

## ABO IMPROVEMENT IN MEDICAL PRACTICE ACTIVITY

### Topic

<b>Title of Project:</b>	Monocular Precautions in at Risk Patients
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### Project Description

Describe the quality gap or issued 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.	We would like to identify as a practice, how we are doing in recommending and prescribing monocular precautions for patients that have low vision in one or both eyes or have lost an eye due to infection, trauma, or tumor. Then we would like to implement new methods of carrying out counseling and prescribing protective lenses to this at-risk population.
<b>Background Information:</b> The month you pulled the baseline IRIS performance report and any additional information that me be pertinent:	Being functionally or anatomically monocular can lead to increased risk of second eye injury due to reduced vision and visual field. It is essential that we as eye care professionals counsel and enable these patients to obtain protective eyewear to prevent second eye injury and vision loss.
<b>Project Setting:</b> (Please select from options below): <ul style="list-style-type: none"><li>• Group Practice</li><li>• Healthcare Network</li><li>• Hospital</li><li>• Multi-Specialty Group</li><li>• Solo Practice</li><li>• Surgical Center</li><li>• Other</li></ul>	Group Practice
<b>Study population:</b> (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:	Patients in our university group ophthalmology practice who are identified as monocular through diagnosis code and/or best corrected visual examination will be considered for inclusion.

**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:** Counseling and prescribing rates for protective eye wear in monocular patients.**Numerator Statement:** Number of monocular patients wearing protective lenses, or that were prescribed or advised to obtain protective eye wear.**Denominator Statement:** Number of monocular patients identified by diagnosis code or best corrected visual examination.

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.

<p><b>Project Interventions:</b>  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:</p>	<p>Interventions:</p> <ol style="list-style-type: none"> <li>1. Education of faculty and residents on the importance of protective eye wear in monocular patients.</li> <li>2. Implementation of patient education signage and handouts on the importance of protective eye wear in at risk patients.</li> <li>3. Addition of EHR after visit summary language educating patient on the importance of protective eye wear in at risk patients.</li> </ol> <p>Time period for implementation prior to repeat analysis of performance: 6 months</p>
<p><b>Project Team:</b>  (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.</p>	<p>Lead QI Investigator and two co-investigators.</p>
<p>Will any other ophthalmologists be requesting MOC credit for participation in this SD-PIM?</p>	<p>N/A</p>

## Project Outcomes/Results

<p><b>Project Summary</b></p>	<p>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.</p>
<p><b>Baseline Data:</b> 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.</p>	<p>Of 260 charts reviewed:</p> <ul style="list-style-type: none"> <li>• 60 Patients met inclusion criteria for our study.</li> <li>• 5 Patients had monocular precautions documented in the patient's chart.</li> <li>• 29 Patients were already wearing protective eye wear.</li> <li>• 33 Patients were not wearing protective eye wear and no precautions were documented in the patients chart.</li> </ul>
<p><b>Follow-up Data:</b> Quantify each of the quality indicators / performance measures described above for the re-measurement period (the period following implementation of the interventions for improvement).</p>	<ul style="list-style-type: none"> <li>• 55 patients charts were identified as meeting inclusion criteria at the end of the intervention period.</li> <li>• 11 of the patients had monocular precautions documented in the chart.</li> <li>• 16 were wearing protective eye wear.</li> <li>• 28 patients were not wearing protective eye wear and no precautions were documented in the patients chart.</li> </ul>

## Project Impact

<p>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.</p>	<p>We did not see a significant change in the number of monocular patients wearing protective eye wear, although there was improvement in the documentation and counseling of these patients among the providers in our practice. This could be sampling bias or under-representation of the number of patients that actually wear protective lenses. At a minimum we have educated our faculty in the need for protective eye wear and hopefully have improved the awareness of this issue.</p>
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## Project Reflection

<p>Did you feel the project was worthwhile, effective?</p>	<p>YES</p>
<p>How might you have performed the project differently?</p>	<p>Prospective analysis with the same study group may have provided a better representation of the effectiveness of our intervention and patient education / counseling.</p>
<p>Please offer suggestions for other ophthalmologists undertaking a similar project.</p>	<p>Prospective study with the same study group and more detailed questioning as to the presence and type of eye wear used would be helpful.</p>