials  50.0%  No
- Verbal participation in time-out  46.5%  No
- Every step followed  15.5%
UM Research Project

★ Goals:
  – Observe pre-op verification procedures in a variety of hospitals around the state to see the extent to which practice follows policy, and why deviations from policy may occur

★ 45 cases, 8 hospitals
  – Ortho, urology, gynecology, ENT, ophthalmology, pulmonary, general surgery
Stories from the field

- The circulating nurse, scrub, and CRNA were ready to do the time-out, but the surgeon had not yet arrived. Although it was not their usual practice, they decided to conduct the Time Out before the surgeon arrived in the OR. When the surgeon arrived, he immediately began the procedure; the time-out was not mentioned or repeated.
The circulating nurse announced that she was doing the time-out. The other members on the team were not listening when she made the announcement; the surgeon and resident were talking about something unrelated to the case, as were the CRNA and scrub......
Stories from the field

..... The circulating nurse attempted to do the time-out again. Again, the rest of the team did not acknowledge her. She continued to read the patient's information, but there was no acknowledgment (verbal or nonverbal) by the team regarding the accuracy of the information. They continued to carry on their conversations while the circulating nurse conducted the time-out by herself.
The circulating nurse did not call for a time-out, merely announced the patient’s name and procedure from memory. Documentation was in the room, but the RN did not refer to it before speaking. The rest of the team did not pause in their activity while she spoke, and nobody confirmed the information she had given.
Other Observations: Site marking

- No site marking in several cases
- Site marked in wrong location
- Site markings that dissolved during prep
- Both sides marked
- No differentiation in marking for multiple procedures
Observations: Time-out

- No time-out in some cases
- No cessation of activity in most cases
- Circulator tried to call for time-out, was ignored
- Team did not acknowledge accuracy of time-out
- Time-out performed from memory; no source documents used
- Auditors could not effectively rate performance relative to policy
Why does drift happen?

★ Overconfidence
★ Faulty risk perception
★ Cognitive overload/multiple things to remember
★ Prospective memory issues
★ Distractions
★ Unclear policies/gaps in policies
What does this tell us?

🌟 We’re making progress on having policies in place, but:
– Practices aren’t standardized
– Policies aren’t clear
– Even when policies are clear, human behaviors, stress, noise, attitude, etc can intervene

🌟 What we’re doing isn’t working
Recommendations: Time-out

★ Step 1:
  – Cover Mayo stand with time-out towel or other barrier

★ Why?
  – Visual reminder to conduct time-out
  – Helps to support scrub tech and other team members if time-out isn’t done and they are reluctant to speak up
Recommendations: Time-out

🌟 Step 2:
- Surgeon initiates, just prior to incision
  “Let’s do the time-out now.”

🌟 Why?
- Surgeon needs to take ownership
- Timing matters! Avoid memory interference.
Recommendations: Time-out

★ Step 3: All activity stops
  – No music or other noise
  – Focus is on the time-out

★ Why?
  – Distractions pull focus away
  – Everyone has a role to play, and all need to pay attention to what others say
Recommendations: Time-out

★ Step 4: Circulator begins time-out
   – Verification of patient ID using two identifiers
   – Name of procedure being performed

★ Why?
   – Circulator has documentation
   – Two identifiers are an additional safeguard
Recommendations: Time-out

★ Step 5: Team members confirm information
  – ACP reads patient name, second identifier, and procedure
  – Scrub visualizes site mark, names procedure that’s been set up
  – Surgeon verifies procedure
Recommendations: Time-out

Why?
– Hierarchies and perceptions of power
– Tendency to agree with the surgeon
– Importance of visualizing site mark immediately prior to incision
– Making everyone an active participant with a specific role increases likelihood of all steps being done correctly
Recommendations in Action

Insert video here
Next Steps

🌟 (will be specific to each facility)
– Present to relevant committees
– Develop timeline for roll-out
– Communication
– Training (teams, auditors)
– Developing supporting tools, documentation
– Policy revision/approval
– PR