## ABO SELF-DIRECTED IMPROVEMENT IN MEDICAL PRACTICE ACTIVITY (NON-CLINICAL)

### Topic

<table>
<thead>
<tr>
<th><strong>Title of Project:</strong></th>
<th>Improved Doctor - Parent Communication for High Risk Retinopathy of Prematurity Patients</th>
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### Project Description

| **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 clinical project)** | Premature infants are at risk for retinopathy of prematurity (ROP), which can result in rapid vision loss. Because of the velocity of the disease and the severity of the outcome, it is important that parents be well informed of their child’s condition and potential complications. The quality concern for this project is patient/parent education. The quality metric we will measure is the percent of parents who have received a phone call from me after the exam was performed. |

### Background Information:

| **The month you pulled the baseline IRIS performance report and any additional information that may be pertinent:** | Parent education is a critical component for any ROP screening and treatment program. Most ophthalmic exams happen in an office setting where the parents are present for the exam and the physician can discuss with them the diagnosis and treatment recommendations. Premature infants, however, are in the neonatal intensive care unit (NICU) where the parent often may not be present. Although a written summary report is left for them at the bedside, this alone does not afford the parent the ability to ask questions directly to the physician. A phone call or face-to-face discussion is ideal. In addition, it is helpful for the discussion to happen prior to the actual exam when the diagnosis of treatment requiring ROP is made. This affords the parents time to process the information and generate questions well in advance of the actual treatment date. Parent education is important because it also is an opportunity for the physician to emphasize the need for close follow up after discharge from the NICU. |

### Project Setting: (Please select from options below):

- Group Practice
- Healthcare Network
- Hospital
- Multi-Specialty Group
- Solo Practice
- Surgical Center
- Other

| **Healthcare Network** |
| **Hospital** |
| **Multi-Specialty Group** |

### Study population:

| **(describe the type of patient for whom the care process will be improved, e.g., all patients in your practice, patients with diabetes, patients presenting for emergency care):** | The study population will include patients screened by me for ROP within a four-hospital network |
Quality Indicators / Performance Measures:
It is important to carefully define outcome or performance measures that will be quantified at baseline (before the care process is changed) and at re-measurement (after you have implemented the proposed improvement) to quantify the impact of your care process change. There are two basic types of performance measures - process of care measures and outcomes of care measures.

- Process of care measures (e.g. timely treatment of diabetic retinopathy) can influence outcome measure (e.g. decreased risk of severe vision loss);
- Outcome measures can be linked to processes of care that can be improved.

Generally, performance measures are expressed as rates, often as percentage rates. For example, if the intent of a project is to improve the quality of glaucoma care in your practice, you may choose to improve your rate of establishing a goal IOP in patients with newly diagnosed glaucoma, measured over a 3-month period.

- The numerator of this process measure would be the number of newly diagnosed patients during this time who have a goal IOP recorded in the medical record.
- The denominator would be the total number of patients diagnosed during that same time period.

Continuous variables (e.g. the refracted spherical equivalent after cataract surgery) can often be simplified and transformed then into percentage rates by setting a quality threshold (within 0.5 diopters in the intended spherical equivalent) which, if attained, would qualify the patient to be in the numerator (e.g. number of patients within 0.5 diopters / total number of patients). It can be advantageous but not mandatory to have more than one quality measure in order to gauge the impact of your process change. In the example above, an additional outcome measure might be the percentage of patients in whom the goal IOP is attained within the first 6 months after diagnosis.

If possible, measure quality indicators for at least 30 individual patients or data points during the baseline and again during the follow up period.

