#### ABO NON-CLINICAL QUALITY IMPROVEMENT (QI) APPLICATION

#### Торіс

Quality Improvement Topic:	Improving the Approach to Preventing Wrong Site Surgeries
What is the reach of this QI activity?	National
Please explain/identify:	Wrong site surgeries continue to occur. Various protocols and checklists help lower the incidence but have limitations. A novel, pictorial method should improve the experience. This would apply to everyone on the team in a systems improvement approach.
Please identify the funding source(s) for this QI activity?	Self

## **Project Description**

1. Describe the quality gap or issue addressed by this activity. (Included in your response to this question should be a description of the resources that informed your decision to pursue this topic, a description of what the literature says about the issue you identified, and the rationale for choosing to address this Non-Clinical QI project.)	Wrong site surgeries or near misses continue to occur. Protocols and checklists to prevent this are frequently disliked or not followed. A novel, pictorial method should decrease these events and improve the experience. Wrong Site Surgery, Retained Surgical Items, and Surgical Fires: A Systematic Review of Surgical Never Events. Hempel et al. JAMA Surg 2015;150(8) 796-805
2. Describe the specific aim(s) of this activity (explanation of the numeric goals and importance to your work processes and your organization).	Reduce wrong site surgeries and near misses Improve the experience
3. Identify the measures that were evaluated in your workplace and provide a summary of pre- and post-intervention data for each measure. (Please provide source information for each measure.)	Survey of healthcare members involved in surgical procedures. Obtain data on wrong site surgeries and near misses Obtain data on the experience Obtain data pre- and post- intervention with novel, pictorial method.
4. What was the source of your data (check all that apply)?	Survey
5. What methods were used for data collection (check all that apply)?	Web-based data entry Tally Sheets
6. What was the comparison group in this activity (e.g., a regional or national benchmark)?	National

## Project Outcomes/Results

1. Describe in detail your role in this activity (i.e., your role in identifying measures and reviewing data, identifying the QI topic, developing the QI plan, identifying interventions, implementing the QI plan and interventions into your practice, etc.).	<ul> <li>Identified the issues regarding wrong site surgery.</li> <li>Created application for pictorial description of surgical site along with patient and surgeon approval at time of surgical decision making to lower risk of wrong site surgery.</li> <li>Implemented this application at surgery center.</li> <li>Created survey using Joint Commission Root Causes Analysis of wrong site surgeries.</li> <li>Created survey of patient and healthcare provider views about pictorial application</li> <li>Analyzed data results</li> <li>Confirmed the positive benefits of using pictorial description of</li> </ul>
	Analyzed data results
	<ul> <li>Confirmed the positive benefits of using pictorial description of surgical site.</li> </ul>
	Practice uses application on surgical patients

2. Were other members from your care team involved in this activity?	Yes
If yes, please describe their role(s) in this activity.	Input from ophthalmic techs, OR techs, front office personnel in office and surgery center, pre-op nurses, surgeons, anesthesiologists, and patients all gave input and completed surveys.
3. Describe the impact this QI effort had on your practice and the care that you provided to your patients.	Lowered risk of wrong site surgery using pictorial description and patient and surgeon approval. Looked at whole process of site accuracy with a systems approach to improve patient care. Got patient input and partnership in the process.
4. What data can you provide to demonstrate that your change concept produced meaningful improvement in your current processes or patient outcomes? (I.e. percentage reduction in post-operative complication, percentage improvement in a specific cohort of patients etc.)	Focusing on Joint Commission derived factors in root cause analysis of wrong site surgeries, the data shows a decrease in occurrence of several factors due to the use of this pictorial method of site selection. This this most notable with laterality incomplete, booking forms incomplete, procedure description incomplete, and site marks removed during prep or cover by surgical draping. The reduction was about 20% for these factors and about 5% for several other factors. Surveys of healthcare providers and patients (unable to download additional files) showed a strongly positive experience with 80-90% approval on most criteria. Also of note is that about 50% of healthcare providers were aware of wrong site surgeries or near misses occurring at institutions that they worked in, emphasizing that this problem is still significant.

# **Project Reflection**

5. Reflecting on this self-directed Non-Clinical QI project, how do you plan to sustain your improvement?	We will continue to use the pictorial application for its positive benefits towards lowering wrong site surgeries. We will continue to further patient partnership. We will look at additional ways to improve surgical flow. One such area we are looking at is to combine informed consent process into the pictorial site selection.
6. Was this Non-Clinical QI project beneficial to your processes, patient population or practice?	Yes, it improved a systems process for improving site of surgery accuracy, lowered risks for wrong site of surgery on patients, helped the practice stay committed to safety approach to patient care.
7. Please describe any lessons learned about your work processes by participating in this self-directed Non-Clinical QI project?	By breaking up work processes into smaller segments, you can more easily look at ways to improve them. We can continually re-assess our processes to see where it can be improved, but it needs to be done in a way to improve not impede efficiency.
8. What do you plan to do next to improve i.e. reduce variation in your processes of care?	Further refine the pictorial site of surgery application. We are looking at combining informed consent process into the pictorial site selection.
9. Please describe whether or not you found participation in the self-directed Non-Clinical QI project to be meaningful, impactful and a valuable use of your time.	Helped clarify the process of implementing an improvement in medical care. The step wise, detailed process helped validate the positive benefits of this application.