Measure Type: Process
Measure Name: Timely Parent Education and Awareness
Numerator Statement: Number of patients screened for ROP
Denominator Statement: 30 consecutive ROP screening exams
We realize that this may not be feasible or appropriate for all projects. Please indicate at least one measure below; either a process or outcome measure:

**Example Measure:**
- Measure Type: Process Measure
- Measure Name: Patient pain level during intravitreal injection
- Numerator Statement: Number of patients in who pain levels decreased by 2 points on a 1-10 scale
- Denominator Statement: 30 consecutive patients undergoing intravitreal injection.
Project Interventions:
Quality improvement requires that you analyze your care delivery processes and identify changes, which if implemented, will improve care and outcomes. Generally, educational interventions are thought to be weak and demonstrate little impact. The introduction of tools, strategies or systematic approaches to care delivery is more powerful. A tool is a thing, for example a preoperative checklist, or written standardized process or protocol. Strategies include changes in procedures or policies like the introduction of a surgical time out before surgery is initiated. Systematic approaches to care delivery involve a comprehensive analysis of care process and the introduction of a combination of tools and strategies designed as a complete process. Please describe the changes to your care processes you intend to introduce:

Tools: To improve the number of parents who have received discussions with the physician, we will implement the use of a checklist where the ROP coordinator will maintain a log of parents and whether they have received a phone call. To better understand the effectiveness and quality of the discussion, the ROP Coordinator will make a follow up phone call to confirm the physician has called the parent, and whether the parent understood what was told to them and if all their questions were answered.

Project Team:
(include roles for yourself and all members of your team):
List the individuals who will be involved in your quality improvement project (i.e., solo project, partners in practice, office staff, OR personnel, anesthesiologists) and the roles they will contribute.

Screening physician
ROP Coordinator

Will any other ophthalmologists be requesting MOC credit for participation in this SD-PIM?
No

Project Outcomes/Results

Project Summary
In the following sections, please prepare a brief summary of the project highlighting the data collected, effectiveness of your measurement approach, interventions, and the overall impact of the project.

Baseline Data:
Quantify each of the quality indicators / performance measures described above for the baseline period (before interventions for improvement were introduced). Report the numerator, denominator and the calculated percentage rate for each measure.

1. I reviewed the charts of 30 consecutive patients screened for ROP prior to my intervention.
2. As part of the standard protocol, all parents received written documentation describing ROP and their child's exam.
3. I identified the number of patients that in addition to the written documentation, I also called the parents to discuss the status of their child's ROP and answer any questions they may have.
4. Out of the 30 patients, I identified 4 patients where I called and spoke to the parents. One of these patients went on to need treatment. Of the 4 discussions, one required a prior phone message to reach the family.
5. The baseline ratio was 4/30 or 13%
**Follow-up Data:**
Quantify each of the quality indicators / performance measures described above for the re-measurement period (the period following implementation of the interventions for improvement).

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<tbody>
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<td>1.</td>
<td>For the following 30 consecutive patients, I used a checklist for each new patient that included calling the family to discuss ROP and any questions they had regarding the disease or care of their child</td>
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<td>2.</td>
<td>Of the 30 patients I was able to speak to the parents of 28</td>
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<td>3.</td>
<td>Of the 28 parental discussions, all parents (100%) were satisfied that I answered all their questions</td>
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<td>4.</td>
<td>Of the 28 discussions, 12 required a prior phone message before being able to ultimately reach the parent</td>
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<td>5.</td>
<td>Of the 28 discussions, 6 involved children who eventually required treatment</td>
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<td>6.</td>
<td>There were 2 patients where a phone message was left, but the parents did not return the call</td>
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<td>7.</td>
<td>The ratio with the intervention was 28/30 or 93% parents contacted</td>
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**Project Impact**

Compare the baseline data to the re-measurement / follow-up data and quantify the impact of the process of care changes (your project interventions). The project hopefully resulted in improvement; however, some projects may result in a diminution in quality. If a lack of improvement or reduction in quality occurred, suggest other strategies that might be more effective.

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<td>Comparing the baseline to the intervention ratio, the checklist had a clear benefit to ensuring that the parents not only were told of their child’s diagnosis (via the written parent report) but also had all their questions answered by the physician through a direct conversation.</td>
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**Project Reflection**

| Did you feel the project was worthwhile, effective? | Yes |
| How might you have performed the project differently? | Measure the time for each conversation to better anticipate the time cost associated with this |
| Please offer suggestions for other ophthalmologists undertaking a similar project. | I would discuss implementing this with the ROP scheduler as part of the first exam. |